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ECBC: EUROPEAN COVERED BOND FACT BOOK 2022

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EUROPEAN MORTGAGE FEDERATION
EUROPEAN COVERED BOND COUNCIL

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This 17th edition of the ECBC European Covered Bond Fact Book builds on the success of previous editions. Chapter I presents an analysis of eleven key themes of the year, offering an overview of the Industry's perspective on these, such as the latest developments on sustainable, green and social covered bonds as well as the latest ECB's responses to the pandemic, and an analysis of covered bonds gaining a stronger global footing.

Chapter II provides a detailed explanation of covered bond fundamentals, the state of play on the latest implementations of the Covered Bond Directive and of Basel III, the Capital Markets Union (CMU), the Liquidity Coverage Ratio (LCR), Solvency II, bail-in mechanisms (MREL and TLAC), and covered bond protection. This chapter also includes articles outlining the repo treatment of covered bonds by central banks, investigates the relationship between covered bonds and other asset classes, such as senior unsecured and government bonds, and describes the USD, GBP and domestic currency denominated covered bond markets.

Chapter III presents an overview of the legislation and markets in 42 different countries, demonstrating the worldwide success and recognition, and the continued spread of the asset class. Chapter IV sets out credit rating agencies' various covered bond methodologies. Chapter V provides a description of trends in the covered bond market, as well as a complete set of covered bond statistics up to the end of 2021.

The ECBC welcomes the broad range of views expressed in this latest edition of the Fact Book and thanks all contributors whose enthusiasm and dedication have once again produced an outstanding publication. Particularly, we would like to express our gratitude to the Chairmen of the ECBC Fact Book and Statistics & Data Working Groups, Mr Sascha Kullig and Mr Joost Beaumont, respectively.

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FOREWORD

The publication of this year's edition of the European Covered Bond Council (ECBC) Covered Bond Fact Book, the 17th edition, comes at a critical geopolitical moment, when financial markets are entering uncharted waters and, at the same time, 30 countries in the European Economic Area are starting to apply the national legislation transposing the Covered Bond Directive. This historic event crowns years of efforts to achieve market convergence and harmonise Industry best practices, efforts which have paved the way for the Capital Markets Union and have positioned the covered bond asset class at the centre of long-term funding strategies. Indeed, for centuries, covered bonds have secured macroprudential features in the banking sector, ranging from tradition and financial stability to market innovation and ESG dynamics, more recently.

Against the backdrop of the implementation of the Covered Bond Directive, inflationary trends, evolving monetary policies and the COVID-19 pandemic, which has influenced every aspect of life, housing markets and market strategies over the past 3 years, now more than ever the Fact Book represents the backbone of the ECBC's activities. As the Industry's think-tank, the ECBC looks to highlight not only the latest developments but also the core fundamentals that have made covered bonds the most traditional yet innovative asset class in the European financial landscape.

This anti-cyclical, long-term financing instrument has become a pillar of financial stability and is the nexus between harmonised European financial innovation and the traditions that sit within national legal frameworks. The Covered Bond Fact Book therefore seeks to identify and assess the key drivers of developments in the covered bond space over the past 12 months, providing the market perspectives and analysis of more than 100 contributors in over 40 countries. These experts share with us their views on the key market and legislative developments that have occurred, the best practices that have emerged, and address issues which have come to the fore such as digitalisation and sustainability, including both the social and green dimensions.

This compendium of market developments encompasses the essence and collaborative spirit of the ECBC members' work, which amalgamates different cultures, perspectives but more importantly legal and financial features in a common qualitative and quantitative perimeter. Over the years, this collaborative and constructive approach has become the true *fil rouge* of our Industry's *modus operandi* i.e., always ready to adapt to challenges whilst preserving asset quality and ensuring investor protection. The Fact Book represents the collective effort of our community to produce a prime academic and statistical benchmark publication, whilst coordinating a discussion forum involving over 2,000 covered bond experts and aficionados around the globe.

Over the years, this community has been able to foster a covered bond philosophy with clear macroprudential characteristics for investors, thereby ensuring capital market accessibility and financial stability for mortgage and housing markets.

More importantly, beyond the financial aspect, for most jurisdictions the introduction of covered bonds has also resulted in the provision of more affordable mortgages, more funding choices for lenders and more long-term borrowing options for consumers when they make the biggest investment of their life.

On a daily basis, capital markets participants need complete and accurate information to support regulatory compliance with the Covered Bond Directive, LCR eligibility and ESG-related due diligences, to name but a few priorities, and this need is growing all the time. This is where the ECBC comes into its own. The ECBC-led Covered Bond Label[1], has become a qualitative benchmark as informative gateway in the covered bond space, celebrating its 10th Anniversary this year.

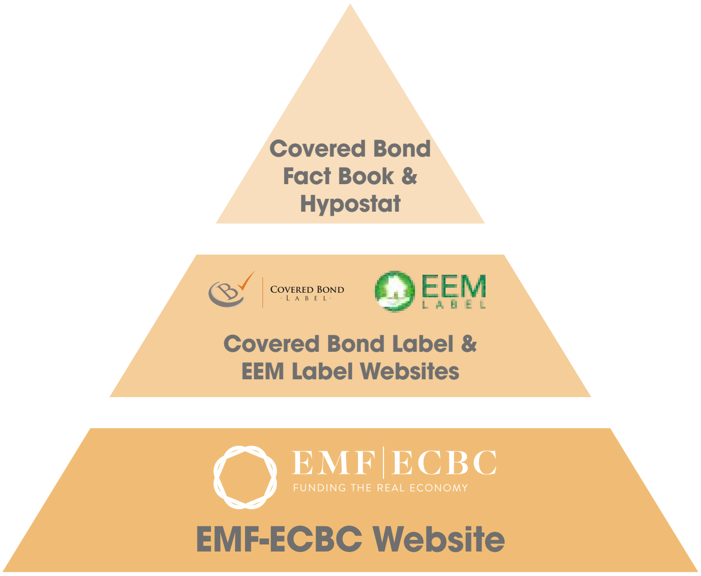
Most recently, the ECBC has completely refreshed its Comparative Database[2] on global covered bond legislative frameworks, which is embedded in the Covered Bond Label website.

1 www.coveredbondlabel.com

2 https://compare.coveredbondlabel.com

During the last years of market turmoil, pandemic and technological innovation, the EMF-ECBC has played a prominent role as a market catalyst, through its efforts to monitor and align best practices. Furthermore, through its working groups, technical committees and task forces, the EMF-ECBC has developed technical knowledge and centres of competence in relation to both the mortgage and covered bond businesses, with a focus on retail considerations, property valuation, prudential regulation, funding strategies, to name but a few areas. By way of a think tank approach and a clear global market governance structure, the EMF-ECBC's has put this expertise to use in preventing market disruption, whilst delivering active coordination and implementation of initiatives aimed at harmonising procedures, standards, definitions and solutions, whether this be through the Covered Bond Label[3] and its Harmonised Transparency Template (HTT), the Energy Efficient Mortgages Initiative (EEMI)[4] or the Energy Efficient Mortgage Label (EEM Label)[5] and its Harmonised Disclosure Template (HDT), for example.

Significantly, all of this know-how and expertise can be accessed by way of a unique information 'pyramid' which offers direct and rapid access to market participants to a wide variety of information and data on specific national markets or on European/global market and policy trends. The content and structure of this pyramid is fine-tuned on a regular basis with market participants in the covered bond and mortgage spaces.



The operational entry level of the pyramid is the EMF-ECBC website[6] through which the EMF-ECBC provides access to all position papers, studies and analysis produced by its technical committees and working groups, offering a valuable window into the potential of current and future legislative and market evolutions. The EMF-ECBC website furthermore provides links to its member organisations, giving an insight into the experts behind the knowledge.

Stepping up a level of detail, the next layer of the pyramid consists of the Covered Bond Label website, where around EUR 2 trillion of covered bonds outstanding are officially registered. The Covered Bond Label web-

3 www.coveredbondlabel.com
4 www.energyefficientmortgages.eu
5 www.energy-efficient-mortgage-label.org
6 https://hypo.org

site offers unique transparency directly managed by issuers, ISIN by ISIN, bond by bond, on: (1) liabilities' characteristics, (2) cover asset data via the Harmonised Transparency Template (HTT) and (3) the features of national legislation, which are summarised and comparable at global level. In a similar way, on the ESG lending side the EEM Label website offers transparency in the energy efficient mortgages space for consumers, lenders and investors.

At the top of the information pyramid are the EMF-ECBC's flagship publications offering a deeper dive into market dynamics and legislative developments: the ECBC Fact Book and the EMF's Hypostat. The ECBC Fact Book crowns the Covered Bond Label Website and Comparative Database with its deeper dive into key themes and trends impacting the covered bond space in the previous year, national legislation, overviews of the overarching macroprudential value and regulatory treatment of this asset class, as well as summaries of rating agencies' methodologies. Through Hypostat, the EMF-ECBC delivers unique analysis of trends in Europe's mortgage and housing, offering a comprehensive asset side perspective of mortgage market dynamics and national characteristics for investors and other market participants.

Significantly at the current time, this information pyramid acts as an operational magnifying glass which will guide market participants through the labyrinth of compliance with the Covered Bond Directive, providing legal details, hard data and intelligence, all of which is crucial for investor due diligence. The pyramid's cornerstone lies in the compliance disclosures requirements with the HTT fully aligned to Article 14 of the Directive. Indeed, at the time of writing, EU Member States are finalising the revision of their national legislation aimed at implementing the European Covered Bond Directive. 27 countries have passed an official act, with some of them in the process of finalising their secondary legislative process after having met the Directive's transposition deadline of 8 July 2022.

At the global level, the prospect of a third-party equivalence regime (due to be finalised by 2024) is boosting the interest in adopting covered bond legal frameworks and helping to make compliance with the qualitative standards foreseen in the Directive a clear point of reference for regulators and legislators.

Access to information, market guidance and harmonisation efforts are the secret ingredients which make the covered bond space a unique corner of the market rooted in stakeholder confidence that in turn represents the real essence of the crisis management capabilities of this asset class.

The EMF-ECBC has always sought to be 'part of the solution' and, through recent market turmoil, has activated the Industry's best resources to monitor, analyse, discuss and guard against potentially negative impacts for mortgage, housing and funding markets worldwide. As a community, the EMF-ECBC remains committed to supporting the transition to a more sustainable economy and society, encouraging countries to move from a pandemic mind-set towards a more sustainable capital markets infrastructure, and supporting consumers and borrowers in turning the current challenges into opportunities.

After so many years, there is no doubt that we are stronger together and we would like to thank all ECBC members for their input, engagement and continued support during what have been challenging times. We would particularly like to express our gratitude to the contributors to this year's publication for their work in ensuring that, despite the exceptional circumstances of the past year, this 17th edition of the ECBC European Covered Bond Fact Book remains:

> The leading source of covered bond market intelligence; and

> The primary source for aggregate covered bond market data and statistics, and a comparative framework analysis.

Morten Bækmand Nielsen
ECBC Chairman

Luca Bertalot
EMF-ECBC Secretary General

ECBC
EUROPEAN COVERED BOND COUNCIL

ABOUT THE ECBC

The European Covered Bond Council (ECBC) is the platform that brings together covered bond market participants including covered bond issuers, analysts, investment bankers, rating agencies and a wide range of interested stakeholders. The ECBC was created by the European Mortgage Federation (EMF) in 2004. As of September 2022, the Council has over 120 members across 30 covered bonds jurisdictions and many different market segments. ECBC members represent over 95% of covered bonds outstanding. In 2014 the ECBC and the EMF unified under a common umbrella entity, the Covered Bond & Mortgage Council (CBMC) with the intention to further develop synergies, share market best practices, achieve convergence across the whole value chain of the Industry, and, in parallel, to act as a market catalyst in origination and funding techniques.

Against this background, the ECBC seeks to represent and promote the interests of covered bond market participants at the international level. The ECBC's main objective is to be the point of reference for all matters regarding the covered bond industry and operate as a think-tank, as well as a lobbying and networking platform for covered bond market participants.

ECBC STRUCTURE

The ECBC Plenary Meeting is a bi-annual discussion forum where all ECBC members gather to discuss issues and to establish strong networking links.

The ECBC Steering Committee, headed by the ECBC Chairman, and composed of representatives from the major covered bond issuing jurisdictions in Europe and industry experts, is responsible for the day-to-day activities of the ECBC. It convenes once per quarter and addresses strategy related questions. Furthermore, the Steering Committee coordinates the programmes of work of the various ECBC working groups.

ECBC WORKING GROUPS

> **The EU Legislation Working Group**, chaired by Mr Frank Will, has over the past years successfully lobbied at EU and international level to obtain appropriate treatment for covered bonds. As its name suggests, this Working Group monitors EU legislation with a specific relevance for covered bonds. Most recently, this has included Basel III and CRD IV/CRR, with a focus on the Net Stable Funding Requirement (NSFR) and the Fundamental Review of the Trading Book (FRTB).

> **The Technical Issues Working Group**, chaired by Mr Agustin Martin Calmarza, represents the technical think-thank of the covered bond community, drawing on experts from across the Industry to tackle key issues for the sector. The Working Group tackles subjects relating to covered bonds such as the use and treatment of derivatives in the cover pool, bankruptcy remoteness and latest market developments. The Working Group manages and updates a database which provides an overview of covered bond frameworks across the EU and globally and enables their features to be compared (this is accessible at www.ecbc.eu).

> **The Market Related Issues Working Group**, chaired by Mr Steffen Dahmer, discusses topics such as the MiFID review and conventions on trading standards and the market-making process.

> **The Statistics and Data Working Group**, chaired by Mr Joost Beaumont, is responsible for collecting and publishing complete and up-to-date information on issuing activities and volumes outstanding of covered bonds in all market segments. With over 30 different covered bond jurisdictions and numerous issuers, the collection of data is of utmost importance, particularly given that the ECBC data is increasingly viewed as the key source of covered bond statistics.

> **The Covered Bond Fact Book Working Group**, chaired by Mr Sascha Kullig, is responsible for the development and publication of the annual ECBC Covered Bond Fact Book. This publication covers market developments, as well as legislative frameworks in different countries and statistics.

> **The Rating Agency Approaches Working Group**, chaired by Ms Elena Bortolotti, examines the rating approaches applied by credit rating agencies for covered bonds and, when necessary, convenes meetings and publishes position papers accordingly.

> **The Global Issues Working Group**, chaired by Mr Colin Chen, focuses exclusively on covered bond issues from a global perspective in an effort to create synergies between traditional, new and emerging covered bond markets. The Working Group aims to allow the development of a more level playing field for all at a global level, helping to enhance transparency and convergence, and ensure a proper recognition of the macro prudential value of the covered bond asset class internationally.

ECBC TASK FORCES

In addition to the working groups, the ECBC has established the following topical Task Forces which consist of relevant covered bond market and legal experts from various jurisdictions at the EU and global levels: EMF-ECBC COVID-19 Recovery Task Force, ECBC Implementation Task Force, ECBC Task Force on Extendable Maturity Structures, ECBC European Secured Notes (ESN) Task Force, ECBC Transparency Task Force, ECBC Liquidity Task Force, ECBC Swap Task Force, ECBC Investor Task Force and is currently constituting an ECBC ESN Bonds Task Force.

The ECBC's objective remains to further strengthen its role in facilitating communication amongst the different covered bond stakeholders, by working as a catalyst in defining the common features that characterise the asset class and in facilitating improvements in market practices, transparency and liquidity.

More information is available from https://hypo.org/ecbc/

Luca Bertalot,
EMF-ECBC Secretary General

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ABECIP – THE BRAZILIAN ASSOCIATION OF REAL ESTATE LOANS AND SAVINGS

ABN AMRO

AIB MORTGAGE BANKS

AKTIA BANK PLC

ALLEN & OVERY

ALPHA BANK A.E.

ALPHA BANK ROMANIA

ASSOCIATION OF DANISH MORTGAGE BANKS (REALKREDITRÅDET – FINANCE DENMARK)

ASSOCIATION OF SWEDISH COVERED BOND ISSUERS – ASCB

AUSTRALIAN SECURITISATION FORUM (ASF)

AXA BANK EUROPE SCF

AXA HOME LOAN SFH

BANCO BPM S.P.A.

BANCO COMERCIAL PORTUGUÊS S.A. (GOH PORTUGAL)

BANK OF IRELAND MORTGAGE BANK

BANKING & PAYMENTS FEDERATION IRELAND – BPFI /ACS IRELAND

BANQUE FÉDÉRALE DES BANQUES POPULAIRES – BPCE

BARCLAYS

BAYERISCHE LANDESBANK – BAYERN LB

BELFIUS BANK

BERLIN HYP AG

BNP PARIBAS

BNP PARIBAS FORTIS

CAISSE DE REFINANCEMENT DE L'HABITAT – CRH

CAISSE FRANCAISE DE FINANCEMENT LOCAL – CAFFIL

CANADA MORTGAGE AND HOUSING CORPORATION - CMHC

CANADIAN IMPERIAL BANK OF COMMERCE – CIBC

CHIOMENTI

CITIGROUP GLOBAL MARKETS GERMANY

CLIFFORD CHANCE LLP

COMMERZBANK SECURITIES

CREDIT AGRICOLE CORPORATE AND INVESTMENT BANK

CRÉDIT AGRICOLE HOME LOAN SFH

CREDIT FONCIER DE FRANCE / COMPAGNIE DE FINANCEMENT FONCIER

CREDIT MUTUEL-CIC HOME LOAN SFH

CRÉDIT MUTUEL ARKÉA

CREDIT SUISSE

CRIF

DANISH SHIP FINANCE

DANSKE BANK

DBRS MORNINGSTAR CREDIT RATINGS

DE VOLKSBANK NV

DEUTSCHE BANK AG

DLR KREDIT A/S

DNB BOLIGKREDITT

DUTCH ASSOCIATION OF COVERED BOND ISSUERS - DACB

DZ BANK

DZ HYP

EEA COVERED BOND BANK PLC

EIKA BOLIGKREDITT AS

EUROMONEY CONFERENCES

EUROPEAN AVM ALLIANCE – EAA

EUROPEAN DATAWAREHOUSE GMBH

FÉDÉRATION DES CAISSES DESJARDINS DU QUÉBEC

FINANCE FINLAND

FINANCE NORWAY – FNO

FITCH RATINGS LTD

GRUPO BBVA

GRUPPO BANCA CARIGE

HSBC SFH FINANCE

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WHITE & CASE

September 2022

COVERED BOND LABEL

The Covered Bond Label is a quality Label which responds to a market-wide request for common qualitative and quantitative standards and for an enhanced level of transparency and comparability in the European covered bond market. The Label:

> Establishes a clear perimeter for the asset class and highlights the core standards and quality of covered bonds;

> Increases transparency;

> Improves access to information for investors, regulators and other market participants;

> Has the additional objective of improving liquidity in covered bonds;

> Positions the covered bond asset class with respect to regulatory challenges (CRD IV/CRR, Solvency II, redesign of ECB repo rules, etc.).

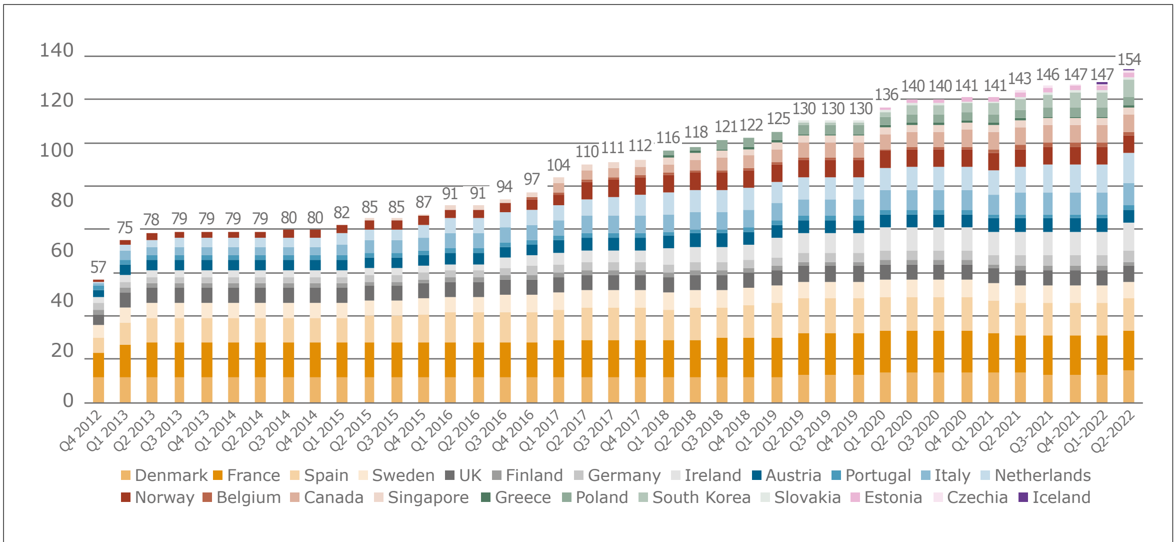
The Covered Bond Label Foundation (CBLF) was founded by the EMF-ECBC in 2012 and it was developed by the European issuer community, working in close cooperation with investors, regulators, and rating agencies and in consultation with all major stakeholders. The Label website became fully operational in January 2013, with the first Labels being granted since then.

As of August 2022, visitors can find the Harmonised Transparency Template (HTT) and 14 National Transparency Templates, 119 issuer profiles and information on 154 labelled cover pools with issuance data on around 5,000 covered bonds amounting to a total face value of around EUR 1.9 tn. In the first half of 2022, one new jurisdiction, Iceland, joined the Covered Bond Label family thus marking an important step of the Label in providing transparency and standards in upcoming covered bond markets. In this period the Label marked as well a further expansion in the in the German market.

The Label is based on the Covered Bond Label Convention (the one currently in force is 2020 Label Convention please see below), which defines the core characteristics required for a covered bond programme to qualify for the Label.

The Covered Bond Label Foundation (CBLF) granted the first Non-European Economic Area (non-EEA) Label in 2015. In February 2016, the first non-EEA global issuer published the HTT followed by the first European issuers. Currently, 26 out of 154 pools are form outside the EEA and the UK.

> Figure 1: Evolution of Labelled Cover Pools

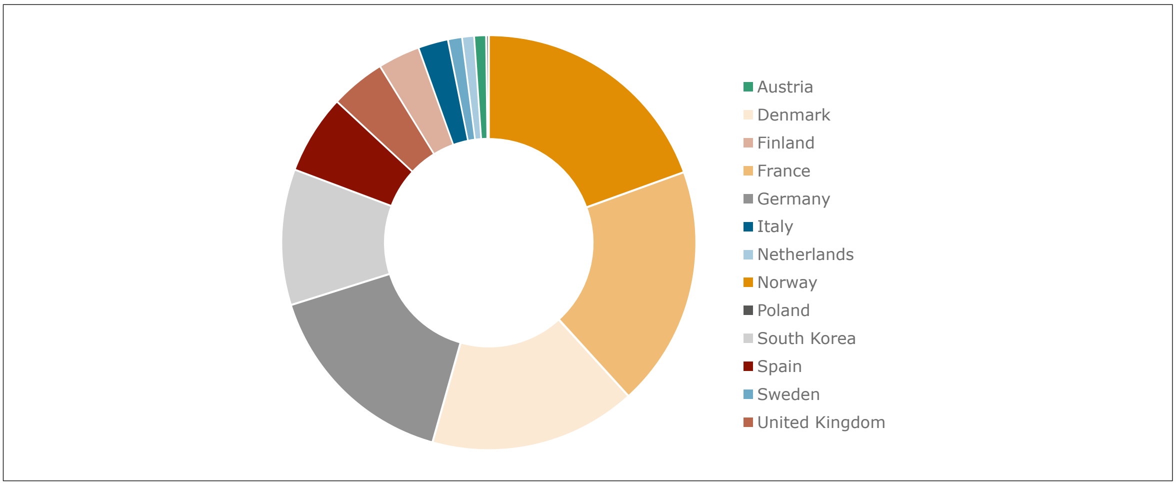


The HTT is the worldwide standardised, Excel-based form that issuers who have been granted the Covered Bond Label use to disclose information on their covered bond programmes. Definitions and format of the disclosed information are standardised to increase comparability and transparency between issuers and between jurisdictions. Standardisation facilitates investors' due diligence, enhancing overall transparency in the Covered Bond market. The HTT, designed to be fully compliant with the current legislative environment undergoes constant review, stirred by the Covered Bond Label Committee and the Covered Bond Label Advisory Council, so to be always up-to-date with regulatory and market requirements. In particular, in order to proactively align with the requirements of the Covered Bond Legislative Package the Covered Bond Label has published in June 2022 an updated provisional HTT, fully aligned with Art. 14 of the CB Directive which will be finalised during the September Label Committee meeting. Additional country-specific information on the covered bond programmes can be found in the National Transparency Templates often included in the HTT.

The HTT presents a significant achievement in terms of convergence of market best practices and a substantial step forward in enhancing transparency in the covered bond space both in Europe and across the globe. The HTT is a particularly positive step for the market and especially for global investors, who will be able to perform their due diligence activities more easily and obtain issuers' data ranging from asset and liability side information to legislative details from different countries in a more comparable way. Over the last couple of HTT revisions the HTT presents also various datapoints on the ESG dimension, such as data on EPC, age structure and energy demand of dwellings used as collateral for mortgages in the cover pool. These additions prove the proactiveness of the Covered Bond Label Community to provide relevant and timely data in order to promote the high transparency and comparability standards for which the Label is known for.

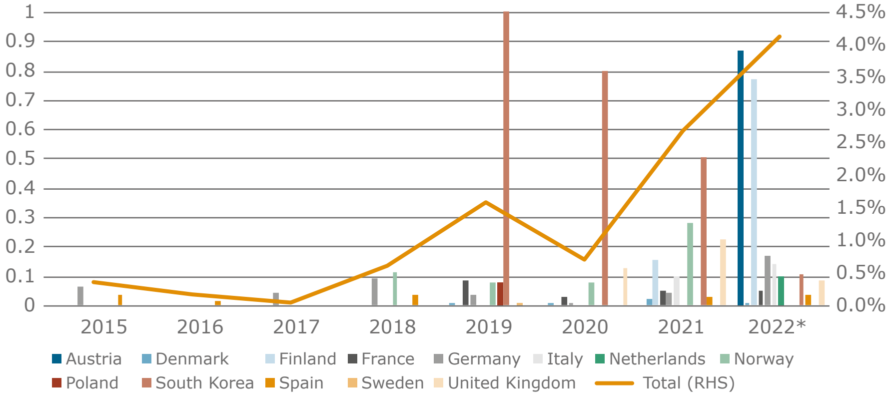
The addition of ESG data in the HTT rests on the steadily growing attention being paid by our members to the issuance of sustainable covered bonds, which are becoming an increasingly important feature of the European financial landscape. What has started in 2017 as a just a self-certification operated by labelled covered bond issuers to flag with a green leaf on the covered bond label website those bonds which are considered sustainable has now reached significant proportions with nearly 70 outstanding bonds in 13 jurisdictions and 35 banks accounting for nearly EUR 56bn. From the latest figures available this volume amounts to roughly 3% of total covered bond outstanding end 2021, and to 2.7% in terms of new issuances during the same period and for 2022 the available figures on the label website suggest that around 4.3% of new issuances are sustainable covered bonds.

> Figure 2A: Outstanding Sustainable Covered Bonds (status July 2022)



Source: Covered Bond Label

> FIGURE 2B: PROGRESSION OF SUSTAINABLE COVERED BONS AS A PERCENTAGE OF TOTAL ISSUANCE



Source: Covered Bond Label
*data for 2022 refers until August 2022

The impact of the new legislative Framework on the Covered Bond Label

With the start of application of the Covered Bond Directive on 8 July 2022 the Covered Bond Label in order to proactively provide up-to-date information and to support the covered bond community in this transition period has undergone, besides the above-mentioned publication of the provisional 2023 HTT, important updates both on the Convention and on the outline of the information on the website.

In the new Convention the legal reference from CRR 129.7 to the Covered Bond Directive has been amended and eligible assets are limited to the ones currently present on the Covered Bond Label, i.e. mortgage, public sector and shipping assets.

Labelled issuers have now the possibility to either immediately acknowledge the 2023 Convention, or to abide for the remainder of the current year to the 2022 Convention.

Here the text of the 2023 Covered Bond Label Convention:

Covered bonds are debt securities, backed by mortgage, public sector or ship assets, and characterised by a twofold bondholders' protection mechanism rooted in a dedicated covered bond legal framework.

In more details:

I Legislation safeguards

a) The CB programme is embedded in a dedicated national CB legislation;
b) The bond is issued by -or bondholders otherwise have full recourse, direct or indirect[1], to- a credit institution which is subject to public regulation and supervision;
c) The obligations of the credit institution in respect of the cover pool are supervised by public supervisory authorities.

1 Including pooling models consisting only of covered bonds issued by credit institutions.

2 The financial assets eligible for the cover pool (including substitution assets and derivative instruments) and their characteristics are defined in the national covered bond legislation which complies with the requirements of the Covered Bond Directive (Directive (EU) 2019/2162, as well as those articles which specify its implementation, including a waiver for the requirement for the issuer to be based in the European Economic Area (EEA), allowing non-EEA LCR compliant covered bonds programmes to be eligible for the Label. Non-EEA Labels will be identified on the Covered Bond Label website in a different graphic solution to EEA Labels.

3 The enhanced Harmonised Transparency Template 2023 will enter into force at the end of the first quarter of 2023 and will be a binding requirement for the granting and renewal of the Covered Bond Label.

II Security features intrinsic to the CB product

a) Bondholders have a dual claim against:
   i. The issuing credit institution as referred to in point I b);
   ii. A cover pool of financial assets[2] (mortgage, public sector or ship assets), ranking senior to the unsecured creditors.

b) The credit institution has the ongoing obligation to maintain sufficient assets in the cover pool to satisfy the claims of covered bondholders at all times.

c) Issuers are committed to providing regular information enabling investors to analyse the cover pool, following the Harmonised Transparency Template[3] and in compliance with the transparency requirements of Article 14 of the Covered Bond Directive (Directive (EU) 2019/2162).

For further information on the Covered Bond Label Convention, visit https://www.coveredbondlabel.com/

Besides the Convention the website has been graphically updated and presents among others as well as indications of compliance levels of the labelled covered bonds. In addition to the categories included in Art 27 of the Covered Bond Directive, i.e. European Covered Bond Label (Premium) and European Covered Bond Label, the Covered Bond Label website has included as well the categories of EEA-Grandfathered, non-EEA Grandfathered, other and N/A, which are all described in the following legend in order to provide a smooth transition tool to the new legislative environment and a support to the member states which according to art 26 are the sole authorities competent to publish the lists of premium covered bonds.

European Covered Bond (Premium): as defined in Art 27.2 Covered Bond Directive

European Covered Bond: as defined in Art 27.1 Covered Bond Directive

EEA Grandfathered – CRR compliant: labelled covered bond issued in the EEA before 8 July 2022 not completely aligned with the Covered Bond Directive, but due to grandfathering might be compliant with Art 129 of CRR and eligible for LCR. Please verify on this website.

Non-EEA Grandfathered: labelled covered bond issued outside the EEA before 8 July 2022 but not completely aligned with the Covered Bond Directive.

Other: labelled covered bond issued after 8 July 2022 by non-EEA issuers in attendance of the final dispositions on the equivalence regime of third-party country which will be decided in 2024.

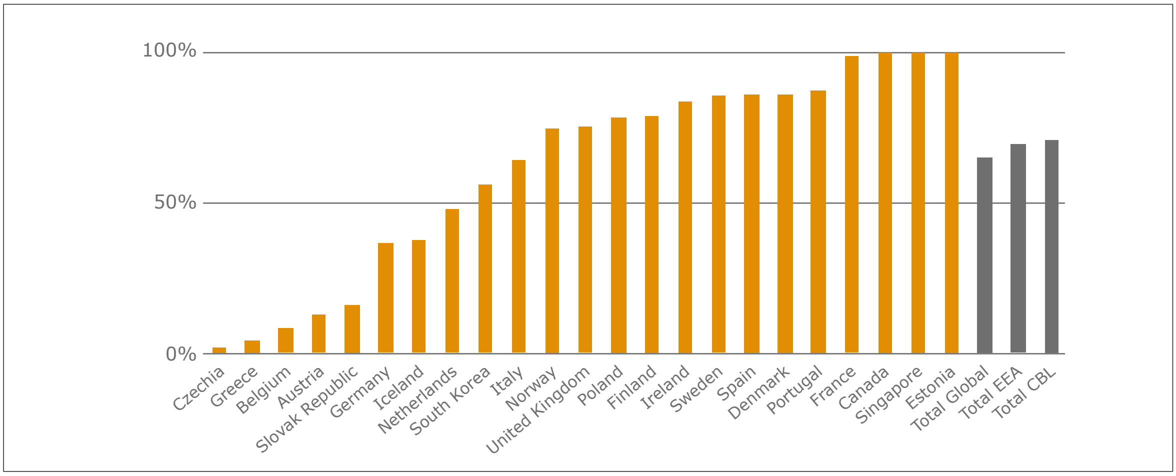
N/A **N/A**: all covered bonds which do not comply with the above-mentioned categories. Among others, but not exclusively here included are:

> covered bonds issued before the 8 July 2022 and only UCITS compliant

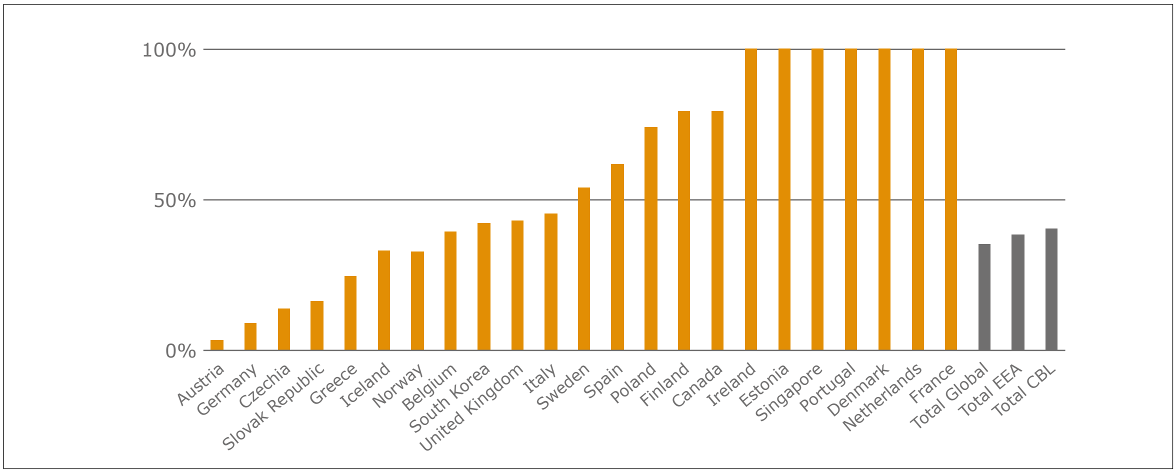
2 The financial assets eligible for the cover pool (including substitution assets and derivative instruments) and their characteristics are defined in the national covered bond legislation which complies with the requirements of the Covered Bond Directive (Directive (EU) 2019/2162, as well as those articles which specify its implementation, including a waiver for the requirement for the issuer to be based in the European Economic Area (EEA), allowing non-EEA LCR compliant covered bonds programmes to be eligible for the Label. Non-EEA Labels will be identified on the Covered Bond Label website in a different graphic solution to EEA Labels.

3 The enhanced Harmonised Transparency Template 2023 will enter into force at the end of the first quarter of 2023 and will be a binding requirement for the granting and renewal of the Covered Bond Label.

> Figure 3A: Market share Covered Bond Label by outstanding



> Figure 3B: Market share Covered Bond Label by issuer



The data on the total covered bond market is based on end-2020 values, whereas data on the Covered Bond Label is based on data of July 2021. Considering the current contraction of the CB market in 2021 you can notice in certain countries, most notably for those with a complete issuers coverage, an underrepresentation in the outstanding figures in the Covered Bond Label.

LABELLED COVER POOLS

AUSTRIA

UniCredit Bank Austria AG Credit Public Sector
UniCredit Bank Austria AG Credit Mortgage

BELGIUM

BNP Paribas Fortis Mortgage Pandbrieven

Argenta Spaarbank Belgian Mortgage Pandbrieven

CANADA

Bank of Montreal Cover Pool

CCDQ Covered Bond (Legislative) Guarantor Limited Partnership

CIBC Legislative

HSBC Legislative Covered Bond Guarantor LP

National Bank of Canada Legislative Covered Bonds

RBC Covered Bond Guarantor LP

Scotiabank Covered Bond Guarantor Limited Partnership

TD Legislative Covered Bonds

CZECHIA
Komercni_banka_HZL_EUR_0001

DENMARK
Danish Ship Finance A/S General Capital Center
Danish Ship Finance A/S Capital Centre A
Danske Bank A/S Cover Pool D – Denmark
Danske Bank A/S Cover Pool I – International
Danske Bank A/S Cover Pool C – Commercial
DLR Kredit A/S Capital Centre B
Jyske Realkredit A/S Capital Center E
Nordea Kredit Realkreditaktieselskab A/S Capital Center 1
Nordea Kredit Realkreditaktieselskab A/S Capital Center 2
Nykredit Realkredit A/S Capital Centre E
Nykredit Realkredit A/S Capital Centre G
Nykredit Realkredit A/S Capital Centre H
Nykredit Realkredit A/S Capital Centre I
Realkredit Danmark A/S Capital Centre S
Realkredit Danmark A/S Capital Centre T

ESTONIA
Luminor Bank AS Euro Medium Term Note
LHV Pank AS LHV CB1

FINLAND
Danske Mortgage Bank Plc, Pool 1
Nordea Mortgage Bank Plc
OP Mortgage Bank EMTCN
OP Mortgage Bank EMTRCN
Sp Mortgage Bank Plc, SP-01

FRANCE
Arkéa Home Loans SFH
Arkéa Public Sector SCF
AXA Home Loan SFH
AXA Bank Europe SCF
BNP Paribas Home Loan SFH
BPCE Home Loan SFH
Caisse de Refinancement de l'Habitat, CRH
Caisse Française de Financement Local
CIF Euromortgage
Compagnie de Financement Foncier
Credit Agricole Home Loan SFH
Credit Agricole Public Sector SCF
Crédit Mutuel Home Loan SFH
HSBC SFH (France)
La Banque Postale Home Loan SFH
MMB SCF
SG Credit Public Sector SCF
SG Credit Home Loan SFH

GERMANY
Berlin Hyp AG – BHH Mortgage Pfandbrief
pbb Mortgage Pfandbrief
pbb Public Sector Pfandbrief
DZ HYP AG – Mortgage Pfandbrief
DZ HYP AG – Public Sector Pfandbrief
Hamburg Commercial Bank – Hyp Pool
Hamburg Commercial Bank – Ship
LBBW Mortgage Cover Pool
LBBW Public Sector Cover Pool
Münchener Hypothekenbank eG – MHB Mortgage Pfandbrief
NORD/LB Public Sector
UniCredit Bank AG – HVB Mortgage
UniCredit Bank AG – HVB Public

GREECE
Alpha Bank Covered Bond Programme I

ICELAND
Sértryggð Skuldabréf – Arion banki hf.

IRELAND
AIB Mortgage Bank ACS (Asset Covered Securities)
Bank of Ireland Mortgages ACS – (Asset Covered Securities)

ITALY
Crédit Agricole Italia OBG S.p.A
Banca Carige S.p.A. Credit Home/Commercial Loan
Banco Popolare de Milano, Bpm OBG2
Intesa Sanpaolo S.p.A. ISP CB Ipotecario S.r.l.
Intesa Sanpaolo S.p.A. ISP CB Pubblico S.r.l.
Intesa Sanpaolo S.p.A. OBG S.r.l.
Intesa Sanpaolo S.p.A. UBI FINANCE S.r.l
UniCredit S.p.A. BpC Mortgage s.r.l.
UniCredit S.p.A. OBG srl
Südtiroler Volksbank Banca Popolare dell'Alto Adige Voba CB S.r.l.

NETHERLANDS
ABN AMRO Covered Bond Programme
Achmea Bank CPT Cover Pool
Achmea Bank SB Cover Pool
Aegon Bank CPT Cover Pool
Aegon Bank SB Cover Pool
ING Bank N.V. ING Bank
ING Bank N.V. ING Bank Soft Bullet
NIBC Bank N.V. Conditional Pass-Through Covered Bond Programme

NN Bank Soft Bullet Cover Pool
NN Bank CPT Cover Pool
Rabobank
Van Lanschot Bankiers N.V. CPT Covered Bond Programme
Van Lanschot Bankiers N.V. SB Covered Bond Programme
Volks Covered Bond Company B.V.

NORWAY

DNB Boligkreditt AS mortgage cover pool
Eika Boligkreditt AS (EIKBOL)
Møre Boligkreditt mortgage cover pool
Nordea Eiendomskreditt AS cover pool
SpareBank 1 Boligkreditt (Spabol)
Sparebanken Sør Boligkreditt AS cover pool
Sparebanken Vest Boligkreditt AS
SR-Boligkreditt mortgage cover pool

POLAND

Pekao BH mortgage
Pekao BH public sector
mBank Hipoteczny S.A. – Mortgage Cover Pool
PKO Bank Hipoteczny SA

PORTUGAL

Banco BPI S.A. Mortgage Cover Pool
Banco Comercial Português, S.A. – Residential Mortgages
Banco Santander Totta, S.A.
Caixa Económica Montepio Geral (CEMG)
Caixa Geral de Depósitos, S.A. Mortgage Cover Pool
NOVO BANCO Conditional Pass-Through Covered Bond Programme

REPUBLIC OF KOREA (SOUTH)

KHFC 2019 EUR 500 million Social Covered Bond due Jun 2024
KHFC 2020 EUR 1 billion Social Covered Bond due Feb 2025
Kookmin Bank USD 7 billion Global Covered Bond Programme
KHFC 2020 EUR 500 million Social Covered Bond due July 2025
KHFC 2021 EUR 1 billion Social Covered Bond due June 2026
KHFC 2021 EUR 550 million Social Covered Bond due Oct 2028
KHFC 2022 EUR 600 million Social Covered Bond due March 2025
KEB Hana Bank USD 5 billion Global Covered Bond Programme

SINGAPORE

DBS Bank Limited USD10 billion Global Covered Bond Programme
OCBC Limited USD 10b Global Covered Bond Programme
United Overseas Bank Limited USD8 billion Global Covered Bond Programme

SLOVAKIA

Prima banka Slovensko a.s. PB Cover Pool 1

SPAIN

ABANCA Corporación Bancaria S.A.,
Banco de Sabadell, S.A. Covered Bond Programme
Banco de Sabadell, Public Sector Programme
Banco Santander S.A., Santander Mortgage Covered Bonds
Bankinter S.A., Bankinter S.A.
BBVA, Covered Bond Programme
BBVA, Public Sector Covered Bond Programme
CaixaBank SA, Mortgage Loans
CaixaBank SA, Public Loans
Caja Rural de Navarra Credit Cooperative, Covered Bond
Eurocaja Rural, Eurocaja Rural
Grupo Cooperativo Cajamar, Cajamar Mortgage
Ibercaja Banca S.A, Ibercaja Banco S.A.
Kutxabank S.A., Kutxabank S.A.
Unicaja Banca, S.A., Unicaja Banco Mortgage Covered Bonds

SWEDEN

Länsförsäkringar Hypotek
Nordea Hypotek cover pool
Skandinaviska Enskilda Banken AB, SEB Cover Pool
Stadshypotek Finnish pool
Stadshypotek AB (publ) Swedish Pool
Stadshypotek AB (publ) Norwegian Pool
Swedbank Mortgage AB cover pool
The Swedish Covered Bond Corporation

UK

NatWest Covered Bond Programme
Clydesdale Bank PLC EUR10 billion Global Covered Bond Programme
Coventry Building Society 1006
Lloyds Bank plc EUR60bn Global Covered Bond Programme
Nationwide Building Society Covered Bond LLP
Santander UK plc
Yorkshire Building Society Covered Bonds

CHAPTER 1 - KEY THEMES OF THE YEAR

1.1 MACROPRUDENTIAL INSTRUMENTS AND THEIR ROLE IN ADDING RESILIENCE TO THE COVERED BOND MARKET

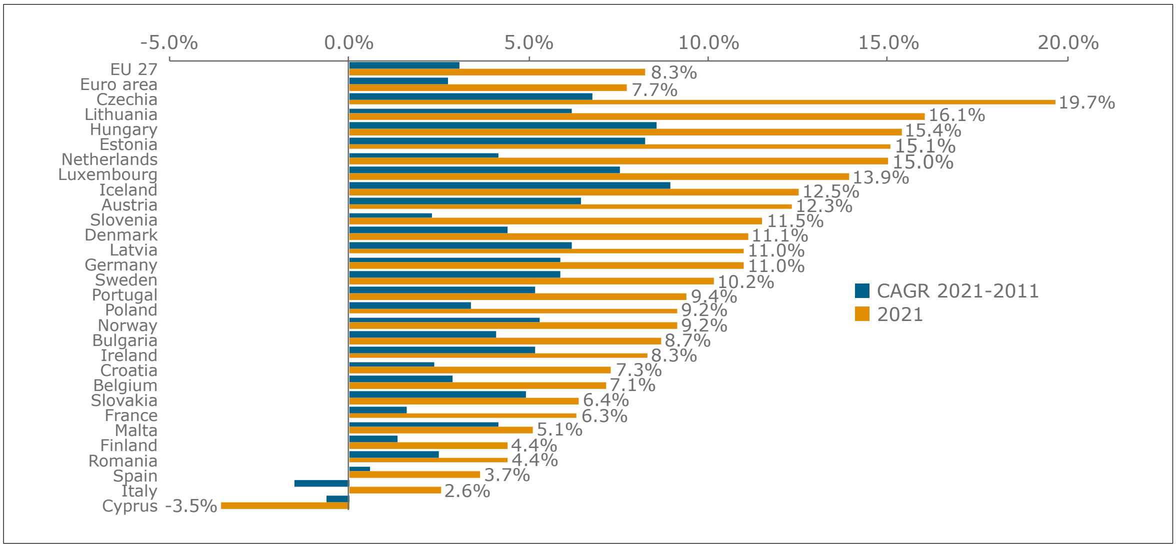
By Elisa Coletti, Intesa Sanpaolo, Karsten Rühlmann, LBBW

Residential real estate loans represent the most widely used cover pool asset in an international context. In recent years, most residential real estate markets in the EU have seen a steady upward trend. Even the Corona pandemic was unable to put a stop to these developments. Covered bond laws contain strict rules on the eligibility of mortgage loans that are allowed to be included in the cover pool. Besides this, numerous macroprudential instruments have been developed in recent years to manage the risks to financial stability that may arise from developments in the real estate market. The institutional framework differs from country to country and requires a differentiated approach based on the specifics of real estate financings. In the following, we describe the current developments in the real estate markets of the EU countries. Building on this, we present the basic macroprudential framework in the EU and take a closer look at recent macroprudential measures in individual jurisdictions.

TREND IN HOUSE PRICES AND MORTGAGE LOANS

The soaring trend in the European residential real estate (RRE) markets continued in 2021 when the pace of growth accelerated in almost all countries. Nominal house prices increased in the EU by 8.3% yoy in 2021 and by 10% in the fourth quarter versus a compound annual growth rate (CAGR) of 3.1% in the last ten years. The same occurred in the euro area, increasing by 7.7% in 2021 and by 9.4% in the fourth quarter, the fastest growth in 20 years. There are differences between countries: in some of them RRE prices have grown continuously throughout the decade, as in Germany where the historical peak of 12.2% yoy was reached in the last quarter of 2021, while in other countries the rise is more recent. In Italy house prices started recovering in the first quarter 2020 and the pace of growth remained moderate, by 4% yoy in the last quarter of 2021. Indeed, price growth accelerated and was more widespread with the pandemic, which triggered changes in housing preferences reflecting the search for larger spaces, fueled by a shift to home working. Along with increased demand, other drivers of the growth in property prices are low interest rates and supply-side constraints. Country-specific drivers are also important (i.e. incentives for energy-efficiency renovations). Moreover, amid higher inflation, flight-to-safety effects toward real estate assets are possible, effects that may be exacerbated by the war in Ukraine.

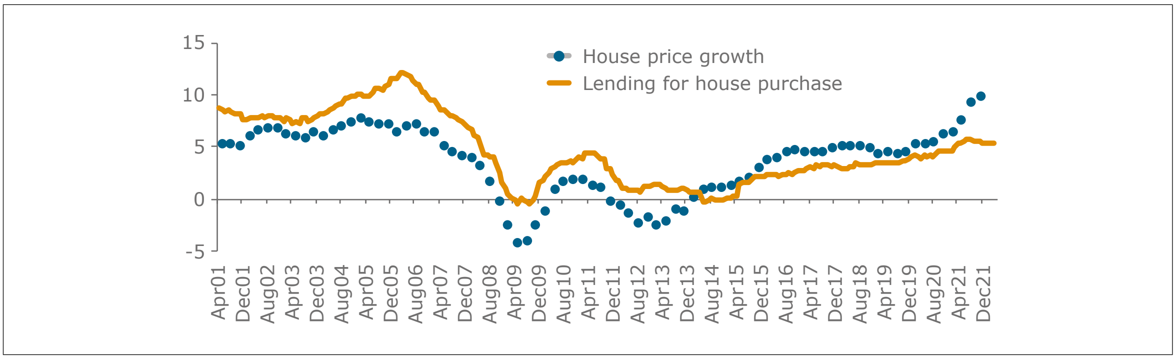
> Figure 1: In 2021 growth in residential real estate prices exceeded the pace recorded in the last decade



Source: Eurostat, Intesa Sanpaolo Research Calculations

The buoyant growth of residential real estate prices is coupled with robust mortgage lending. In the euro area in April 2022 growth in housing mortgages was equal to 5.3%, after an average rate of 5.5% in the previous 12 months and a peak of 5.8% in August 2021, thus showing a y-o-y slight slowdown. In several countries, the trend seems plateauing, following a long period of recovery. Indeed, according to the Bank Lending Survey, in the euro area in the initial months of 2022 banks slightly tightened credit access conditions for lending to households for house purchases.

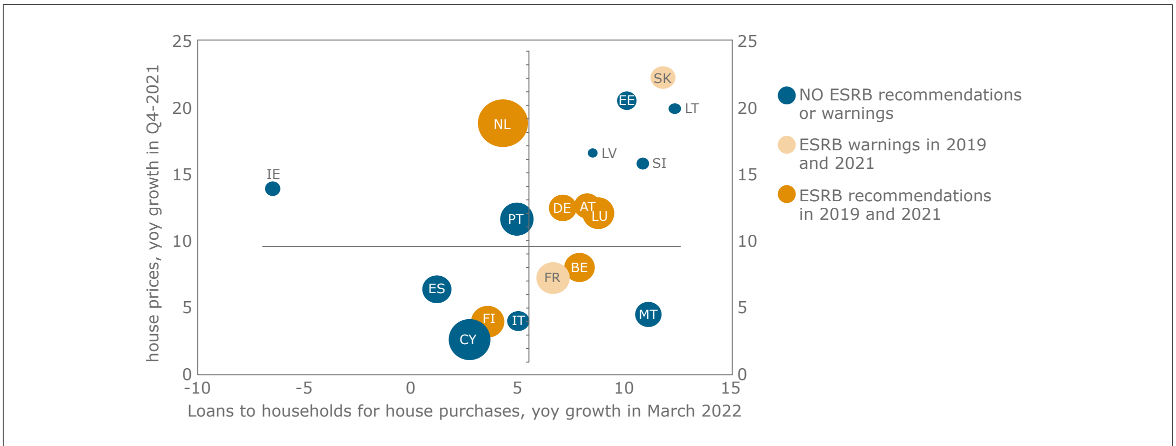
> Figure 2: The trend in the Euro area house prices is coupled with developments in mortgage loans (y-o-y % change)



Source: ECB, Intesa Sanpaolo Research

There is a clear positive correlation between house prices and mortgage loans, though patterns vary among countries. In some countries both house prices and housing loans are strongly increasing, while in other countries developments are muted. Overall, concerns of vulnerabilities in the residential real estate markets continued to build. However, as shown in figure 2, differently from pre-2008 crisis, in the last seven years, and more specifically in the post pandemic boom, the growth in mortgages has lagged the rise in RRE prices. As mentioned before, debt isn't the main driver of rising prices. Since the pandemic, the housing market has been driven to an important extent by replacement purchases. Existing homeowners tend to have the most equity and the lower LTV. This condition should limit the impact on financial stability of a rapid increase in real interest rates and the resulting house price corrections.

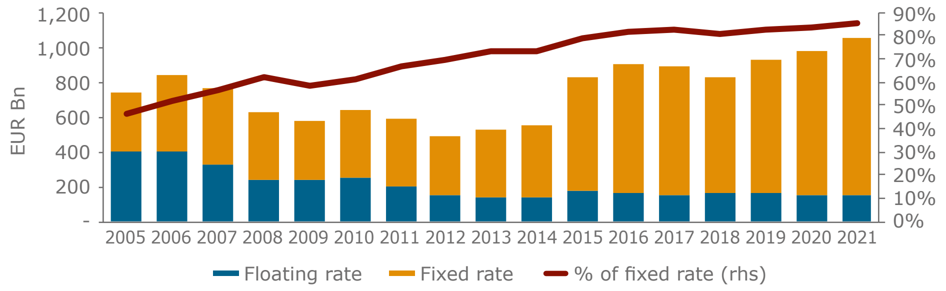
> Figure 3: The overall picture: RRE prices, mortgage loans, household indebtedness (the size of the bubbles) and ESRB's stance to macroprudential measures in selected countries.



Source: ECB, Intesa Sanpaolo Research

Another mitigating factor of possible adverse impacts of monetary policy normalization regards the structure of interest rates on new mortgage loans. In a scenario of weakening income positions and higher interest rates, households' debt servicing capacity could worsen, particularly in countries with elevated debt levels. However, the shift from floating to fixed-rate mortgages occurred over more than a decade will protect households from the increase in debt servicing needs related with higher reference rates. Indeed, as shown in figure 4, for the euro area, the share of fixed-rate mortgages over total new housing loans reached 85% in 2021, following a long period of very low interest rates and loan renegotiations, from 46% in 2005 when households used to direct their preferences towards floating-rate loans. From the covered bond market perspective, the higher share of fixed-rate housing loans is expected to mitigate any possible credit deterioration in mortgage loan cover pools.

> Figure 4: Breakdown of the flow of loans to households for house purchases between floating and fixed-rate loans (EUR Bn and % of fixed-rate over total)



Source: ECB, Intesa Sanpaolo Research

THE MACROPRUDENTIAL FRAMEWORK AT EUROPEAN LEVEL

The steady rise in real estate prices can endanger the stability of the financial system and give rise to systemic risks. To counter these risks, national supervisory bodies as well as legislators have the possibility to decide on and activate the use of macroprudential instruments. In this sense, macroprudential instruments are measures designed to maintain a stable financial system.

Many macroprudential instruments and related institutions have been created in response to the financial crisis. In order to establish harmonized but decentralized macroprudential supervision, national, European and international responsibilities intertwine closely. On the one hand, macroprudential instruments have been directly incorporated into the regulatory framework for the first time with the Capital Requirements Directive (CRD) and Capital Requirements Regulation (CRR) and thus harmonized specifications were made for implementation in national law. On the other hand, macroprudential policy and the associated toolbox are fundamentally the responsibility of the national authorities responsible for macroprudential supervision.

At the European level, the European Systemic Risk Board (ESRB) has been responsible for macroprudential supervision of the EU financial system since 2011. In addition to members from a wide range of European institutions (ECB, EU Commission, EBA, ESMA, EIOPA, EFC), it is composed of representatives of the national macroprudential authorities of the individual EEA member states. The central decision-making body is the ESRB's General Board, chaired by ECB President Lagarde. If serious risks or imbalances are identified in the European financial system, the ESRB can issue warnings or recommendations to the EU, EU member states or European and national supervisory authorities. The communication is either confidential or public. Recommendations include concrete actions to mitigate identified risks or imbalances. These are not legally binding. However, the rejection of recommended measures must be adequately justified. If the recommendations are adopted, the ESRB monitors their implementation and also has the right to issue an opinion on the measures under consideration.

In the course of the Single Supervisory Mechanism (SSM) Regulation, the ECB has also been given macroprudential powers since November 2014. As part of this, it is responsible for assessing the macroprudential measures adopted by the national authorities. If necessary, it can demand the tightening of the corresponding instruments.

With regard to the variety of macroprudential instruments, there is a wide range of possible interventions. In its regular reports on the various national measures, the ESRB makes a fundamental distinction between "capital based measures" and "borrower based measures". Instruments that do not fall into either category are classified as "other measures".

In this context, "capital based measures" target the entire banking system and are intended to combat structural risks by applying additional capital buffers. For example, the Capital Conservation Buffer (CCoB), which currently stands at 2.5% for all member states, is intended to improve the overall loss absorption capacity of the banking system. The Countercyclical Capital Buffer (CCyB) can help to dampen excessive credit growth in upswings and thus prevent the economy from overheating. In the event of a downturn, a dissolution of the CCyB can in turn counteract a crisis-induced restriction in the supply of credit. The Global Systemically Important Institution Buffer (G-SII Buffer) and the Other Systemically Important Institution Buffer (OSII Buffer) are designed to mitigate risks arising, among other things, from excessive interconnections between individual banks. The systemic risk buffer is intended to counter systemic risks and can apply to specific groups of institutions or the entire banking system. Sector-specific buffers that address specific risk positions are also possible.

"Borrower based measures", on the other hand, refer to the specific financing and aim to smooth the credit cycle. Within this framework, excessive lending can be counteracted. On the other hand, structural credit features can be influenced in order to curb risks for the national economy, which arise, for example, from excessive debt or from sharply rising property prices. In general, they refer to residential mortgage loans.

In principle, both individual measures and a combination of several measures can be applied. This strongly depends on the country specifics and the assessment of the current situation on the part of the respective "decision makers". At this point it is important to mention that decisions can be made in very different ways. On the one hand, it plays a role which bodies have the decision-making authority. This can differ considerably from country to country and varies from only one authority to a combination of several authorities. In addition to the national central banks, some countries also have committees within or outside the central banks. Furthermore, in some countries the decision on possible measures is also placed in the hands of the supervisory authority, which acts independently of the central bank. In addition, the influence of political bodies is possible, whereby the Ministry of Finance of the respective country usually plays the main role here. On the other hand, the nature of the influence also varies significantly. The possibilities for the responsible bodies to exert influence range from the right to make proposals (soft power) to the power to issue instructions (hard power). The responsible bodies as well as their powers thus have a decisive influence on the choice of measures as well as their implementation, so that an assessment of macroprudential measures can only take place at the national level. There is therefore unlikely to be a "patent remedy".

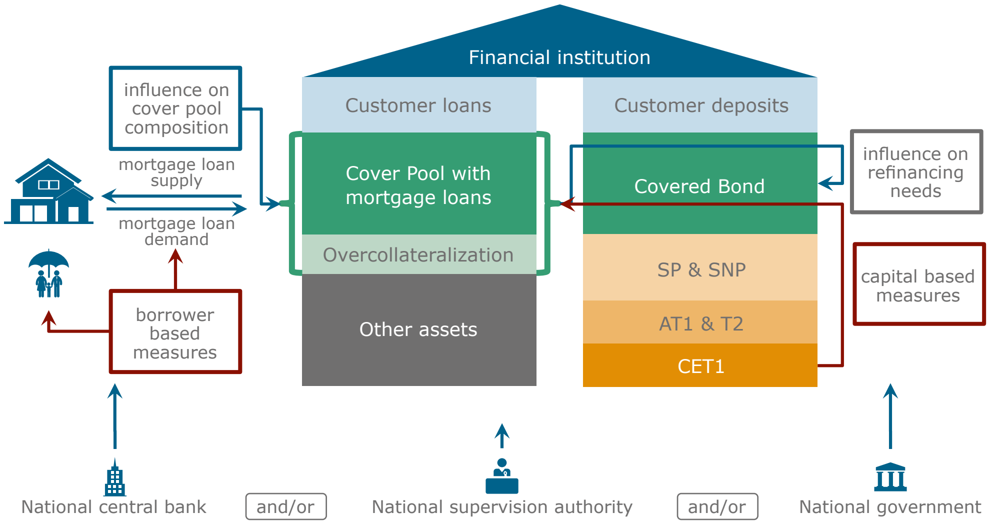
> Figure 5: Overview of macroprudential measures

Macroprudential measures	Examples
Capital based measures	> Capital Conservation Buffer (CCoB) > Countercyclical Capital Buffer (CCyB) > G-SII Buffer > O-SII Buffer > Systemic Risk Buffer (SRB)
Borrower based measures	> Debt Service to Income (DSTI) > Loan-to-income (LTI) > Loan-to-value (LTV) > Debt-to-Income (DTI) > Loan Term > Loan Amortization > Stress / Sensitivity Test
Other measures	> Leverage ratio > Liquidity ratio > Loan-to-Deposit > Risk Weights

Source: ESRB, LBBW Research

In the covered bond context, the use of macroprudential instruments can influence both issuance activity and the composition of the cover pool. Thus, the requirement for additional capital buffers can in principle lead to lower lending. Stricter credit guidelines, on the other hand, can put the brakes on demand for mortgage loans. On the other hand, instruments such as LTV or LTI caps as well as maturity restrictions on loans can lead to an improvement in credit quality in the cover pool or a reduction in ALM risks. On the issuer side, capital based measures in particular can contribute to a higher resistance to crises and thus to a lower probability of default, which in the overall context is reflected positively in the covered bond assessment.

> Figure 6: Covered bonds in the context of macroprudential measures



Abbreviations: CET1 = Common Equity Tier 1; AT1 = Additional Tier 1; T2 = Tier 2;
SP = Senior Preferred; SNP = Senior Non-Preferred

Source: LBBW Research

CURRENT DEVELOPMENTS AND RECENT MACROPRUDENTIAL MEASURES

In the last five years, the ESRB has taken extensive action twice. Accordingly, five warnings and six recommendations have been issued to eleven member states in June 2019. A corresponding public communication on this took place in September 2019. Czechia, Germany, France, Iceland and Norway were affected by the warnings. Belgium, Denmark, Luxembourg, the Netherlands, Finland and Sweden have received concrete recommendations. Two years later, the ESRB came back with a follow-up. Five warnings and two recommendations were sent out in December 2021 and subsequently communicated in February 2022. Bulgaria, Croatia, Hungary, Liechtenstein and Slovakia are new countries with warnings. In addition, Austria and Germany have received concrete recommendations for measures.

The risk factors identified by the ESRB are diverse and range from accelerating house price growth and increasing overvaluations to sharp increases in lending and, in some cases, associated loosening of lending standards. Further risks from the real estate market can arise due to high household indebtedness or high shares of interest only loans. In this context, the risk factors occur in varying degrees depending on the country or may only apply to limited regions, such as metropolitan areas. In some cases, the ESRB also points to insufficient data, which makes it difficult, for example, to obtain information on the development of lending standards that is important for risk analysis.

Of the 17 countries that received either a warning or a specific recommendation, the ESRB sees high risks from real estate market developments in five countries. This applies in particular to countries in the Nordics and the BeNeLux region. A medium risk is seen for all other countries. The most frequent risk is existing or increasing overvaluation tendencies (in 88% of the countries). These are often accompanied by continued strong house price growth (82%) and strong and sustained credit growth (76%). In more than half of all countries, the dangers of high household indebtedness (65%) and easing of lending standards (59%) are also mentioned. In the Nordics in particular, the ESRB also highlights the strong interconnectedness between the banking markets, which is reflected in cross-border financing and a generally high importance of residential real estate financing in these countries.

> FIGURE 7: ESRB RISK ASSESSMENT AND KEY VULNERABILITES ON DIFFERENT EEA RESIDENTIAL REAL ESTATE MARKETS

Country	ESRB		Key Vulnerabilities						
	Warning/ Recommendation	Risk Assess-ment	House Price Growth	Over-valuation	Housing Lending Growth	Deteriorating Lending Standards	High Household Indebted-ness	Intercon-nectedness of Banking Systems	High Share of Interest Only Loans
Austria	Recommendation	Medium	✓	✓	✓	✓			
Belgium	Recommendation	Medium	✓	✓	✓	✓	✓		
Bulgaria	Warning	Medium	✓	✓	✓				
Croatia	Warning	Medium	✓	✓	✓	✓			
Czechia	Warning	Medium	✓	✓	✓	✓			
Denmark	Recommendation	High	✓	✓			✓	✓	✓
Finland	Recommendation	Medium			✓	✓	✓	✓	
France	Warning	Medium		✓	✓	✓	✓		
Germany	Recommendation	Medium	✓	✓		✓			
Hungary	Warning	Medium	✓	✓	✓		✓		
Iceland	Warning	Medium	✓	✓	✓	✓	✓		
Liechtenstein	Warning	Medium					✓		
Luxembourg	Recommendation	High	✓	✓	✓	✓	✓		
Netherlands	Recommendation	High	✓	✓		✓	✓		
Norway	Warning	High	✓	✓	✓				
Slovakia	Warning	Medium	✓	✓	✓		✓		
Sweden	Recommendation	High	✓	✓	✓		✓	✓	✓

Source: ESRB "Vulnerabilities in the residential real estate sectors of the EEA countries", LBBW Research

The work of the Basel Committee on Banking Supervision and the macroprudential policies of the ESRB and the ECB, among others, are believed to have led to the introduction of numerous macroprudential instruments at the country level in recent years. In particular, the additional capital buffers contributed to the banking systems in most member states proving to be much more robust and resilient compared to the financial crisis in 2008. During the height of the Covid 19 pandemic, the ECB allowed a wide variety of relief, for example with regard to the Pillar-2-Guidance (P2G), the capital conservation buffer and the leverage ratio. As the pandemic became more manageable and the economic outlook for credit institutions improved, it was decided at the beginning of this year to phase out the temporary relief. In the context of this, macroprudential measures also moved back into the focus of politics. In December 2021, the EU Commission launched a consultation on the appropriateness of the current macroprudential rules in the CRR and CRD to mitigate financial stability risks. The experiences from the use of capital buffers in the environment of the Covid 19 crisis should also be taken into account. In March 2022, the ESRB also published a concept paper proposing to introduce borrower-related measures into EU legislation based on a common minimum catalogue.

In the light of still rising property prices, additional capital buffers were reactivated or introduced for the first time at national level in the recent past. For example, in Croatia, Denmark, Estonia, France, Germany, Iceland, the Netherlands, Romania and Sweden, additional countercyclical capital buffers are planned (again) during 2022 and the beginning of 2023 (For more details see comments in figure 8). Other states, in turn, are going to increase their already existing CCyB. With regard to specific Systemic Risk Buffers, Germany and Lithuania will join the existing jurisdictions in the future. Accordingly, the Federal Financial Supervisory Authority (BaFin) published a general ruling at the end of March 2022, according to which German credit institutions will have to comply with a sectoral systemic risk buffer of 2.0% for their residential real estate financing. The target is to be implemented together with the CCyB (0.75%) from February 2023. Previously, in November 2021, the Lithuanian central bank had already decided to introduce a sectoral systemic risk buffer for residential real estate financing – also in the amount of 2.0%. This is to be applied from 1 July 2022.

With regard to borrower based instruments, for example, the Austrian supervisory authorities provide for a mandatory introduction of an LTV limit (90%), a debt service to income limit (maximum 40%) and a maximum loan term (35 years) for newly granted loans. The corresponding measures are to be applied from the second half of 2022. The borrower based measures that have applied in Austria so far were merely a recommendation to the credit institutions. New mandatory borrower based measures can also be observed in Czechia. Here, too, the corresponding instruments were previously based on recommendations, which were also partially suspended during the Covid 19 pandemic. The Czech central bank has had the power to set binding LTV, DTI and DSTI limits since August 2021. It exercised this right for the first time in November 2021. Thus, with effect from 1 April 2022, a DTI limit of 8.5 (9.5 for borrowers under 36) a DSTI limit of 45% (50% for borrowers under 36) and a LTV limit of 80% (90% for borrowers under 36) will apply to newly originated mortgage loans. The previous recommendations that are not covered by the new provisions (e.g. maximum loan term of 30 years, stress tests) are to continue to apply. Another recent example is France. Here, the French Financial Stability Council (Haut Conseil de Stabilité Financière) has also moved to cast previous recommendations regarding the maximum debt service to income ratio DSTI (35%) as well as the maximum loan term (25 years) into binding specifications with effect from 1 January 2022.

An analysis of the macroprudential instruments active in the member states shows that many countries already have borrower based measures in place. LTV limits are used most frequently, with a share of 81%. This is followed by requirements for debt service to income limits (52%) and maximum loan terms (44%). In Germany, too, there has been a legal basis for the enactment of borrower based measures since 2017. However, the possible instruments (LTV limit, amortization requirement) have not yet been activated by the BaFin.

> Figure 8: Selected borrower based and capital based measures in different countries

Country	Borrower based measures							Capital based measures	
	DSTI	LTI	LTV	DTI	Loan Term	Loan Amortiza-tion	Stress/ Sensitivity Test	CCyB	SRB
Austria	✓		✓		✓				✓
Belgium			✓						
Bulgaria							✓	✓	✓
Croatia								✓*	✓
Cyprus	✓		✓				✓		
Czechia	✓		✓	✓	✓	✓	✓	✓	
Denmark		✓	✓					✓*	
Estonia	✓		✓		✓			✓*	
Finland			✓				✓		
France	✓				✓			✓*	
Germany								✓*	✓**
Hungary	✓		✓						
Iceland	✓		✓					✓*	✓
Ireland			✓				✓		
Latvia	✓	✓	✓	✓	✓				
Liechtenstein			✓			✓			✓
Lithuania	✓		✓		✓				✓**
Luxembourg			✓					✓	
Malta					✓				
Netherlands			✓					✓*	
Norway			✓	✓		✓	✓	✓	✓
Poland	✓		✓		✓				
Portugal	✓		✓		✓				
Romania	✓		✓		✓			✓*	✓
Slovakia	✓		✓	✓	✓	✓		✓	
Slovenia	✓		✓		✓	✓			
Sweden			✓					✓*	✓

Source: ESRB, national authorities, LBBW Research – * Croatia (03/2023 0.5%), Denmark (09/2022 1.0%), Estonia (12/2022 1.0%), France (04/2023 0.5%), Germany (02/2023 0.75%), Iceland (09/2022 2.0%), Netherlands (05/2023 1.0%), Romania (10/2022 0.5%), Sweden (09/ 2022 1.0%)

CONCLUSION

In the context of the ongoing normalization on monetary policy, interest rate hikes will possibly dampen the run in RRE market, while on the other side it could worsen borrowers' ability to pay and impair the value of cover pool assets such as mortgage loans. In this sense, macroprudential measures, especially borrower based tools contribute to higher resilience in the covered bond market. Indeed, macroprudential initiative put in place in 2019 and 2021 mainly addressed countries with a higher household indebtedness, combined with accelerating house prices and strong increase in housing loans. Nevertheless, it is challenging to choose the right time to use macroprudential tools. The complexity of the mortgage finance market also makes it difficult to verify the impact of the use of macroprudential measures. Finally, apart from supply and demand, a wide variety of other factors affect the development of real estate markets and prices, such as energy and regulatory requirements and rising material costs.

1.2 IMPACT OF FINAL BASEL III ON THE EU MORTGAGE SECTOR

IMPLICATIONS FOR COMPETITIVE DYNAMICS AND CREDIT PROVISION

Introduction

In December 2017, the Basel Committee concluded their work on updating and completing the Basel III international regulatory framework for banks. A key objective of the reform is to reduce exces-sive variability of banks' capital requirements primarily driven by internal models, used by most large banks to estimate capital requirements. Here, policymakers' concern has been that the variation in the risk estimated by internal models, is not linked to corresponding variations in the underlying risks.

To address this, the Basel Committee has, amongst other things, suggested the implementation of a so-called output floor, providing a minimum level of capital that a bank must hold, thus working as a back-stop for estimated risk.

The European Commission recently released Banking Package 2021 with a proposal on how to implement the Final Basel III agreement in the EU. It introduces key changes to credit risk, operational risk and market risk and suggests implementing the output floor in accordance with what was suggested by the Basel Committee.

Previous studies conducted show strong evidence that the output floor will significantly impact low-risk business, such as mortgage lending. On the back of this, the EMF-ECBC commissioned Copenhagen Economics to assess the impact of Banking Package 2021 on the EU mortgage market.

In this article, we outline the results of the recently conducted study and discuss the wider implications of implementing Banking Package 2021. The article consists of two parts: part 1, by Copenhagen Economics, outlines the key findings of the study. Part 2, by Wolfgang Kälberer, focus on the wider implications for the banking sector.

PART 1

By Astrid Leth Nielsen and Jonas Bjarke Jensen, Copenhaguen Economics

IMPACT ON CAPITAL REQUIREMENTS FOR THE EU MORTGAGE SECTOR

Main findings

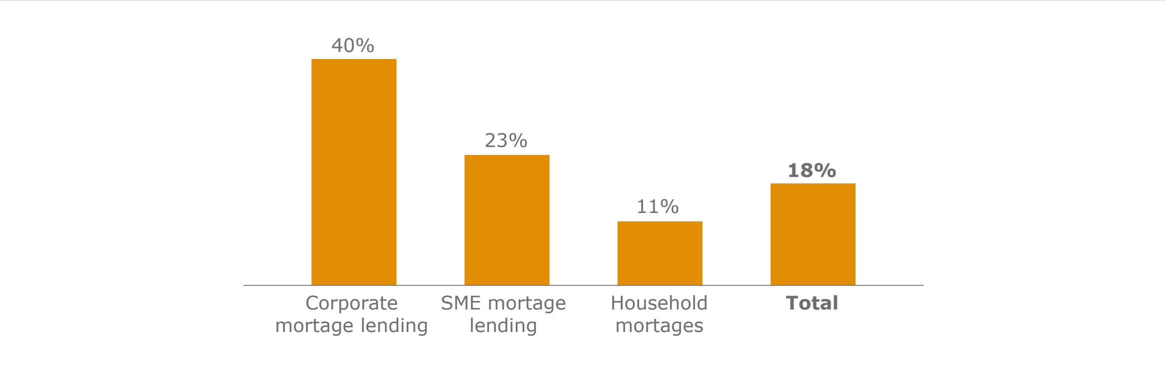
In the study, we estimated that capital requirements for the EU mortgage portfolios[1] will increase by an estimated 18% compared to the end of 2020. This corresponds to EUR 22 billion in extra capital. Fully restoring capital ratios to the pre-package level would require an additional EUR 17 billion, leaving a total extra capital need of up to EUR 39 billion.

However, the average impact of 18% includes substantial variation across institutions and depends crucially on two dimensions: 1) the type of lending and 2) which approach is taken by the institutions to model risks. In other words, the *average* impact is not very reflective of how institutions actually will be impacted; some institutions might see very strong impact, while other institutions in fact will see a decline in capital requirements for their mortgage portfolios.

To illustrate this, we can first look across different types of mortgage lending, where we found large discrepancies, see Figure 1. For corporate mortgage lending we estimated that capital requirements will increase by 40% on average. On the other hand, household mortgages will be less impacted with an increase on 11%. This should be seen in the light of the focus of Banking Package 2021, which has been in favour of lighter treatment of households, compared to the original Basel proposal. Under the standardised approach (applicable when the output floor is binding) the risk weight on 20% applied to exposures secured by residential real estate is thus significantly lower than the risk weight on 60% applied to exposures secured by commercial real estate.

1 We analyse assets included in the EBA transparency exercise, i.e., we assess the impact on 80 of the largest credit institutions in 13 major mortgage markets in the EU. Our country selection covers 93% of the EU mortgage market.

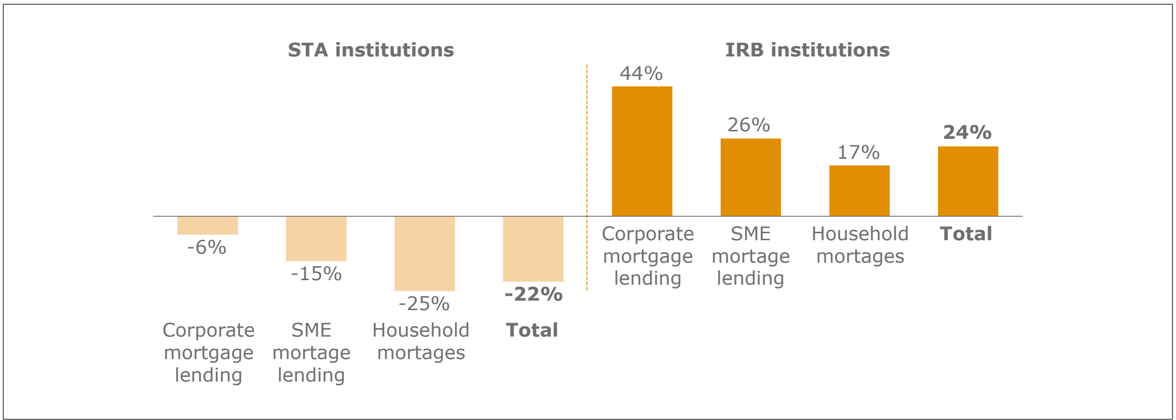
> Figure 1: Increase in capital requirements for different portfolios, % of original CET1 requirements



Source: Copenhagen Economics (2022) Impact of Final Basel III on the EU mortgage sector

Another relevant split is based on the approaches taken by institutions to model risk today; where IRB institutions on average had an increase in capital requirements of 24%, we found that STA institutions actually will experience a decrease in capital requirements of 22%, see Figure 2. This is based on the more preferential treatment of STA RW laid out with the loan-splitting approach in Banking Package 2021. Again, corporate mortgage lending at IRB institutions will be impacted the most with an increase on 44%. The impact for SME exposures is in general lower due to the SME supporting factor continued from the current regulation in Banking Package 2021.

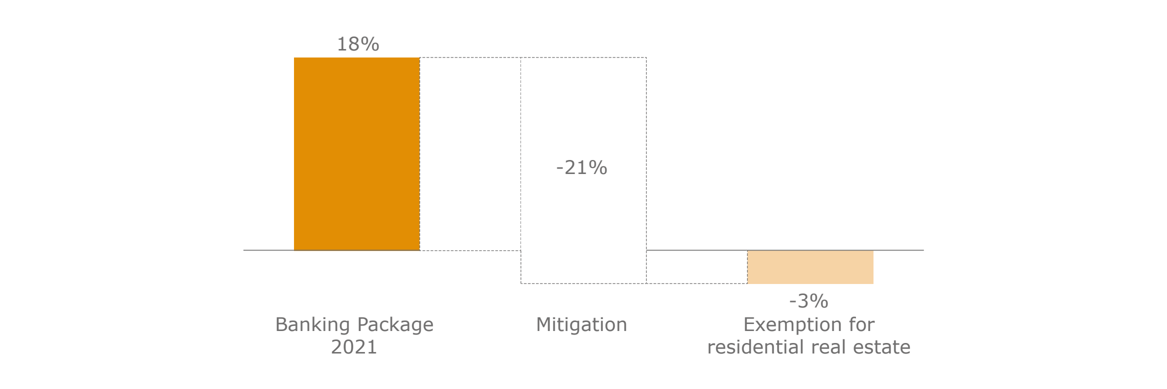
> Figure 2: Increase in capital requirements, % of original requirements



Source: Copenhagen Economics (2022) Impact of Final Basel III on the EU mortgage sector

Banking Package 2021 could be implemented in ways that could temporarily mitigate the estimated increase in capital requirements. For example, the EU Commission has suggested a transitional arrangement for mortgage loans secured by residential real estate – conditional on banks passing the so-called hard test (demonstrating low losses during the last 6 years). This could practically neutralize the impact of the package, as it would significantly reduce the number of banks being bound by the output floor. Assessing the impact on top of fully-loaded capital requirements, we find a small decline in capital requirements for the EU average mortgage portfolio of around 3% as shown in Figure 3.

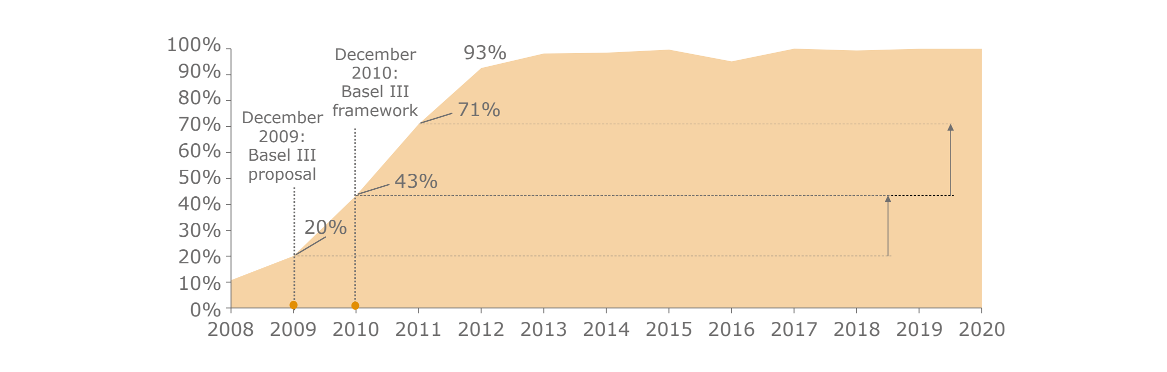
> Figure 3: Change in capital requirements when exemption for residential real estate is in effect (on top of fully-loaded requirements), conditional on passing the hard test, % of original CET1 requirements



Source: Copenhagen Economics (2022) Impact of Final Basel III on the EU mortgage sector

To have any significant impact on the capital need of institutions, we would expect that the temporary exemption would have to be made permanent. There is strong evidence that banks adjust to capital requirements shortly after the announcement of a reform, for instance due to market expectations. This was the case after the proposal and announcement of the Basel III framework in 2009 and 2010 – here, most European banks complied with Basel III capital requirements already in 2012 see Figure 4, even though they were only to be fully phased in, in 2019.[2]

> Figure 4: Banking assets compliant with Basel III CET1 capital requirements, Percent of total assets



Note: The minimum CET1 capital requirements under Basel III assumed here are the ones mentioned in the original publication on Basel III. This results in a fully phased in CET1 requirement of 9.5%, assuming a countercyclical capital buffer equal to the maximum value of 2.5%.

Source: S&P Global Market Intelligence database; BCBS (2009) – Strengthening the resilience of the banking sector, BCBS (2010) – Basel III: A global regulatory framework for more resilient banks and banking systems.

2 See for instance Copenhagen Economics (2021) EU implementation of the Final Basel III standard – impact on the European banking sector and the real economy.

How we did it

First, please note that our study only explores the effects of Banking Package 2021 on the European mortgage sector. Thus, we estimated the **contribution of the mortgage portfolio** to lenders' total capital requirements. An estimated decline or increase in capital requirements for the mortgage portfolio, should thereby not be seen as the total impact for the lender. The reason being a mortgage lender often will have many other exposure types, which will likely see an increase in capital requirements due to Banking Package 2021.[3]

We estimated the impact of Banking Package 2021 for the mortgage portfolio (covering households, SMEs and corporates) for some 90% of the total EU mortgage market. The development in data on the banking sector in recent years, made it possible for us to carry out the study without requiring any confidential data from lenders. Instead, we were fortunate: 1) that the EBA transparency exercise gave us much of the data needed[4] made our study possible and 2) pillar 3 reports and other public available information have to disclose information on e.g., LTVs, classification of lending and average sizes of loans, which we used to estimate risk weights applicable to the different exposures.

As mentioned, the study only covered the mortgage sector. However, we still had to estimate capital requirements on a group level, because the output floor is binding on an aggregate level. We did so, by first implementing measures not related to the output floor, e.g., changes to market risk, operational risk and the standardized approach. Second, we estimated capital requirements under the output floor for the lender as a whole, thereby including all portfolios. Finally, we assessed which of the two capital requirements was highest; if the floored capital requirements were higher than unfloored, the lender would be bound by the output floor, and we would apply floored risk weights to the mortgage portfolio.

IMPLICATIONS FOR COMPETITIVE DYNAMICS

The impact of the package could very well reach beyond the need for institutions to recapitalise. The large divergence in how hard institutions is affected could entail that the package has broader rami-fications in how competitive different banks are in servicing different types of clients. Or rather it speeds up an already ongoing process the previous decade where regulatory overhaul has initiated a disentangling of underlying risks and capital costs.

Going back to basic banking, one would expect there to be a clear relation between underlying risks, capital allocated and passed-on capital costs. In a world without regulation, this would be the case as banks would allocate more capital buffer to more risky clients – a capital cost that the client would likely need to pay for.

The current IRB framework somewhat simulates this basic banking principle – although admittedly in a quite complex manner: When the fundamentals of a client worsen, say lower revenue-to-debt, the PD of the client will worsen in the internal models of the bank, leading to higher risk weights. The higher risk weights would increase the capital costs for that client.

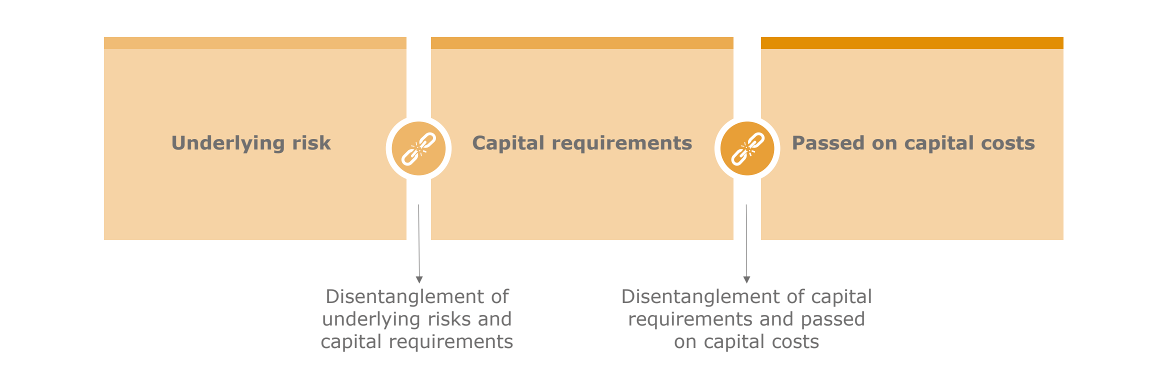
Most large IRB approved banks would have internal capital costs allocation models that would distribute the higher capital costs to that client (of group of clients). Of course, there are many considerations in a pricing decision, but on average we should expect coherency between capital costs for individual clients and the prices that they pay.

To sum up, with the current framework we have that higher risk, leads to higher capital requirements, which leads to higher capital costs being passed on. The Final Basel III package – and particular the way it is being implemented in EU – challenges this coherency.

3 For instance because of higher RW's for unrated corporates and market risk.

4 Our study thus covers the 80 financial institutions for the 13 biggest mortgage markets in the EU, included in the EBA transparency exercise.

> FIGURE 5: DISENTANGLING OF RISK, CAPITAL REQUIREMENTS AND PRICING OF BANK PRODUCTS



Source: Copenhagen Economics (2022) Impact of Final Basel III on the EU mortgage sector

Disentanglement of underlying risks and capital requirements

Let us start with the first break in this coherency; disentanglement of underlying risks and capital requirements. For around 2/3 of IRB institutions the output floor will be binding, as a result of the Final Basel III package, cf. Figure 6. This means that floored risk weights will be applied based on the standardised approach, where LTV is the only input factor. As a result, higher risk of default for the underlying asset will not have any implications for capital requirements.

This will change the strategic choice for lenders of which customer groups to pursue, with larger incentives – everything else being equal – to pursue high risk customers. For example, when bound by the output floor, a large renowned unrated corporate with billions in revenue and a 50-year history of no default will have the same capital requirements as a newly started online retailer.[5] In turn, this will imply that lenders will become less competitive in servicing large corporates, which might look for funding elsewhere, e.g. issuing debt on capital markets; it is not given that large corporates are willing to pay the price for the higher capital requirements, if passed on – as these are out of sync with risk fundamentals.

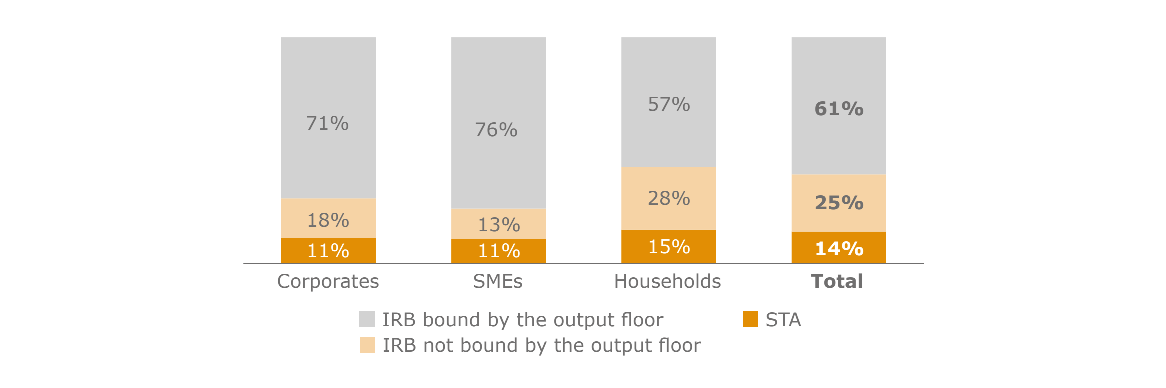
Disentanglement of capital requirements and passed on capital costs

As mentioned, the 18% average impact covers very large divergency among institutions: in our sample, more than 15% of all institutions will experience increases in capital requirements of more than 30% – in some cases we see increases in capital requirements of more than 70%. At the same time, around 1/3 of IRB banks will not be bound by the output floor, implying little change to capital requirements. In some cases, both end of the scale is operating on the same market.

This could shift the competitive dynamics on the markets they operate in. In particular because the output floor is binding on a group level. Thus, even though a given bank might not experience large changes on the aggregate level, a binding output floor could still significantly change the implied capital costs for individual customer groups.

5 Given it is large enough to not receive a SME discount.

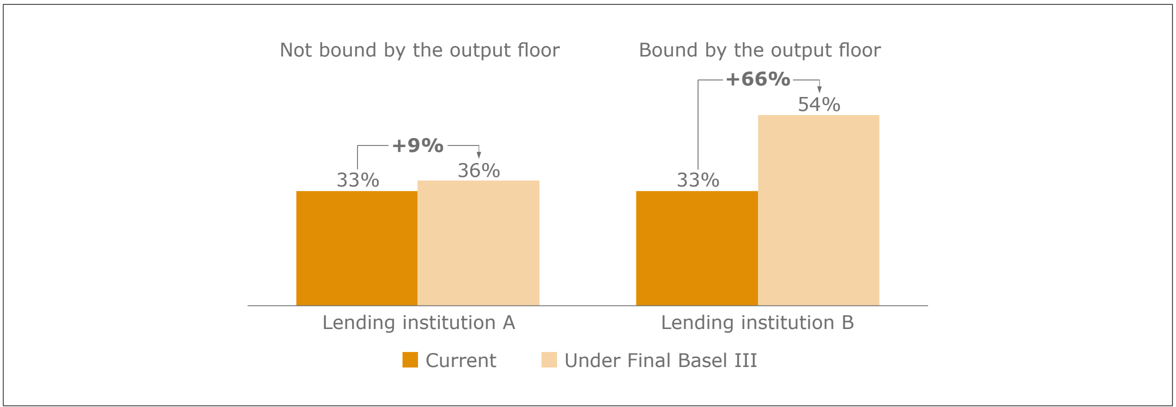
> Figure 6: Around 2/3 of IRB exposures will be bound by the output floor, Share of market mortgage exposures



Source: Copenhagen Economics (2022) Impact of Final Basel III on the EU mortgage sector

To see this, consider a stylized example of two lending institutions (A and B), which have identical corporate portfolios. However, lending institution A has a larger residential mortgage portfolio, where institution B has almost no residential exposure. As a result, institution B will see a strong increase in capital requirements for the corporate portfolio, whereas institution A will not – even though they have identical corporate portfolio. This is illustrated in Figure 7.

> Figure 7: Increase in risk weights for the corporate portfolio – illustrative, Risk weights



Source: Copenhagen Economics

The reason is as follows: in the EU implementation, capital requirements for the residential portfolio are significant lower compared to corporate exposures. Thus, because of the large residential portfolio, institution A will not be bound, implying very limited impact on capital requirements. Institution B – with a completely identical corporate portfolio – would on the other hand be bound by the output floor and experience a strong increase in capital requirements for the corporate portfolio – in this example of 66%. This will make institution A more competitive in servicing corporate clients. This leaves institution B the difficult strategic question of whether it will fully pass-on the capital costs, take a cut in return on equity or seek to move exposures off the balance sheet, e.g. pushing corporates clients towards capital markets.

Before the package, competitive dynamics would make sure that differences in capital costs passed on for a given customer segment will not be too large, since this represents business opportunities for new entrants, which could service the given customer segment.

However, this was in a situation where capital requirements for the large IRB institutions was quite homogenous; the same customer would have the same capital requirements at the different banks. What will happen when the Final Basel III package will break this homogeneity? This is a difficult question to answer and will be based on individual lending institutions strategy and business model. Our expectation is that we will move towards a situation where capital costs are less likely to be passed on 1:1 to the customer segments that experience the highest increases, but instead be more broadly spread out on customers, while considering price sensitivities of different segments.

From tax incident literature, we know that smaller clients, households and SMEs typically have smaller price sensitivity. They do not have the same professional setup in investigating optimal funding opportunities, and have fewer financing choices, e.g. cannot issue debt on capital market. Consequently, we could end up in a situation where households and SMEs eventually will end up with a significant portion of the bill of Final Basel III – despite the fact that exactly these customer groups have been imposed less strict requirements to begin with.

PART 2

By Wolfgang Kälberer, EMF-ECBC Strategic Advisor

CONCLUSIONS FOR BUSINESS MODELS AND MORTGAGE MARKETS

It is worthwhile recalling that the European banking industry requested that the output floor (OF) be introduced as one of three approaches to calculate capital requirements, the so-called parallel stacks approach. The highest capital requirements resulting from either the IRB risk based ap-proach (unfloored), the 72.5% floored risk weights based on the Basel III requirements only or from the leverage ratio would be applicable. As the use of IRB models is de facto already subject to two backstops (PD & LGD input floors and the leverage ratio), the introduction of a 'gold plated' European OF of 72.5% essentially represents a third backstop which is considered by the Industry to be unnecessary and will ultimately penalise primarily low risk business such as mortgage lending.

The research carried out by Copenhagen Economics shows that the whole value chain from lending to funding is impacted by the OF. Based on their analysis, the following five conclusions on the pref-erable implementation of the package can be provided.

Conclusion N°1: The output floor (OF) of 72.5% proves to be particularly detrimental for a majority of mortgage markets with substantial IRB exposures

Whereas the overall Banking Package triggers an average capital increase for the entire banking sector of 6-8%, there is strong evidence that certain types of mortgage lending are impacted much more significantly: the average additional capital needs for mortgage portfolios are expected to increase by 18%. The main driver for such an incommensurate capital increase is the output floor of 72.5%. Around two-thirds of IRB exposures in the mortgage market of the European Union (EU) are bound by the output floor.

An 18% capital increase is almost 2 times higher than the average weighted capital increase triggered by all other banking assets. It is furthermore far beyond the initial target ratio. At the beginning of the process, the G-20 mandate provided guidance that Basel III should not result in significant capital increases across the banking sector (below 10% additional capital). But in reality, an important share of banks' balance sheets is affected: the 18% increase, in the markets assessed, ap-plies to 28% of the total EU credit assets (outstanding mortgage loans in the EU of around 8 trillion Euro, equal to almost 50% of EU GDP).

The size of this increase is even more remarkable as mortgage lending is recognised as a low-risk business and is correlated with some of the lowest loss rates across the EU. But the OF impact does not reflect this correlation. To the contrary, the lower the risk of the underlying mortgage exposures, the higher the additional capital needs of IRB institutions could be. Banks might be inclined to reduce the percentage capital increase by adding higher risk exposures to their portfolio. Such a mechanism would not only set the wrong incentives but also points to a substantial misalignment between the risk profile of the underlying exposures and the design and calibration of the OF. The result is a significant loss of risk sensitivity, which translates in mortgage markets carrying some of the strongest additional capital burden triggered by the implementation of the OF.

An underlying justification for the introduction of the OF relates to the reliability of IRB models. However, these models and the associated data requirements are put through rigorous approval procedures. The ECB conducted a targeted review of internal models from 2016 to 2020 (TRIM). And the EBA designed a corresponding IRB Roadmap with new guidelines and standards that have been implemented by banks. IRB models are not only under constant monitoring and benchmarked by supervisory authorities, but the EBA already confirmed in 2016 that there is no robust evidence that IRB models are pro-cyclical.

Conclusion N°2: IRB banks expect average capital increases of 24%

Focusing the impact assessment on IRB banks, the additional capital needs are even higher: these banks will be confronted with an average capital increase of 24% for their mortgage loan books. Distributing this figure between the different customer types, it can be concluded that:

> household mortgages carry capital increases of 17% (11% including banks using the standardised approach/STA banks)

> SME mortgages carry capital increases of 26% (23% including STA banks) what represents a substantial additional capital burden to the detriment of the backbone of the European economy

> corporate or commercial mortgage loans carry capital increases of 44% (40% including STA banks). Such an increase could constitute a serious challenge for the funding of the real economy of the EU.

Conclusion N°3: A permanent favourable regime for low-risk residential mortgages is required in order to mitigate major negative consequences for consumers

It is vital that the transposition of the OF into the CRR is calibrated as neutrally as possible for residential mortgages. The target should be to avoid any substantial interest rate increases for private homeowners. Otherwise, the affordability of homeownership would be at stake.

In order to achieve this target, the proposed 'transitional arrangements' for low-risk residential mortgages must be maintained and turned into a permanent regime, and this across all Member States and not at Member State discretion. Permanence is all the more justified as mortgage lending is generally designed as a long-term business which remains on the balance sheet of lenders until full redemption of the loans. In contrast to the 'originate to distribute model', the balance sheet tradition acts as a very efficient consumer protection tool where lenders accompany households over decades, addressing problems where relevant and being available to find appropriate solutions.

Should IRB banks be forced to securitise their mortgage assets in order to reduce higher capital costs, consumers could find themselves in front of anonymous and possibly foreign Special Purpose Vehicles (SPV) holding their debt and primarily led by investment and profitability interests. Beyond off-balance funding schemes of mortgages, another potentially detrimental effect for consumers would consist of the risk of mortgage businesses be shifted from regulated lenders to non- or less regulated market participants. Consumers might ultimately be confronted with capital providers who are commonly allocated to the 'shadow banking market'.

A long-term relationship with households, alongside the dual recourse nature of mortgages, comes with a risk mitigation effect. There is no more robust and objective a tool for the measurement of the 'real' risk profile of exposures than loss rates (hard test requirement in Art. 465 par.5 CRR). In case of compliance the proposed treatment under Art. 465 par.5 CRR would be justified without time limitation.

Finally, a permanent favourable regime for household mortgages is fundamental in order to address the climate change challenges, i.e. the investment needs triggered by the decarbonisation of the building stock and building renovation. In a context where more than 220 million homes in Europe need to be renovated to meet the EU 2030 climate targets, this equates to renovation at a rate of in excess of half a million homes per week. The scale of the investment needed to meet this challenge is huge and cannot be achieved by the public sector alone. The EU's mortgage markets have a central role to play in this regard. The real breakthrough of a net-zero Europe will come through the large-scale use of green mortgages, as highlighted by the Energy Efficient Mortgages Initiative (EEMI), which seeks to introduce a greener, sustainability-focused approach to purchasing, renovating and living in homes by way of an 'ecosystem' aligning the interests of lenders, investors, SMEs, utilities and, above all, consumers. Higher capital costs for mortgage lenders triggered by a 72.5% OF would undermine this role and these efforts.

Conclusion N°4: An average capital increase of 44% for IRB commercial mortgage exposures requires a treatment similar to residential mortgage exposures based on hard test requirements

The traditional commercial mortgage business of IRB banks will be charged with a capital increase of 44%. Additional capital charges of 26% for mortgage loans to SMEs are also substantial, although these exposures benefit from the SME supporting factor. Both figures represent a material burden for the funding of the real economy. Many economic sectors and their growth capacities will be affected.

Corporate mortgage lending will be fundamental to the transition towards a climate-neutral economy and the implementation of national housing policies. It is a major catalyst for the development of an ecosystem comprising a broad spectrum of stakeholders which can support financial stability and the attainment of the 2050 emission targets, in line with the EU Green Deal and the Renovation Wave Strategy. More specifically, commercial mortgages, together with households, are paramount for the funding of the renovation of the EU's building stock, 35% of which is over 50 years old and almost 75% of which is energy inefficient. Disproportionate capital increases will hamper the release of funds needed to fight against climate change.

Again, there is no more robust and objective a tool for the measurement of the 'real' risk profile of exposures than loss rates (hard test requirements). Hence, there are no compelling supervisory reasons for not applying the hard test requirement to corporate mortgages as well. In case of compliance with the hard test requirements (0.25%), risk weights for corporate/commercial mortgages should be subject to a similar rationale, i.e. be calibrated in consistency with those for residential mortgages.

Conclusion N°5: The introduction of an OF of 72.5% presents a systemic challenge for low risk on-balance mortgage business models and for covered bond funding

As referenced under the 1st conclusion, the research provides evidence that the more IRB mortgage lenders are specialised on secured real estate finance, the more constraint they are by the OF. This is particularly valid and possibly surprising compared to IRB institutions whose balance sheets consist of bigger shares of unsecured corporate exposures or even investment banking assets. It is therefore fundamental that legislators and bank supervisors consider the whole value chain of the mortgage lending process and their correlations. The main components are capital cost (profitability), risk profile, on-balance sheet lending, long-termism and long term funding through covered bonds. All these components are strongly correlated.

As regards capital cost, risk profile and on-balance sheet lending, a reduction in the profitability of the mortgage business could incentivise IRB banks to sell their mortgage assets to SPVs and/or reduce new lending.

Off-balance sheet funding would reduce the availability of eligible cover assets for covered bond funding. This would not only represent a threat to the on-balance sheet nature of the EU mortgage business but also challenge the viability of covered bonds, which provide crucial long-term access to global capital markets.

It also appears conclusive that less risk sensitive capital requirements undermine the stimulus for IRB banks to lend to low risk customers but increase the incentives for higher-risk lending. This will not only put upward pressure on the cost of mortgage lending for both households and corporates. Higher-risk lending might also conflict with the conservative eligibility criteria for covered bond funding. Indeed, the OF primarily impacts on those low-risk mortgages which are eligible for covered bond funding in accordance with the new EU Covered Bond Directive (Directive (EU) 2019/2162 on the issue of covered bonds and covered bond public supervision).

It appears rather inconsistent to introduce higher capital requirements for those mortgage exposures which are considered particularly safe by European legislation and therefore suitable as cover assets for the issuance of "European Covered Bonds – Premium" thereby limiting future covered bond volumes and weakening one of the most crisis resilient funding instruments which on the other hand is supposed to be promoted and further strengthened by the EU Covered Bond Directive.

1.3 SUSTAINABLE COVERED BONDS: MARKET OVERVIEW

By Joost Beaumont, ABN AMRO, Maureen Schuller, ING, and Antonio Farina, S&P Global Ratings

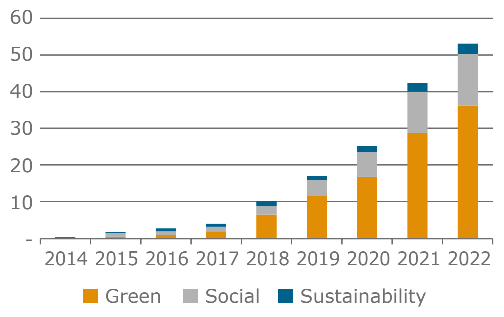
The market for sustainable covered bonds

The covered bond market welcomed the first sustainable covered bond in 2014, followed by an inaugural green euro benchmark covered bond in 2015. Furthermore, the first social covered bond was also issued in 2015. The market of sustainable covered bonds has continued to expand ever since, with the total amount outstanding around EUR 54 bn by the end of June 2022, according to Bloomberg data. This key theme chapter will provide an overview of the market, focussing on its size, flavours, new supply, investor base, relative value, use of proceeds and central bank policy related to climate risk.

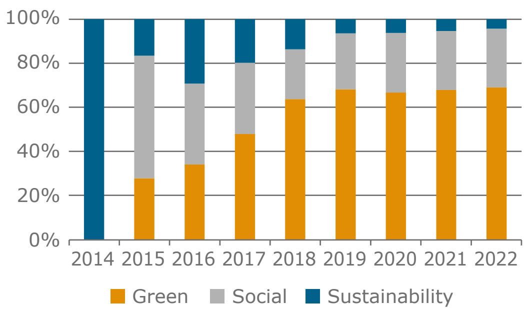
Size of the sustainable covered bond market

Sustainable covered bonds have been issued in different formats, ranging from green, social, and sustainability covered bonds. The different flavours reflect the different use of proceeds of the bonds (please see for more details chapter 1.6 and 1.7 of the fact book). In short, green covered bonds are mostly aligned with the ICMA's Green Bond Principles, and sometimes also already with the EU Taxonomy with the proceeds of the bonds being used to (re)finance green projects. In case of covered bonds these are often linked to energy-efficient buildings. Social covered bonds are mostly aligned with the ICMA's Social Bond Principles. The proceeds of the bonds are used to (re)finance social projects, which in case of covered bonds is largely related to affordable housing or public lending. Finally, sustainable covered bonds are aligned with the ICMA's Sustainability Bond Guidelines, which tends to be a mix of green and social projects, for instance, energy-efficiency as well as affordable housing. Green covered bonds form the majority of outstanding sustainable covered bonds, as they had a 69% share in total sustainable covered bonds outstanding in June 2022. Social covered bonds had a share of 26% and sustainability covered bonds 5% (see graph below right).

> Figure 1: Outstanding amount of sustainable covered bonds, EUR bn



> Figure 2: Share of green, social and sustainability covered bonds in total, %



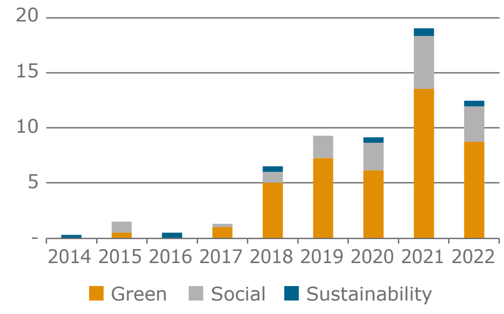
Source: ECBC, ABN AMRO, Bloomberg, 2022 data covers H1

New issuance of sustainable covered bonds gaining momentum

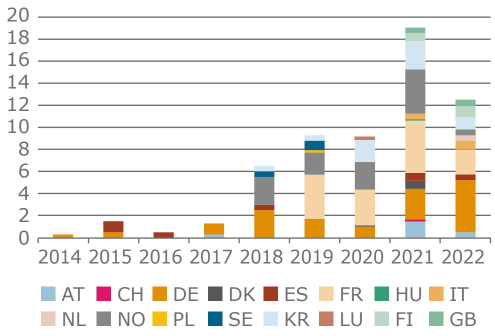
The sustainable footprint of the covered bond market has grown over the years, with new supply having gained real momentum since 2018, setting new records every year. In 2021, more than EUR 19 bn of sustainable covered bonds were issued across different currencies, which was almost triple the volume of sustainable covered bond issuance in 2018. Year-to-date, new supply has already exceeded EUR 10 bn, suggesting that 2022 can become another record year.

A breakdown by covered bond type shows that the majority of sustainable covered bonds is backed by mortgages (91% of the amount outstanding), with the remaining 9% backed by public sector loans. This mirrors the fact that most sustainable covered bonds are green bonds, financing energy-efficient buildings. Finally, issuers of sustainable covered bonds come from an increasing number of countries. At the start, German and Spanish issuers dominated the market, but currently there are 16 jurisdictions out of which sustainable covered bonds are being issued (see graph below right). Regarding currencies, the euro is dominant, while there are also CHF, DKK, GBP, HUF, NOK, PLN, SEK, and USD denominated sustainable covered bonds.

> FIGURE 3: NEW ISSUANCE OF SUSTAINABLE COVERED BONDS, EUR BN



> FIGURE 4: NEW ISSUANCE OF SUSTAINABLE COVERED BONDS BY COUNTRY, EUR BN

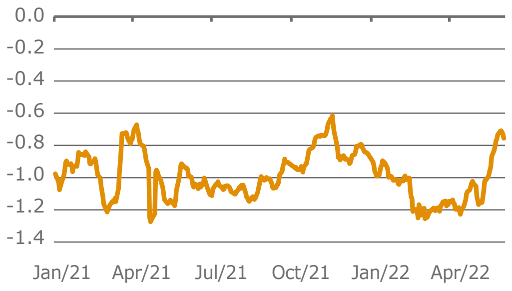


Source: ECBC, ABN AMRO, Bloomberg, 2022 data covers H1

Focusing on the iBoxx euro benchmark covered bond index and taking the July composition, the total amount of sustainable covered bonds in the index equaled EUR 48.5 bn. This is 6% of the total index, which compared to the 3.3% share a year ago. Of these, EUR 32 bn were green covered bonds (4% of total index). This shows that sustainable covered bonds are still a niche product, although their share in the index is gradually accelerating over time. Indeed, the share of sustainable covered bonds in total issuance of euro benchmark covered bonds was around 9.4% in H1 2022, which was below the 17% seen in 2021, but still above the average share of sustainable covered bonds in the overall index. The clarity about what can be classified as energy-efficient buildings within the EU taxonomy, and therefore the mortgages that can be financed by issuance of green (covered) bonds, is likely to support issuance of sustainable covered bonds in the coming years.

A key reason for issuers to come to the market with covered bonds in sustainable format is that these bonds can be priced with a premium (or so-called greenium), largely reflecting the broader investor base (see also below). We compared the trading levels of more than ten green covered bonds versus non-green covered bonds from the same issuer as well as having a roughly similar duration (and all euro benchmarks). This gives a rather pure measure of the greenium. The graph below left shows the results, underlining that in most cases green covered bonds do indeed trade at a (slightly) tighter levels than their non-green peers, with the greenium on average being roughly 1bp.

> Figure 5: Z-spread of green covered bonds versus non-green peers, bp



> Figure 6: Z-spread of social covered bonds versus non-social peers, bp

Source: ABN AMRO, Bloomberg

A similar comparison between social covered bonds and non-social peers gives a mixed picture, with social covered bonds not always trading tighter than non-social peers. On average there is not a real difference between trading levels between social and non-social covered bonds, but this could also be related to the smaller sample size. In any case, the benefit from sustainable covered bonds seems rather modest in the covered bond universe, which likely reflects their already relatively tight trading levels compared to other forms of bank debt.

SUSTAINABLE COVERED BONDS FINANCE A BROAD VARIETY OF ASSETS

Sustainable covered bonds are mostly issued conform the four pillars of the ICMA's Green Bond Principles (GBP), Social Bond Principles (SBP) or Sustainability Bond Guidelines (SBG), with a dedicated environmentally sustainable and/or a social use of proceeds. Sustainability linked bonds (SLB) are still a novelty in the banking segment and have thus far not been issued in covered bond format.

> Figure 7: Sustainable covered bonds seek alignment with the GBP, SBP and SBG

Four components of alignment					
I	**Use of proceeds**				
	Green			***Social***	
1	Renewable energy	√	1	Affordable basic infrastructure	√
2	Energy efficiency	√	2	Access to essential services	√
3	Pollution prevention and control	√	**3**	**Affordable housing**	**√**
4	Environmentally sustainable management of living natural resources and land use	√	4	Employment generation, and programs designed to prevent and/or alleviate unemployment stemming from socioeconomic crises, including through the potential effect of SME financing and microfinance	√
5	Terrestrial and aquatic biodiversity	√			
6	Clean transportation	√			
7	Sustainable water and wastewater management	√			
8	Climate change adaptation	√	5	Food security and sustainable food systems	√
9	Circular economy adapted products, production technologies and processes, and/or certified eco-efficient products	√	6	Socioeconomic advancement and empowerment	√
10	**Green buildings**	**√**			
II	**Process for project evaluation and selection**				
III	**Management of proceeds**				
IV	**Reporting**				
Key recommendations for heightened transparency					
i	Green, social or sustainability bond frameworks				
ii	External reviews				

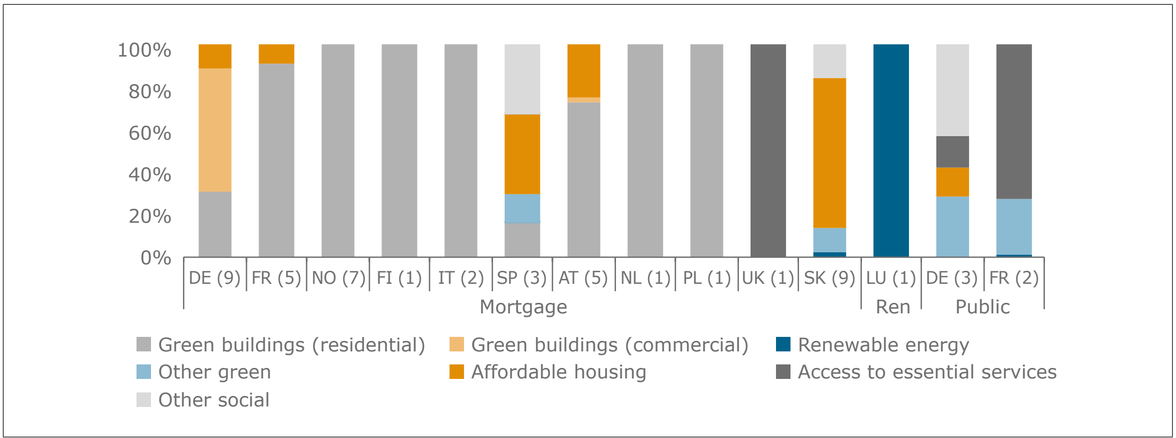
Source: ICMA, ING

A key feature of use of proceeds bonds is that they (re)finance an earmarked portfolio of new or existing eligible green and/or social assets. This portfolio may have an overlap with assets that are eligible as cover pool assets, but does not necessarily have to. As such, there are examples of sustainable covered bonds that allocate proceeds to a portfolio of sustainable loans that are not part of the cover pool. Separate from their use of proceeds, these sustainable covered bonds are secured by sufficient cover assets meeting the asset eligibility criteria stipulated by law and/or the bond programme documentation.

That said, most sustainable covered bond issuers would generally strive to have sufficient eligible green and/or social loans in the cover pool to at least match the amount of sustainable covered bonds outstanding. For that reason, these loans not only have to meet the criteria stipulated in the sustainable bond framework, but also the asset eligibility criteria under the respective covered bond legislation or programme documentation. It is important to bear in mind however that sustainable and vanilla covered bonds issued against one cover pool do have the same preferential claim on both the sustainable and non-sustainable assets that are part of the cover pool.

There are banks that issue both green and social covered bonds against the same cover pool, either under one single sustainability bond framework, or via separate green and social frameworks. In turn, there is also an example of a covered bond issuer that issues both social public sector covered bonds and social mortgage covered bonds via the same social bond framework.

> FIGURE 8: USE OF PROCEEDS SUSTAINABLE EUR BENCHMARK COVERED BONDS*



* Shares of the sustainable portfolio assets in covered bond cover pools by end June 2022. The number of sustainable asset portfolios or cover pools per country are in brackets. The numbers exclude the use of proceeds distribution of issuers that had not yet been published at the time of writing.
Source: Issuer information, ING

In general, green **mortgage covered bonds** primarily finance energy-efficient commercial or residential buildings (63% of all use of proceeds), with green residential real estate loans nowadays being the most important use of proceeds category (51%). Instead, banks with mortgage cover pools (partly) comprised of social housing loans often issue social or sustainability mortgage covered bonds (17% of all use of proceeds).

Access to essential services is the most important use of proceeds category for sustainable public **sector covered bonds** (8%). These bonds were at first solely issued in social format to finance community projects in areas of healthcare and education. However, 2019 also featured the first green public sector covered bond financing assets in the sustainable water and sanitation, waste management, energy efficiency, renewable energy and territorial mobility/soft urban transport segments. In 1H 2022 another green public sector covered bond was issued (re)financing rail infrastructure and public transportation projects.

A **renewable energy covered bond** under the Luxembourg covered bond law was printed in 2020. The bond extended the green covered bond issuance beyond the traditional mortgage and public sector covered bond segments and remains up until today the one single example of a sustainable covered bond issued under a dedicated legal framework for the issuance of green covered bonds.

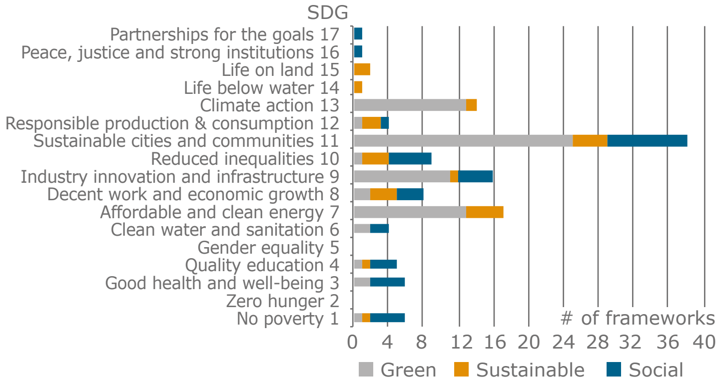
Matching the use of proceeds with the sustainable development goals

Sustainable covered bonds also generally aim to contribute to the achievement of the sustainable development goals (SDG) drafted by the United Nations in 2015. Bonds with a green use of proceeds have a somewhat narrower range of SDGs they support than bonds promoting social purposes. Sustainable cities and communities (SDG 11) is the best sponsored sustainable development goal.

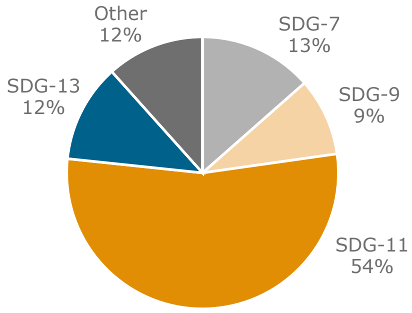
While most sustainable bond frameworks do give an indication of the SDGs they support per use of proceeds category, only few banks would actually report the exact bond proceed allocations to the dedicated SDGs. We tried to quantify the sustainable covered bond proceed distributions to the different SDGs by matching (pro-rata) the reported allocations per use of proceeds category with the different SDGs listed for the specific use of proceeds. This leads to the indicative conclusion that 54% of all sustainable covered bond proceeds is concentrated on the support of SDG 11, followed with a substantial margin by SDG 7 - affordable clean energy (13%), SDG 13 – climate action (12%) and SDG 9 – industry innovation and infrastructure (9%). The remaining 12% is spread across the other SDGs, with the exception of SDG 5 – gender equality and SDG 2 – zero hunger.

Which SDGs are in fact promoted by the different use of proceeds categories is open to debate however. Some second party opinion (SPO) providers, such as Sustainalytics and ISS ESG, give an indication of the SDGs they believe are sponsored via the green, social or sustainability bonds frameworks they review. Sometimes these SPO providers do come to a slightly different conclusion on the SDGs supported than the issuer itself in its sustainability bond framework.

> Figure 9: SDGs contributed to by sustainable covered bonds



> Figure 10: Share of proceed allocations to SDGs



* Only for sustainable EUR covered bonds

Source: Issuer information, SPO providers, ING

Use of proceeds and the environmental Taxonomy objectives

Covered bonds with an environmentally sustainable use of proceeds also often strive to contribute to at least one of the six environmental objectives set by the EU Taxonomy regulation, with the climate change mitigation objective so far being the most important one (see chapter 1.6 for further details).

THE RELEVANCE OF SUSTAINABILITY RATINGS

In the past number of years ESG criteria have been increasingly integrated in issuer and covered bond rating methodologies (see ratings chapter). In these cases, ESG aspects are considered to the extent that they impact the credit risk of an issuer or bond. However, there are also external reviewers that assign banks an ESG rating or score purely based upon their environmental, social and governance performance. Moreover, issuers can obtain an external assessment of their green, social or sustainability bond process. The ICMA identifies four types of these bond related reviews:

> Second party opinion (SPO);

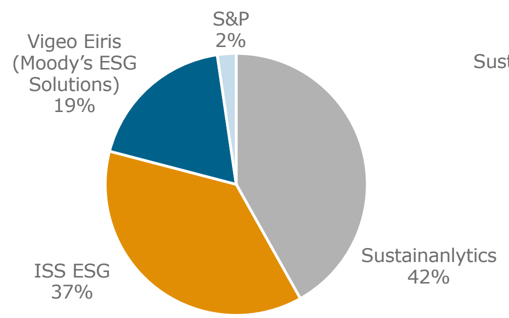
> Verification;

> Certification;

> Green, social, sustainability and SLB scoring/rating.

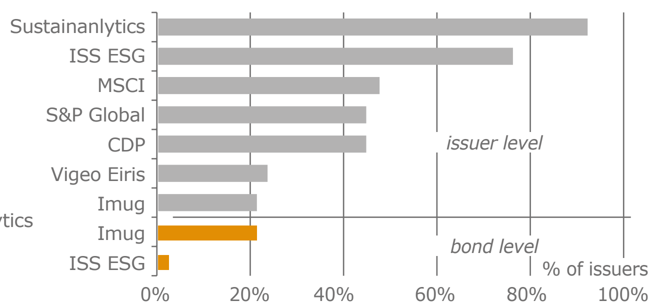
Ahead of issuance, sustainable bond issuers often rely on a **second party opinion** of the applicable sustainable bond framework. This means that an independent institution assesses the quality of the framework and verifies whether the green/social or sustainability bond is aligned with the relevant green/social or sustainability bond principles. Sustainalytics provides the second party opinion for most sustainable covered bond frameworks, together with ISS ESG. The post-issuance verification of the proceed allocations is often performed by an external auditor. In other cases, the appointed SPO provider gives an update of the second party opinion as part of the **verification** process. While external reviews are currently obtained on a voluntary basis, the pre- and post-issuance review process will become more formalised under the EU green bond standard. The draft European green bond regulation also outlines a registration and supervision framework for external reviewers.

> Figure 11: Distribution SPO providers*



* Only for sustainable EUR covered bonds
Source: Issuer information, SPO providers, ING

> Figure 12: The ESG ratings/scores often referred to*



* Only for sustainable EUR covered bonds
Source: Issuer information, Sustainability rating/score providers, ING

Issuers can also obtain a **certification** of their green, social or sustainability bonds or frameworks against a recognized external green, social or sustainability standard or label. As such, several green covered bonds are climate bond certified on behalf of the Climate Bond Initiative (CBI) as an assurance of their consistency with the global warming goals of the Paris agreement. Also the Covered Bond Label of the EMF/ECBC provides a sustainable covered bond label for covered bonds that are, among others, compliant with the Covered Bond Label Convention, and contain a formal issuer commitment to fully use the covered bond proceeds to (re) finance clearly defined environmental and/or social criteria.

Sustainable covered bonds often do not have distinct **sustainable bond ratings**. Imug is one of the rating agencies that provides such ratings to a number of sustainable covered bonds, all of which have been classified in the 'Very Positive' or 'Positive' categories. ISS ESG also provides sustainability bond ratings, but has done so for only one sustainable covered bond thus far. This sustainability bond was classified as 'Approved' as it exceeded the b- approval threshold. Moody's also gave a green bond assessment to one covered bond, but withdrew all its green bond assessments in October 2020 for business reasons.

Of the institutions assigning **company level sustainability scores or ratings**, ISS ESG and Sustainalytics cover the largest number of sustainable covered bond issuers. Other entities that score some of the existing sustainable covered bond issuers on ESG aspects include MSCI, CDP, Imug, S&P Global and Vigeo Eiris (part of Moody's ESG Solutions). While investors would generally view ESG scores as important, we don't find any supporting evidence of ESG ratings explaining the applicable (modest) differences in greeniums within the sustainable covered bond segment. The broad diversity in ESG ratings and scores, and the perceived transparency issues regarding the approaches and methodologies used, may be possible explanations. To overcome these issues, the European Commission may come with a proposal to improve the reliability and comparability of ESG ratings by early 2023, pending the result of an impact assessment.

Investor demand

To date, sustainable covered bonds have generally been significantly oversubscribed in the primary market. Bankers report that a more diverse investor base is looking at these instruments, with both ESG-dedicated funds and traditional covered bond investors placing orders. This incremental demand has not yet consistently translated into a lower cost of funding for issuers – the so-called "greenium" – partly because accommodative monetary policy had, until recently, kept interest rates close to zero. However, some market participants believe that this wider investor base could support sustainable issuance, for example in times of market correction or in the current rising interest rate environment. Even traditional covered bond investors view sustainable issuance favorably. Most have introduced qualitative or quantitative ESG considerations into their investment policies, and green or social covered bonds tend to perform better in their ESG analyses. Most investors focus mainly on the issuer's overall ESG score, rather than on ESG credentials specific to the covered bond. Alignment with the EU Green Bond Principles and Taxonomy is not yet a critical factor, but we expect this to become more important over time.

Investors identify three main sources of concern. The first is the lack of asset segregation, because upon issuer insolvency, green or social assets will be mixed with other non-green assets in the cover pool. This resembles what would happen to investors in green unsecured bonds, who would have the same claims against the issuer's insolvency estate as the non-green investors. The second is a lack of liquidity – sustainable covered bonds are generally easy to sell but very difficult to buy. Third is so-called "greenwashing", or the risk that sustainability claims made by issuers might be overstated or unreliable. While the structural issue of asset segregation will probably not be addressed until we see the first programs that are exclusively backed by sustainable assets, an increase in issuance volumes could assuage the second concern and recent regulatory developments may help with the third.

Central banks and climate change

Climate change brings economic and financial risks that central banks can no longer ignore. Over 100 central banks and financial regulators have now joined the "Network for Greening the Financial System" (NGFS): a network focused on climate change risk management, of which the largest central banks are now part of. It recently published a "toolkit" of ways in which monetary policy institutions can address climate change in their operations.

Central banks have essentially three areas of focus: i) financial stability: how climate change may affect the soundness of banks and risk of the overall financial system, ii) research: understanding how climate change may impact economic growth and inflation, and consequently monetary policy decisions, and iii) monetary policy: addressing whether central banks should help to mitigate climate change through their policies and how to do so. Climate-related risks can impact the financial system in two ways: physical risk – such as weather events related to hotter temperatures, where physical damage to property or businesses increases losses for banks and insurers, and transition risk, where climate policies to green the economy can be costly for firms or create "stranded" assets, for example by making reserves of coal, oil, and gas unburnable.

For financial stability purposes, regulators are using scenario analysis, stress tests, and other tools to assess the financial sector's vulnerability to climate change, foster higher disclosure, and encourage banks to embed environmental risks in their strategy and risk management. Over the past couple of years, the European Central Bank (ECB), Bank of England (BoE), and the French Autorité de Contrôle Prudentiel et de Resolution (ACPR; the supervisory arm of the Banque de France) have started to conduct "top-down" climate risk-related stress test exercises on the European financial institutions they supervise. Supervisors' climate stress tests help identify the main sectors and geographies generating transition and physical risks for banks' assets and seek to quantify their exposure to these risks. Supervisors are not yet penalizing banks with higher capital requirements for such long-range risks, but they are ratcheting up the pressure on bank management to proactively understand and reduce them. The ECB has also launched a "bottom-up" climate risk stress test in 2022, with the results published in July. Contrary to previous economy-wide stress tests, the projections will not be made "top-down." Rather, the banks themselves will formulate the projections, using their own credit and market risk models under scenarios set by the ECB. This will require much more work from individual banks but produce more revealing results. This stress test is part of a broader supervisory push to move climate risks higher up the risk management agenda for European banks and a wider regulatory push to incorporate ESG risks into the three pillars of the Basel prudential framework. It has many similarities with the U.K. Prudential Regulatory Authority (PRA)'s Climate Biennial Exploratory Scenario, also conducted this year. In both cases, supervisors are using the long-term scenarios developed by the NGFS and seek to assess the business model transformations likely to be triggered under different climate change pathways, in addition to the potential credit losses. Both the ECB and the PRA announced that they will not impose additional capital requirements on the back of these stress tests. Nevertheless, we can assume that regulators will use the results to inform their day-to-day supervision, particularly where they identify outlying banks that are particularly unprepared or have poor risk management or data capabilities.

Climate change and the transition to net zero are also likely to directly affect monetary policy. First, if the financial system is in a weaker position as a result of physical risk or stranded asset related losses, this could impair transmission of monetary policy. Second, transition to a hotter planet or a greener economy are both likely to involve large structural changes from today's macroeconomic environment. These could affect the neutral rate, which guides central banks' monetary policies. As such, in a world of higher temperatures, labor productivity is likely to be lower and capital accumulation could be impaired by recurrent physical risk events that may damage infrastructure, while households and firms may choose to retain more precautionary savings. On the other hand, the transition to net zero, which will trigger sizeable green innovation could also spur more rapid productivity gains, increasing the neutral rate. Finally, there are clear impacts on price stability, the main focus of central banks' mandates. As physical risks become more frequent and severe, output and inflation dynamics are likely to become more volatile. Similarly, a quicker transition to net zero via higher carbon pricing or stricter regulations could trigger output fluctuations, when firms need some time to adjust and lead to price shocks. ECB president Christine Lagarde has said that climate change policy is "mission critical" for her term. Following its 2021 strategy review, the ECB presented a "climate action plan" to further incorporate climate change considerations into its monetary policy framework. For now, the ECB is focusing on financial stability and improving disclosure and research, to include the impact of climate-related risks in its assessments.

In a second stage, the ECB may consider more active policies to foster the transition to net zero, such as "green quantitative easing", "green targeted lending operations", or "green collateral", which would involve giving more advantageous terms to "greener" beneficiaries of bond-buying or bank liquidity programs. However, whether using those tools would breach the "market neutrality" principle of central bank policies and be more akin to fiscal policy is still under debate. For example, when buying assets, central banks buy in line with issuance in the market, in order not to distort the relative prices of bonds. This would be different if the central bank starts favoring "green" assets. That said, some argue that firms eligible for the ECB's bond purchases and bond portfolio, are themselves not representative of the economy and with a bias to "non-green assets". Additionally, there is no "green benchmark" to date, with many of the existing ESG frameworks still criticized, which means central banks could potentially run into issues of "greenwashing". Second, it could be difficult for central banks to address the long-term problem of climate change with their cyclical policies, especially as corporate bond buying programs are typically just a small part of total purchases.

Conclusion

This chapter addressed multiple facets of the sustainable covered bond market. Although sustainable covered bonds still remain a niche in the covered bond market, their share has been growing every year. Sustainable covered bonds finance a wide range of green and social loans, often related to energy-efficient buildings, affordable housing and access to essential services. However, due to the tight spread levels of covered bonds, the greenium between sustainable and vanilla covered bonds remains modest and is in some cases not even visible. Meanwhile, the tools available to investors to make a distinction between sustainable versus less sustainable investment alternatives continue to evolve. To name an example, ESG criteria have been increasingly integrated in issuer and covered bond rating methodologies, while issuers also often obtain an external assessment of their green, social or sustainability bond process from external reviewers. Besides, central banks have become more and more involved in climate-related issues. The potential integration by central banks of climate considerations into any future purchase, targeted lending operations or collateral eligibility initiatives, will by then only form a further positive incentive for investors to buy sustainable assets, including sustainable covered bonds.

1.4 GREEN COVERED BONDS – AN IMPORTANT CONTRIBUTION TO CLIMATE NEUTRALITY

By Maureen Schuller, ING, Alexandra Schadow, LBBW, Julian Kreipl, UniCredit and Sanna Eriksson, OP Mortgage Bank

Green bond principles and use of proceeds

The market for green bonds has grown steadily, reaching a total outstanding volume of EUR 1,128 bn (worldwide in EUR equivalents), which accounts for the lion's share of the total ESG bond market, at the end of last year, with further growth expected. After a record new issue volume of green bonds of EUR 469 bn in 2021, the total volume of new issues in the first six months of 2022 has been EUR 288 bn. The volume of newly issued green covered bonds (EUR equivalents, all currencies) after six months amounted to EUR 12 bn. After the first green covered bond issue in April 2015, many issuers followed suit. As at the end of June 54 banks (thereof 28 in the EUR benchmark segment) have been active in the green covered bond segment. They issue mainly in EUR, followed by DKK and SEK. In the EUR (sub-) benchmark segment, a total of EUR 51.25 bn in sustainable covered bonds were outstanding at the end of the first half of 2022. Of these, EUR 34.55 bn were green covered bonds, EUR 13.9 bn social covered bonds and EUR 2.8 bn sustainable covered bonds.

Basically, green covered bonds raise funds that are used to refinance green properties with three exceptions. Two issuers refinance public assets with a green covered bond and another issuer has refinanced renewable energy loans with its sub-benchmark size green covered bond. All other issuers use green covered bonds to finance both residential and commercial real estate assets that meet certain sustainability criteria. The EU has been working on a green bond standard (GBS) since 2019 and the EU Commission published a proposal on 6 July 2021. In May 2022, the EU Parliament agreed on a common position. This is followed by a trialogue between the European Commission, the EU Council and the EU Parliament.

In the absence of corresponding legal foundations, corresponding market standards have emerged in recent years in the form of the Green Bond Principles (GBP) of the International Capital Market Association (ICMA), which were published in a revised version on 10 June 2021. The standard confirms the previous recommendations and further increases the issue of transparency. In particular, it recommends a transparent presentation of the climate transition strategy in the green bond framework as well as the alignment with the GBP. In addition, ICMA recommends that issuers appoint an external review provider to confirm compliance with the GBP pre and post issuances. The principles deliberately do not contain a conclusive classification of project categories in order not to pre-empt corresponding national and international legislative initiatives.

The Green Bond Principles define the following five key environmental areas of action:

> Climate change mitigation
> Climate change adaptation
> Natural resource conservation
> Biodiversity conservation
> Pollution prevention and control

Based on these five areas, the guidelines name numerous possible project directions, but do not limit them. With regard to covered bonds, we concentrate on the following:

> Energy efficiency: new and refurbished buildings, energy storage, district heating, smart grids, appliances and products
> Pollution prevention and control: reduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, waste recycling and energy/emission-efficient waste-to-energy
> Green buildings: must meet regional, national or internationally recognized standards or certifications

Most issuance programmes apply these voluntary market standards, which focus on transparency, disclosure and reporting. As a basis for a green issuance programme, a corresponding framework should be created that addresses the following four core components:

> Figure 1: The four components of the Green Bond Principles

The four components of the GBP			
Use of Proceeds	**Process for Project Evaluation & Selection**	**Management of Proceeds**	**Reporting**
Illustration of how the issuer uses the proceeds from the issuance of the Social/ Sustainability covered bonds.	Issuer shall outline how it identifies and selects suitable projects.	Proceeds from Social/ Sustainability covered bonds should be treated separately from others. Internal control systems should ensure that revenues are allocated only to appropriate projects.	The issuer should provide regular information about its projects and the proceeds, so that investors can constantly track this.

Source: ICMA, LBBW Research

Additionally, it is recommended that issuers have an independent third party verify the alignment of their framework with the GBP (second party opinion). Furthermore, ICMA has published a reference framework that helps issuers and investors map the investment targets of the respective green emission programme to the UN Sustainable Development Goals (SDGs). A detailed analysis of the green covered bond programmes of the big issuers with benchmark formats in regard to the SDG targets shows that the following are used most frequently:

Source: UN SDG

In contrast to the wide range of theoretically possible SDGs, current green covered bond issuers focus primarily on the goal of Sustainable Cities and Communities (SDG 11). But there are some special cases where Clean Water and Sanitation as well as Responsible Consumption and Production are in the centre of the use of proceeds (SDG 6 and 12) for a public sector covered bond. Other covered bonds focus on Industry, Innovation and Infrastructure (SDG 9).

For large banking groups, the Green Bond Framework and the SPO refer to the entire range of green activities and their refinancing. Considerations for the use of proceeds includes all green loans, whether they are cover pool eligible or not. The part that is refinanced via covered bonds is only a subset. The assets must comply with the respective legal requirements, which in the case of green covered bonds concerns real estate financing almost exclusively. In the case of pure-play mortgage banks, the use of proceeds is limited to mortgages from the outset.

The prerequisites for further growth in the market for green covered bonds are the availability of a corresponding collateral pool as well as the willingness of issuers to use this basic volume of green loans for covered bond issues. However, whether these banks use their green loan portfolios for covered bond issues or prefer green senior issues, for example, may depend on the achievable pricing advantage of a covered bond issue with "green" status. In view of the current high market volatility, we see certain advantages for covered bonds as a refinancing instrument. Based on the immense volume of mortgages refinanced via covered bonds, there is a high potential for green bonds in the medium to long term in our view. This should also receive strong support from the political level, since the European Green Deal is driving the sustainable renewal of real estate portfolios in Europe. However, there is still the next hurdle to overcome: The EU taxonomy. While ICMA deliberately does not make a final classification of project categories, this is done in the taxonomy. Furthermore, the future EU green bond standard is directly linked to the requirements of the EU taxonomy.

The taxonomy regulation in a nutshell

The EU taxonomy regulation came into force in July 2020 and provides a unified classification system for sustainable activities. Together with China's taxonomy it is also one of the reference pillars for the work of the International Platform on Sustainable Finance (IPSF) on the common ground taxonomy.

At this point, the EU taxonomy identifies six environmental objectives. However, its scope may be extended in the coming years with social objectives, as well as by economic activities that significantly harm the environment, or do not significantly impact the environment.

An economic activity is considered environmentally sustainable and thus EU taxonomy aligned if it:

> **Contributes substantially** to one of the six environmental objectives identified:
  1. Climate change mitigation;
  2. Climate change adaptation;
  3. Sustainable use and protection of water and marine resources;
  4. Transition to a circular economy, waste prevention and recycling;
  5. Pollution prevention and control;
  6. Protection and restoration of biodiversity and ecosystems.

> **Does not significantly harm** (DNSH) any of these environmental objectives;
> Is carried out in compliance with the **minimum safeguards** (MS); and
> Complies with the technical screening criteria (TSC).

In June 2021, the European Commission adopted the climate delegated act setting the technical screening criteria for the climate change mitigation and climate change adaptation objectives (1-2) and the conditions for avoiding significant harm to the other environmental objectives (including 3-6). These criteria became applicable on 1 January 2022. The environmental delegated act for the remaining four environmental objectives is expected to be published in 2022 (to become applicable on 1 January 2023).

> Figure 2: The identified sectors per environmental objective 1-6

		Environmental objectives					
	Economic activities	**1**	**2**	**3**	**4**	**5**	**6**
1	Agriculture, forestry and fishing*	√	√				√
2	Environmental protection and restoration activities	√	√				
3	Manufacturing	√	√		√	√	√
4	Energy	√	√				
5	Water supply, sewerage, waste management and remediation**	√	√	√	√	√	√
6	Transport	√	√			√	
7	**Construction and real estate activities**	√	√		√		
8	Information and communication	√	√				
9	Professional, scientific and technical activities	√	√				
10	Financial and insurance activities		√				
11	Education		√				
12	Human health and social work activities		√				
13	Arts, entertainment and recreation		√				
14	Civil engineering		√		√		
15	Disaster risk management		√	√			

* The climate delegated act, only includes Forestry for the climate change mitigation and climate change adaptation objectives
** The advise of the PSF includes civil engineering and disaster risk management as additional economic activities, and distinguishes restoration and remediation, water supply, sewerage and waste management as different categories rather than one.
Source: EC, PSF, ING

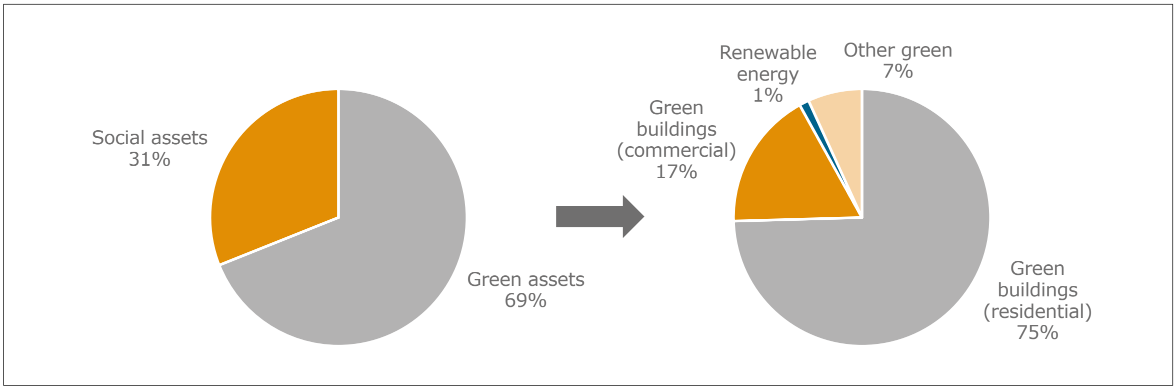
Within the climate delegated act nine sectors are identified for the climate change mitigation objective based on their emissions footprint, while 13 sectors are distinguished for the climate change adaptation objective. In March 2022, the Platform on Sustainable Finance (PSF) published its advice on the technical screening criteria for the other four environmental objectives, building further on the sectors identified in the climate delegated act (see figure 2).

Building loans contributing substantially to climate change mitigation

Due to the traditional dominance of mortgage assets in covered bond collateral pools, the technical screening criteria for **construction and real estate activities** are the most relevant for green covered bonds. This is illustrated in figures 3 and 4, which confirm that of the 69% in EUR sustainable covered bond green asset allocations, 92% finance energy-efficient building loans.

> Figure 3: Asset allocations by type (covered EUR 51 bn)*

> Figure 4: Green asset allocations by type (covered EUR 35 bn)*



*Covered EUR supply (size ≥ EUR 250 mn)
Source: Issuer allocation reports, ING

The delegated act divides the construction and real estate sector into seven sub-sectors. Two of these are **low-carbon activities** that themselves contribute substantially to one of the taxonomy's environmental objectives. These are generally the most important for the selection of green real estate assets:

> The construction of new buildings;
> The acquisition and ownership of buildings.

One is a **transitional activity**:

> Renovation of existing buildings;

The remaining four activities are all **enabling activities**. These include the installation, maintenance and repair of:

> Energy-efficiency equipment;
> Charging stations for electric vehicles in buildings (and parking spaces attached to buildings);
> Instruments/devices for measuring, regulation and controlling energy performance of buildings;
> Renewable energy technologies.

Figure 5 gives an overview of the technical screening criteria for substantial contribution to the climate change mitigation objective for the first three real estate activities. To be taxonomy compliant, buildings built as of 2021 should have a primary energy demand (PED) that is 10% lower than the country specific thresholds for 'nearly zero-energy buildings' (NZEB) applicable for new buildings in the EU per 2021. Buildings built before 31 December 2020 should have an energy performance certificate (EPC) class A. These buildings are also taxonomy compliant if they belong to the top 15% most energy efficient buildings of the regional and national building stock built before 2021.

> FIGURE 5: TECHNICAL SCREENING CRITERIA FOR CONSTRUCTION AND REAL ESTATE ACTIVITIES*

Construction of new buildings	The **primary energy demand (PED)**, defining the energy performance of the building resulting from the new construction is **at least 10% lower than** the threshold set for **the nearly zero-energy building (NZEB) requirements**. The energy performance is certified using an as built energy performance certificate (EPC). **Buildings > 5000 m^2:** * Should upon completion undergo testing for air-tightness and thermal integrity. Performance deviations or defects in the building envelope should be disclosed. Robust and traceable quality control processes during the construction process are an acceptable alternative to thermal integrity testing. * The life cycle global warming potential (GWP) of the building has been calculated for each stage in the life cycle and is disclosed on demand.
Renovation of existing buildings	The building renovation complies with the applicable requirements for major renovations stipulated by the EPBD. The energy performance of the building or the renovated part that is upgraded must meet the EPBD's cost-optimal minimum energy requirements. Alternatively, the renovation leads to **a reduction of PED of at least 30%**. The initial energy performance and improvement are based on (a) a detailed building survey, (b) an energy audit conducted by an accredited independent expert or (c) any other transparent and proportionate method and validated through an energy performance certificate (EPC). The 30% improvement results from an actual reduction in PED (excl. renewable energy sources) and can be achieved through a succession of measures within a maximum of three years.
Acquisition and ownership	**Buildings acquired ≤ 31 December 2020:** Building has **at least an Energy Performance Certificate (EPC) class A**. As an **alternative**, the building is **within the top 15%** of the national or regional building stock expressed as operational PED and demonstrated by adequate evidence, which at least compares its performance vs the national or regional stock built before 31 December 2020 and at least distinguishes between residential and non-residential buildings. **Buildings acquired > 31 December 20:** Criteria for construction of new buildings

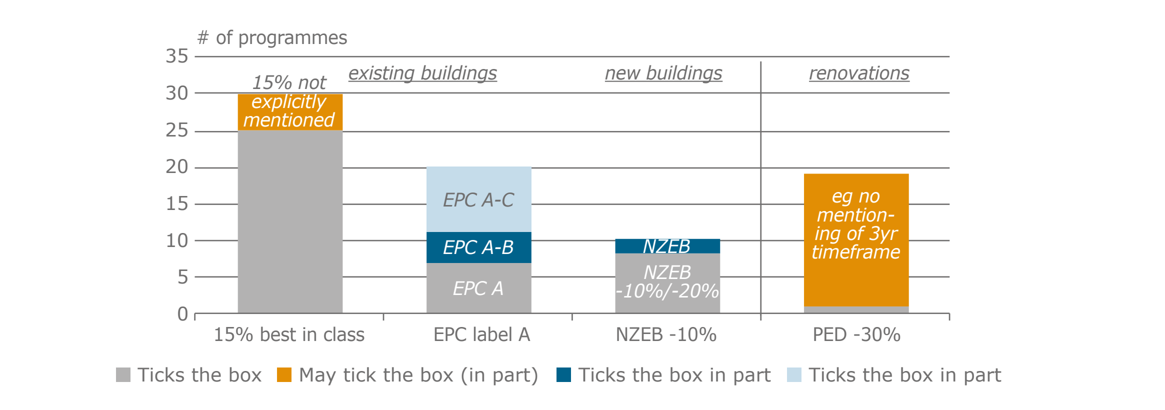
*These are solely technical screening criteria for the significant contribution of these activities to the climate change mitigation objective
Source: European Commission, ING

The 15% best in class criterion for buildings built before 2021 is probably most crucial for the ability of banks to issue green covered bonds that solely (re)finance taxonomy aligned real estate loans. After all, the portion of buildings labelled with an A class EPC certificate is typically small in most jurisdictions. Besides, these labels often lack comparability. As a result, a building can be labelled A in one country, while in another country with stricter EPC criteria a similar type of building could be labelled B or C. In some countries EPC labels may not even comprise a rating classification. The comparability issue may improve with the planned revisions to the Energy Performance and Buildings Directive (EPDB) as discussed later in this article.

Figure 6 shows that most sustainability bond frameworks of European covered bond issuers use the top 15% selection criterion for green building assets. There are only a few that do not explicitly confirm that the selection norms applied have a 15% best in class outcome for all the building loans collected. Besides, sustainability bond frameworks increasingly seek compliance with the EPC label A criterion. That said, thanks to the 15% best in class alternative, they don't have to limit the use of EPC labels to class A, as long as proper evidence is provided that the selected property loans represent the 15% most energy efficient building assets.

Not all issuers include renovation loans in their green asset portfolios. Those that do, refer to a 30% improvement in energy performance, but generally without additional requirements, such as the TSC's three-year maximum term for a series of measures to achieve the upgrade. Thus far, still few issuers have introduced the NZEB-10% criterion for buildings built per 2021. We believe however, that frameworks will continue to be updated to ensure optimal taxonomy compliance of green portfolios.

> FIGURE 6: EUROPEAN GREEN COVERED FRAMEWORKS MEET THE TSC PRIMARILY ON THE TOP 15%*



* This chart only takes as a reference the 27 frameworks of green/sustainability EUR covered bonds issued by European issuers that allocate proceeds to green buildings.
Source: Issuer green covered bond frameworks (updates available per June 2022), ING

However, meeting the technical screening criteria is not the only challenge issuers face when ensuring taxonomy alignment of their green bonds. Even if an economic activity contributes significantly to the climate change mitigation objective, it still has to avoid doing significant harm to any of the other environmental objectives. To name an example, the generic DNSH criteria for climate change adaptation therefore require a climate risk and vulnerability assessment (CRVA) to identify physical climate risks such as wildfires or floods, and an adaptation solutions plan to reduce these risks.

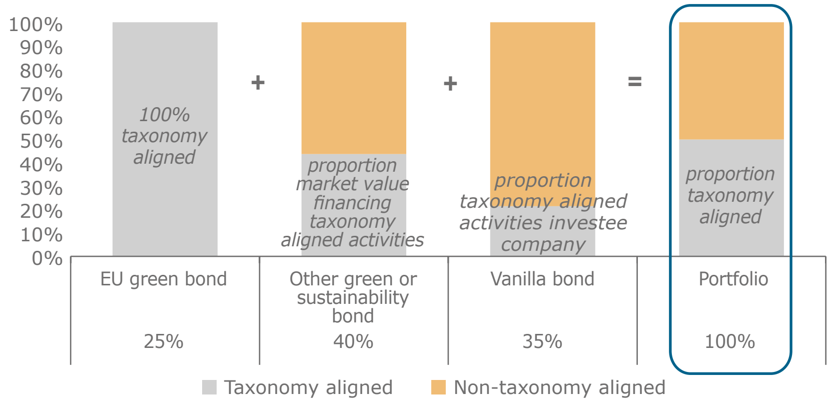
The importance of taxonomy compliance for green covered bonds

Banks have good reasons to strive for the best possible taxonomy alignment of their green assets. These stretch well beyond the purpose of green bond issuance alone. The taxonomy regulation will be an important pillar to the future voluntary EU green bond standard, which according to the draft proposals will require full taxonomy alignment of the use of proceeds.

However, it also forms an integral part of EU regulation promoting sustainable reporting, such as the sustainable finance disclosure regulation (SFDR) and non-financial reporting directive (NFDR), as revised and expanded via the corporate sustainability disclosures regulation (CSRD). These disclosure regulations have the consequential side-effect that companies (including banks) will face increased investor scrutiny on the sustainability of their activities, among others from portfolio managers that have to show to what extent their investment funds and portfolios consider sustainability aspects. The taxonomy compliance of the assets financed via green (covered) bonds is just the tip of the iceberg.

For taxonomy disclosure purposes, the SFDR, NFRD (CSRD) and the future EU green bond standard will in a way work as communicating vessels. This point is illustrated by the indicative investment portfolio comprised of bonds in figure 7. The graphic takes the regulatory technical standards on disclosures under the SFDR, adopted by the European Commission on 6 April 2022, as a reference. These disclosure technicalities should apply from 1 January 2023 to financial market participants such as insurance companies, pension funds, investment firms, or credit institutions that provide portfolio management services.

> Figure 7: Taxonomy related disclosures will impact green and vanilla bonds differently



Source: European Commission, regulatory technical standards adopted on 6 April 2022, ING

The key performance indicator (KPI) measuring the taxonomy compliance of financial products, is calculated as the ratio of the market value of all investments of the financial product in environmentally sustainable (ie taxonomy aligned) activities versus the market value of all investments of the financial product. Environmentally sustainable investments can (among others) include the following:

> **Bonds** issued under the future voluntary **EU green bond standard** (GBS) = 100% market value;

> **Other debt securities** where a proportion of the proceeds is used exclusively on **environmentally sustainable activities** = proportion of the market value corresponding to the share of the proceeds used to finance taxonomy aligned economic activities;

> **Debt instruments** and equities in **investee companies** = market value of the proportion of debt instruments/equities reflecting the proportion of activities of the investee companies that is associated with environmentally sustainable economic activities.

For financial companies such as banks, this proportion comes down to the share of environmentally sustainable economic activities as disclosed under the NFRD (CSRD) (ie, "green asset ratio").

This illustrates that the taxonomy-related disclosure requirements may impact all bonds issued, whether marketed with a sustainable use of proceeds or not. The taxonomy compliance of vanilla bonds will also be considered via the share of activities of the issuer that are deemed to be environmentally sustainable. Hence, issuers reporting a stronger taxonomy alignment under the NFRD (CSRD) could see this translate into more favourable trading levels, also for their vanilla bonds.

The intentions of the ECB to introduce climate change related disclosure requirements for collateral, may only strengthen this effect. As of 2026 the central bank will solely accept as collateral marketable assets and credit claims from companies and debtors that comply with the CSRD. In light thereof, the ECB would support better and harmonised disclosures of climate related data for assets, such as covered bonds and asset-backed securities, that do not fall under the CSRD.

The European green bond standard

Meanwhile, fixed income investors will likely favour those instruments that meet all the criteria of the future EU green bond standard, as these bonds are considered to be 100% taxonomy aligned. It is important to bear in mind however that the EU green bond standard proposals of July 2021 take a use of proceeds approach. For green covered bonds aiming to comply with the EU green bond standard this means that bond proceeds should solely be allocated to (new and/or existing) loans that finance environmentally sustainable economic activities (ie are taxonomy aligned). These loans are not explicitly required to be part of the cover pool.

Besides, under the European green bond standard proposals environmentally sustainable activities do not yet have to be fully taxonomy aligned upon issuance, as long as there is a taxonomy alignment plan in place ensuring that the taxonomy requirements will be met within a period of five years (or ten years at most if justified). Nonetheless, proceeds always have to be allocated in full before the bond matures. If the technical screening criteria and do no significant harm provisions are amended, issuers also have to make sure the green bond proceeds are (re)allocated to conform to the new criteria within a period of five years. Otherwise they can no longer claim that the bond is a European green bond. This five year period may still be removed or increased as part of the Trilogue discussions on the EU green bond standard (ongoing at the time of writing).

Due to the use of proceeds approach there are for covered bonds no information requirements on the taxonomy alignment metrics at the level of the cover pool. The transparency requirements for European green bonds, such as the (pre-issuance) green bond factsheet and (post-issuance) allocation and impact reports, will only provide information on the level of the green asset portfolio.

Having said all that, we do believe that most issuers will strive to confirm they have sufficient taxonomy compliant assets in the cover pool against their outstanding European green covered bonds. After all, particularly where taxonomy aligned assets would have lower probabilities of default, green covered bond investors may have a preference for proceed allocations to taxonomy compliant assets that are in fact also part of the cover pool. This despite the pari passu preferential claim to those assets with vanilla covered bondholders. However, the taxonomy alignment of the green covered bond will probably still be viewed as most important by investors when it comes to buying a European green covered bond.

This does not mean that green bonds that are not fully taxonomy compliant will lose investor interest. They will still count towards the taxonomy KPIs for the part that they do finance taxonomy compliant activities. The EU green bond standard may nonetheless become the preferred reference for investors by which issuers can show the taxonomy alignment of their green bonds. Especially as investors may not always have the resources or the willingness to perform a full taxonomy compliance assessment themselves for every green bond. Against this backdrop, industry initiatives, such as the EMF-ECBC's Energy Efficient Mortgages Initiative (EEMI) and the VDP's minimum standards for Green Pfandbriefe, will remain an important support to both issuers and investors in their green bond structuring and investment processes.

EPBD revisions will enhance the energy efficiency of buildings

When it comes to the future evolution of the environmental metrics of covered bond collateral pools, it is also important to bear in mind that the Energy Performance of Buildings Directive (EPBD) is aiming for a zero-emission building stock by 2050. The measures included in the legislative proposal 2021 are considered proportionate and build to the largest extent on the existing design of the original 2002 Directive and the 2010 and 2018 revisions. As already indicated in the Climate Action Plan, the EPBD is the key legislative instrument to deliver on the 2030 and 2050 decarbonisation objectives. It follows up on key components of the three focus areas of the Renovation Wave Strategy, including the intention to propose mandatory minimum energy performance standards, following an impact assessment looking at their scope, timeline, phasing in and accompanying support policies.

In the EU, heating, cooling and domestic hot water account for 80% of the energy that households consume. In order to make Europe more resilient there is a need for energy efficiency renovation for buildings and making them less dependent on fossil fuels. Energy efficient buildings are key for reducing the energy consumption, for bringing down emissions and for reducing energy bills since buildings account for 40% of energy consumed and 36% of energy-related direct and indirect greenhouse gas emissions.

The EPBD´s main targets are reducing buildings' greenhouse gas (GHG) emissions and final energy consumption by 2030 and setting buildings towards EU-wide climate neutrality in 2050. The EPBD is grounded in several specific objectives: to increase the rate and depth of buildings renovations, to improve information on energy performance and sustainability of buildings, and to ensure that all buildings will be aligned with the 2050 climate neutrality requirements.

Zero-emission buildings become the new standard for new buildings, the level to be attained by a deep renovation as of 2030 and the vision for the building stock in 2050. When discussing energy performance it always comes back to data, more precisely the lack of data. Member States shall set up national databases for energy performance certificates of buildings, which also allow to gather data related to building renovation passports and smart readiness indicators. Information from the national databases shall be transferred to the Building Stock Observatory, based on a template to be developed by the Commission. The EPBD also improves the already existing provisions on energy performance certificates, their issuing and display, and their databases. To ensure comparability across the Union, by 2025 all energy performance certificates must be based on a harmonised scale of energy performance classes, in which the best class A represents a zero-emission building, while the lowest class G shall include the 15% worst-performing buildings in the national building stock. Furthermore, the European Commission proposals require non-residential buildings to have an EPC label of at least F by 2027, and residential buildings by 2030. Non-residential and residential buildings should have an EPC label of at least E by 2030 and 2033 respectively. Although the EPBD will widen the need for EPC, it has to be noted that there are many building owners that do not have a mortgage or are "off the market" because they just live in their house. Therefore we welcome the EU Save Energy Plan of 18 May 2022 not only because it seeks to make Europe more resilient but because it focuses efforts on meeting the targets to reduce energy consumption as a whole.

The EU Save Energy Plan

On 18 May 2022, the European Commission unveiled its new *EU Save Energy Plan*. This latest scheme was launched in concert with the wide-reaching REPowerEU plan, which aims to transform the EU's energy system amid the current geopolitical and commodity market uncertainties, moving away from fossil fuel sources and further supporting renewable energy technologies.

In terms of the specific content of the EU Save Energy Plan, the European Commission addresses the issue of energy efficiency by way of two approaches:

1. Achieving immediate energy savings through voluntary choices; and
2. Accelerating and strengthening structural, mid- to long-term energy efficiency measures.

These will be underpinned by both a financial framework and a governance structure.

The energy efficiency of buildings is one of the key pieces of the plan, as the Commission proposes specific actions that involve both Energy Efficiency Directive and the Energy Performance of Buildings Directive. Particularly, the body proposes:

> To increase to 13% the binding target in the Energy Efficiency Directive, and;

> Invites the European Parliament and Council of the EU to consider, during the ongoing negotiations, new, more ambitious energy savings obligations to enable savings and energy efficiency gains in buildings.

The European Commission also seeks to increase private financing of energy efficiency. To this end, it proposes to launch, in cooperation with Member States, a high-level European Energy Efficiency Financing Coalition with the financial sector, based on the Energy Efficiency Financial Institutions Group (EEFIG) and to examine possible supplementary measures to trigger further private investments, for instance, through mortgage portfolio standards or pay-for-performance schemes.

Green covered bond market

The significant impact that COVID-19 had on markets and funding is just fading out, as the next market turmoil in form of the Russia-Ukraine crisis and rising inflation risks as well as rising yield curves are impacting financial markets. But the current market environment is supporting covered bond issuance as fading ECB support and high volatility are favoring stable safe-haven products like the covered bond and by May 2022 issuance was already approaching the total supply volume of covered bonds in FY2021. Together with the increased issuance of covered bonds, we also see several new green covered bond issues. We anticipate that the positive trend to make increased use of green covered bonds will persist, especially when keeping in mind the newly introduced EU taxonomy and the EU's climate targets of reducing GHG by 55% until 2030. The buildings sector is the largest energy consuming sector and responsible for about 40% of energy consumption and 36% of carbon emission in the EU – and covered bonds are the most widespread tool to refinance mortgages. Aside from the sustainable perspective, issuers as well as investors are looking at pricing and performance differences of green and non-green covered bonds.

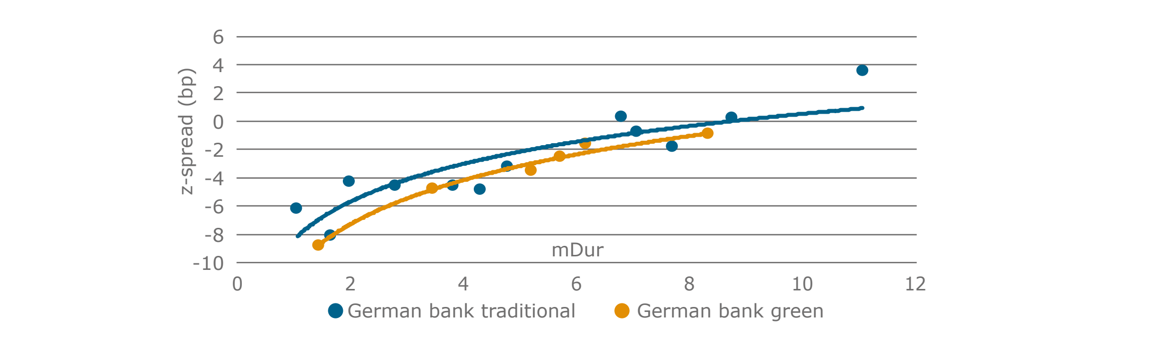
Green covered bonds and non-green covered bonds have the same risk profiles from a credit risk perspective. For this reason, they should not display significant pricing differences, as is currently the case. Potential (minimal) differences are, in our view, likely attributable to liquidity, the amount of time that has elapsed since issuance, amounts outstanding, etc. However, there does seem to be one difference: the investor bases of green covered bonds are broader than those of non-green covered bonds. In addition to attracting the attention of traditional covered bond investors, green covered bonds also attract the interest of dedicated ESG investors. This broader investor base could facilitate the placement of new deals in times of crisis, but during the COVID-19 sell-off in early 2020 and also during the phase of increased volatility due to geopolitical circumstances and inflation risks since February 2022, no spread-supportive impact could be observed.

We start by considering the issuers' viewpoint and examine whether green covered bonds achieve beneficial pricing. Beneficial pricing would be justified given the costs associated with setting up a green bond framework, the additional documentation and reporting involved as well as the external assessment required (in the form of a second-party opinion). Available deal data on new issues confirm the common assumption that green deals attract a broader investor base and involve more different accounts and accordingly this should pave the way for advantageous new issue premiums (NIP) and higher cover ratios for new deals. For 2021, green covered bonds enjoyed a volume-weighted average NIP of 0.6bp (2020: 0.8bp) versus 0.9bp (2020: 3.0bp) for traditional covered bonds and volume-weighted average cover ratios of 2.2 times (2020: 3.2 times) versus 2.0 times (2020: 2.3 times) for traditional covered bonds. Although differences have been smaller last year, the demand for green covered bonds is still higher and NIPs are lower, which leads to a calculative funding advantage for issuers.

Studying current market snapshots to see how pricing occurs in secondary markets does not offer a clear picture. The following two charts show examples of Z-spread levels of two of the most active green covered bond issuers, which also have solid secondary curves with traditional covered bonds. Taking a German green covered bond issuer as an example, both the traditional and the green curve are indicating a small 1bp greenium, while comparing single bonds to each other results in a negligible difference of less than 1bp (see figure 8). In figure 9, the green covered bonds from a French issuer are compared with its traditional covered bonds. In this case, the lower green curve suggests a greenium of 1-2bp, while comparing the two closest bonds with a remaining term of 7Y results only in a greenium of 0.3bp – which is again negligible in our opinion and might result from other factors. Lastly, we cannot determine a market-wide greenium for green covered bonds which might be explained by already tight spread levels and hence limited room for further tightening as well as reduced liquidity in the market as the ECB has absorbed large parts of the segment. Nevertheless, in both showcases, the green covered bonds are trading at (very) small premiums to comparable bonds from the same issuer.

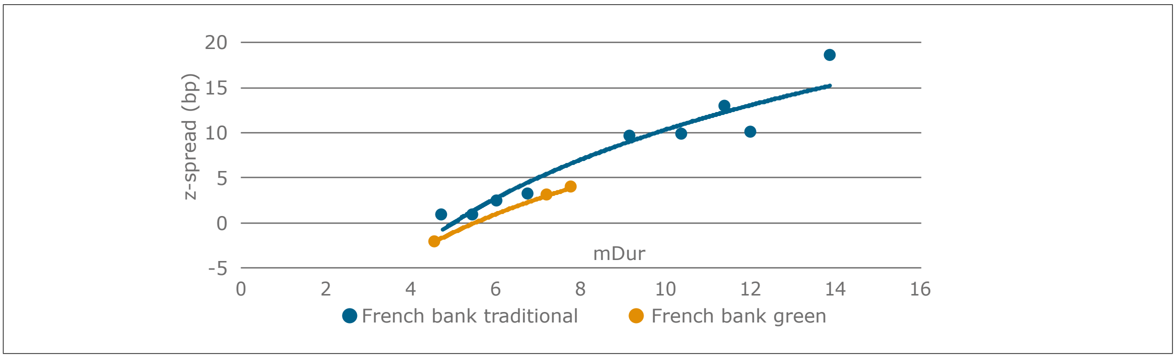
For now, we expect the greeniums to stay low, but looking forward and factoring in increased ESG bond supply and increased investor interest, we consider a greenium of 1-2bp as possible.

> FIGURE 8: GERMAN EXAMPLE



Source: Bloomberg, UniCredit Research

> FIGURE 9: FRENCH EXAMPLE

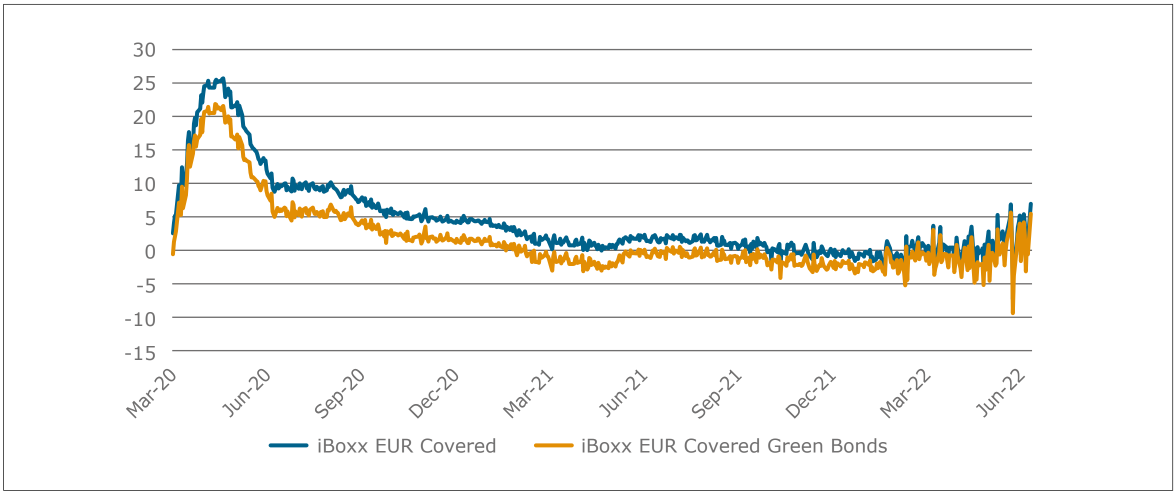


Source: Bloomberg, UniCredit Research

Performance

From an investor's point of view, investing in green covered bonds yields not only financial but also environmental returns – but does responsible investing have an influence on performance? As can be seen in figure 10, both the iBoxx EUR Covered index and iBoxx EUR Green Covered index are very closely correlated. Since 2020, the green covered bond index has been trading within a range of -5.1bp and -0.6bp to the overall iBoxx EUR Covered index, while the average duration was 1.3 year longer, and of course a completely different issuer and country composition. At what is considered the peak of the COVID-19 crisis (in spread terms) in mid-April 2020, the average spread of the two indices increased from around 3bp to 4bp and the spread difference peaked in early-May 2020 at 5.1bp, while it declined in the subsequent recovery phase until end-June 2020 to 3.5bp. Since then, the spread difference kept further declining to an average of 1.3bp in 2022. In our view, these small differences in indices are attributable to index composition, liquidity, time that has elapsed since issuance, outstanding amount, duration, etc.

> Figure 10: Comparison of iBoxx indices



Source: iBoxx, UniCredit Research

Conclusion

By the end of June 2022 the global market for EUR sustainable covered bonds had grown to EUR 51.25 bn, with green covered bonds making up 67% of the total amount in ESG covered bonds outstanding. While green issuance volumes in covered bonds remain relatively modest compared to the senior unsecured market, the substantial volumes of mortgages refinanced via covered bonds do offer good potential for the green covered bond market to further expand in the medium to long term. This growth is supported by political and regulatory developments in Europe, aiming at channeling investments towards environmentally sustainable assets. The taxonomy regulation, and related voluntary EU green bond standard, in particular, will form a key reference point for investors when assessing the contribution of green covered bonds towards environmentally sustainable objectives. The demand from investors for assets meeting the criteria from the taxonomy regulation will likely support a wider spread differential between green and non-green covered bonds than witnessed today, particularly for green covered bonds able to demonstrate full taxonomy alignment. Meanwhile, regulatory developments aiming at improving the energy performance of buildings will be crucial to the general upgrading of the ESG metrics of building loans on bank balance sheets, including of those present in covered bond collateral pools.

1.5 SOCIAL/SUSTAINABILITY COVERED BONDS – GAINING MOMENTUM

By Uwe Jurkschat, DKB, Ralf Berninger, SFIL, Rodger Rinke, LBBW

The issuance of social bonds attracted particular attention during the peak phase of the pandemic, when a large number of (acute) measures to combat the crisis, such as short-time working allowances or aid loans to SMEs, were refinanced via social bonds on the capital market. The issuance volume of social bonds in the EUR market reached a preliminary peak last year with EUR 111 billion (+24% vs. previous year). In the current year, the volume of social bonds has reached EUR 28.3 billion until the end of May. A decline in issuance is noticeable here – also caused by the cessation of EU Sure issuance activity.

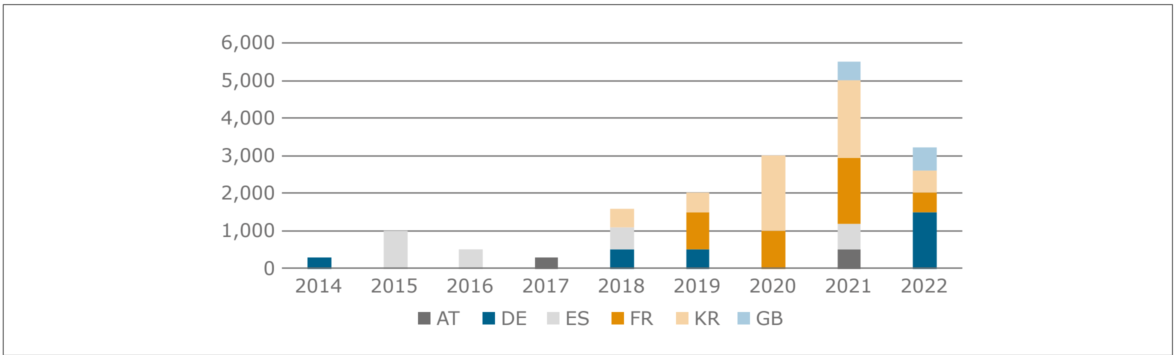
As the pandemic winds down, the issue of social housing in particular is coming into focus in the covered bond segment. Rising interest rates, inflation-related increases in construction costs and a price environment that has remained dynamic in the majority of European markets in recent years make the topic of housing one of the most important social issues of our time. Thus, in recent months, a number of newcomers have entered the social covered bond market whose programs focus on the issue of social housing. These include issues by Yorkshire Building Society and Berlin Hyp. DKB's latest issue also focuses on social housing, after the issuer had previously focused on water management. Nevertheless, the share of newly issued social and sustainability covered bonds compared with the overall covered bond market in the EUR benchmark segment is currently declining. After doubling to 6% in 2021, the share of social/sustainability issues in the new issue volume in the EUR segment is only around 3% this year - also driven by the generally higher issuance activity. The total issue volume of social/sustainability covered bonds reached the equivalent of EUR 3.2 billion in 2022 ytd in all currencies – and we have seen the first issuance of a social covered bond in GBP. All other issuances are EUR-denominated.

MARKET OVERVIEW FOR SOCIAL/SUSTAINABILITY COVERED BONDS

As of the end of May 2022, 12 different issuers with 25 transactions (thereof 20 EUR benchmark deals) have been active in the social covered bond market. In addition, three issuers from two countries have issued a total of four EUR benchmark sustainability covered bonds. The total volume of currently outstanding social/sustainability covered bonds currently amounts to EUR 16.8bn, which corresponds to less than 1% of the global covered bond market.

Nevertheless, the market for social covered bonds has had an impressive growth story since Muenchener Hypothekenbank eG issued the first ESG covered bond with a sub-benchmark volume and a social focus back in 2014. This was followed in 2015 by the first benchmark-sized social covered bond issued by Kuxtabank. Momentum picked up in 2018 with two EUR benchmark social covered bonds and one sustainability covered bond. Since then, the number of benchmark transactions has increased every year, reaching eight transactions in 2021.

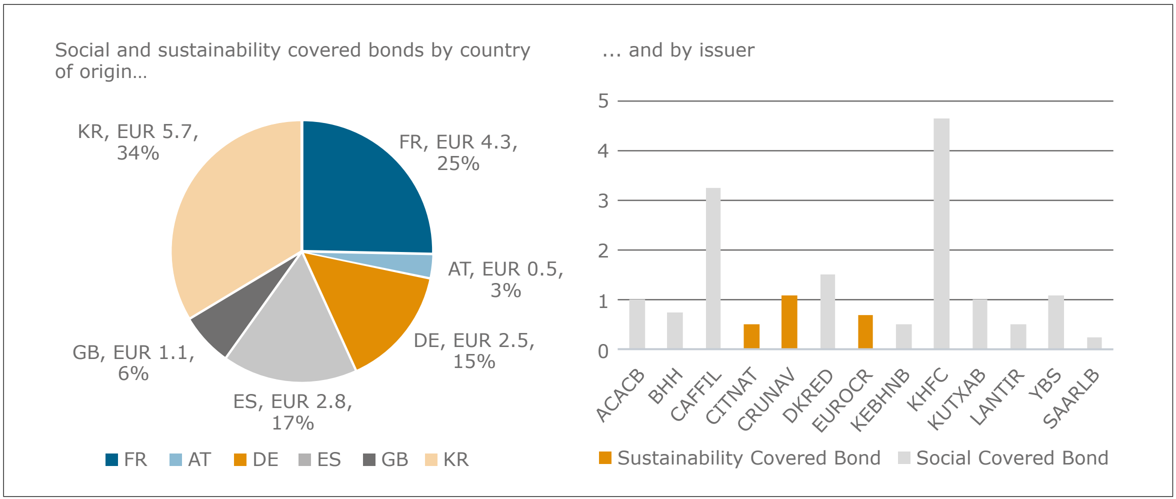
> FIGURE 1: PRIMARY MARKET ACTIVITY OF SOCIAL/SUSTAINABILITY COVERED BONDS IN EUR MN



Source: Bloomberg, LBBW Research

Looking at the regional distribution of primary market activities, an initial focus in Europe becomes clear. After starting with a sub-benchmark Pfandbrief from Germany, all issuers in the following years were Spanish except for one Austrian issue. In 2018, public sector covered bonds and the first issue from Korea followed. Subsequently, Korean issuers dominated the market and issued a total of around 1/3 of the total market volume for social/sustainability covered bonds, led by Korea Housing Finance. Since mid-2021, however, European issuers have again increasingly entered the market. French issuers entered the market relatively late (from 2019), but now occupy second place with a volume of EUR 5.7 billion. Meanwhile, CAFFIL became the largest issuer of social covered bonds in Europe.

> Figure 2: Market overview (bonds outstanding)



Source: Bloomberg, LBBW Research

PURPOSE AND USAGE OF SOCIAL COVERED BONDS

In general, social covered bonds fund projects that help to deal with a specific social issue and/or seek to achieve positive social outcomes for specific target groups. Sustainability Bonds provide the possibility to finance both green and social projects under the same format. Social and sustainability covered bonds have the same high security standards and risk profiles as "regular" covered bonds. Therefore, there should be no significant price differences between comparable covered bonds. However, possible (minimal) differences could result from the broader investor base and the associated higher demand for social and sustainability covered bonds. In the market, however, the question of price differences between social and sustainability covered bonds compared to "normal" covered bonds is difficult to answer. For most issuers, a comparison between a social/sustainability covered bond and a regular covered bond transaction fails due to transactions with similar maturities. In addition, there is the still compressed spread environment and liquidity considerations. With the few transactions where a comparison is possible, no significant premium of social/sustainability issuances can be identified compared to the "regular counterparts".

In the absence of corresponding legal foundations and a social taxonomy, which is currently still in the works, corresponding market standards have emerged in recent years in the form of the Social Bond Principles (SBP) and the Sustainability Bond Guidelines of the International Capital Market Association (ICMA). Both principles deliberately do not contain a final classification of project categories in order not to pre-empt corresponding national and international legislative initiatives.

Based on the Social Bond Principles, the following six areas of application are possible, but not limited to:

> Affordable basic infrastructure (e.g. clean drinking water, sewers, sanitation, transportation, energy)

> Access to essential services (e.g. health, education and vocational training, healthcare, financing and financial services)

> Affordable housing

> Creating employment and preventing unemployment stemming from socioeconomic crises, including through the potential effect of SME financing and microfinance

> Food security and sustainable food systems

> Socio-economic advancement and empowerment

In general, social projects according to the ICMA standards should be aimed at specially – but not exclusively – defined, specific population groups, which is an important element of the Social Bond Principles that might include people living below the poverty line, the unemployed, or vulnerable groups. The definition of these target population groups depends on local circumstances and may also include addressing the general public.

Many projects in areas like social housing or education serve social and environmental targets at the same time. The ICMA standards suggest that a classification of the proceeds as a social bond in this case should be based on the issuer's main objectives for the underlying projects. At the same time, issuers have the opportunity to intentionally mix green and social projects in a sustainability bond program. In the covered bond space, this can include for example energy efficient buildings, the reduction of waste or emissions. It can be attractive for issuers to pool both green and social project categories to generate sufficient lending volumes and sufficient assets for regular issuance.

Most issuance programs apply ICMA's voluntary market standards, which focus on transparency, disclosure and reporting. As a basis for a social or sustainability bond program, a corresponding framework should be created that addresses the following four core components:

> Figure 3

The four components of the SBP

Use of Proceeds	Process for Project Evaluation & Selection	Management of Proceeds	Reporting
Illustration of how the issuer uses the proceeds from the issuance of the Social/Sustainability covered bonds.	Issuer shall outline how it identifies and selects suitable projects.	Proceeds from Social/Sustainability covered bonds should be treated separately from others. Internal control systems should ensure that revenues are allocated only to appropriate projects.	The issuer should provide regular information about its projects and the proceeds, so that investors can constantly track this.

Modified graphic; Sources: ICMA, LBBW Research

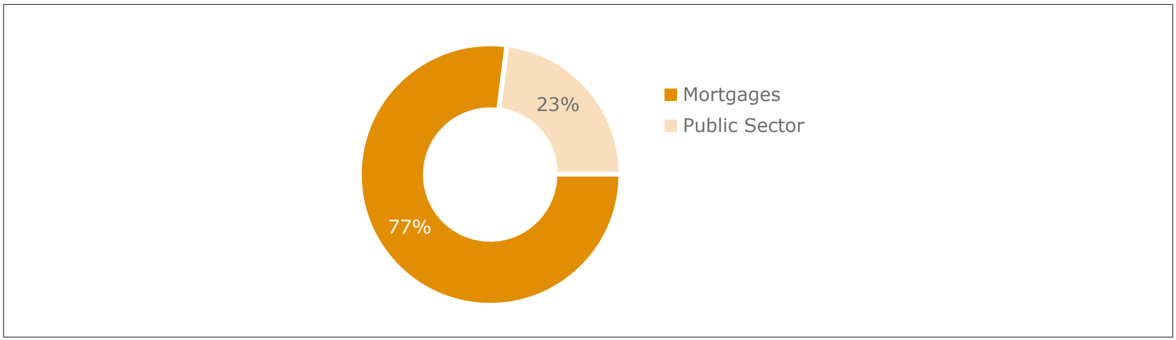
Additionally, the ICMA standards recommend that issuers have an independent third party to verify the alignment of their framework with the SBP (second party opinion). Furthermore, to facilitate the issuance of social bonds, ICMA published a "Pre-issuance Checklist for Social Bonds/Social Bond Programmes", which aims to give guidance on the necessary steps for establishing a Social Bond Framework. In addition, ICMA provides a standardized impact reporting for social bonds.

RAPID GROWTH OF THE SOCIAL BOND MARKET OVER RECENT YEARS

While the overall EUR social bond market has seen rapid growth in recent years, the development of the covered bond market has lagged behind the overall market development. One reason for the rapid growth of the overall social bond market was a big shift in the overall composition of the market. Growth in social bond issuance was driven by agencies and supranational issuers financing social investments and expenditures under social bonds format.

For the covered bond market on the other hand, issuance continues to be dominated by social bond transactions financing social and affordable housing. When looking at the overall split between public sector and mortgage covered bonds, the social covered bond market has been dominated by mortgage covered bonds which represent 77% of outstanding volumes.

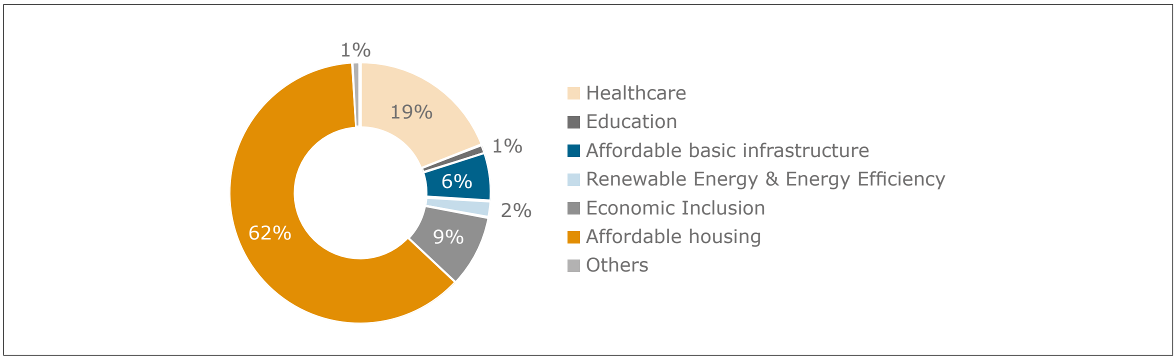
> Figure 4: Distribution - In Volume Social Covered Bond - Per Type



Source: LBBW Research

When taking a closer look at the use of the proceeds (UoPs), of social covered bonds, affordable housing is by far the largest sector with a share of over 60%, followed by healthcare with a share of 19%.

> Figure 5: Distribution - In Volume Social Covered Bond - Per Social UoPs



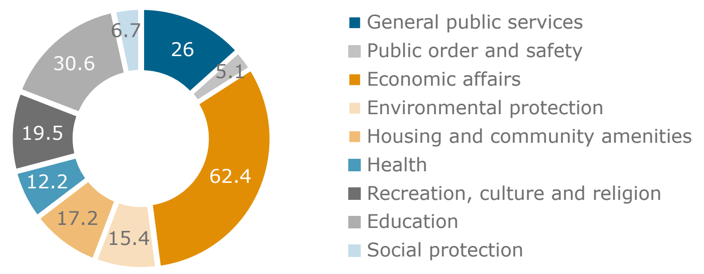
Source: LBBW Research

THE FINANCING OF LOCAL PUBLIC SECTOR INVESTMENTS AS A POTENTIAL AREA FOR GROWTH OF THE SOCIAL COVERED BOND MARKET

In many countries across Europe, including in Germany and France, public sector covered bonds play an important role in financing local government investments. A large of these local government investments have clear social objectives.

In 2020 European Union local government investments totaled EUR 295 billion[1]. A large share of these local public sector investments is closely linked to social objectives. Public education represented 16% of local government investments, followed by recreation and culture with a share of 10%, public housing at 9% and public health-care with a share of 6%. Taken together, these areas represented EUR 120 billion in public investments in 2020.

> FIGURE 6: 2020 EUROPEAN LOCAL GOVERNMENT INVESTMENT BY CATEGORY (EUR BILLION)



Source: Eurostat

It is worth noting that local authority investments often have both environmental and social objectives at the same time. The construction of a new school will be an investment in public education, but at the same time, it may also be considered a green project, if the construction is an energy efficient building. Another example would be the construction of a new tramway line, with a focus on providing clean local public transportation and clean public transportation, but at the same time with important social objectives link to the same. Sustainable water management of the provision of drinking water is another area, where social and environmental objectives are closely linked. Very often, it will be up to the issuer to determine whether a specific local government investment mainly aims to address social or environmental issues.

One difficulty for the refinancing of local government investments via the issuance of social covered bonds is to identify specific social projects. Local government lenders typically finance the overall investment budget of a local authority and do not use a project finance approach. In some cases, local government lenders may finance public sector entities with a very specific mission, for example water boards, public transport authorities or public universities. However, in most cases local government lenders will need to adjust the lending process by setting up specific loan contracts linked to these social investments.

OUTLOOK

The social covered bond format is well established to finance affordable housing. However, as of today very few public sector covered bond issuers have set social public sector covered bond programs. Social projects represent a large share of local government investments, creating important opportunities for the growth of the social covered bond market. One of the obstacles that public sector covered bond issuers will need to overcome is the difficulty in identifying specific social investments when lending to local authorities.

1 Source of all local government data : Eurostat

REGULATORY DEVELOPMENTS – THE NEW PROPOSAL FOR A SOCIAL TAXONOMY:

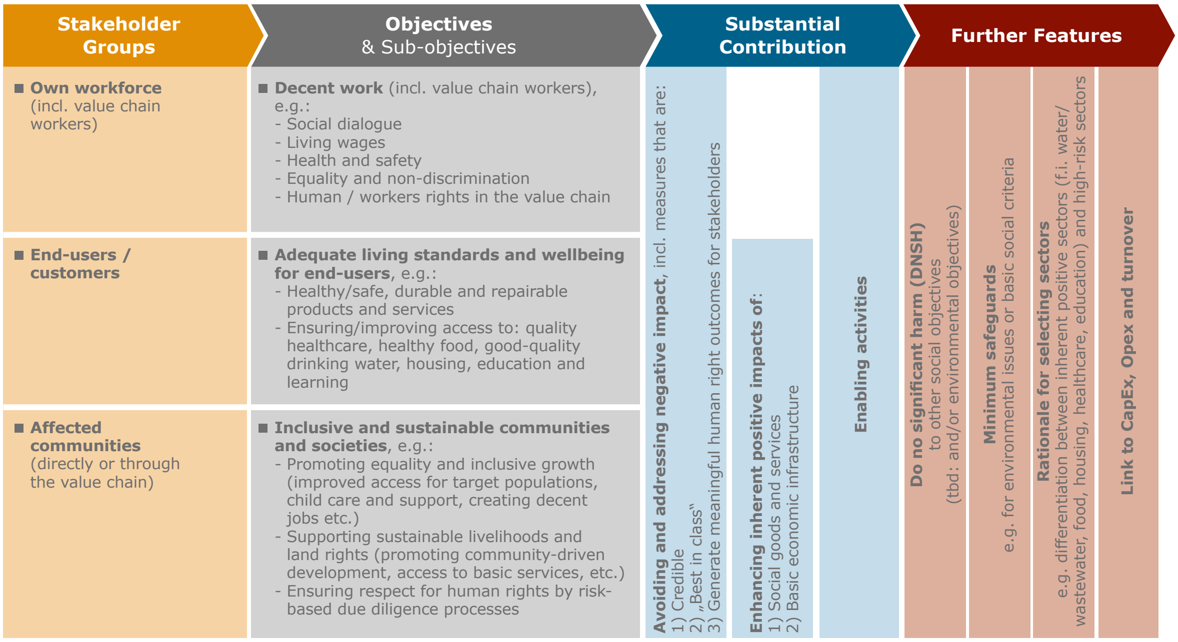
ORIGIN OF THE SOCIAL TAXONOMY

Besides the permanent discussions and measurements to strengthen the standardisation in the green sustainability space there is also an ongoing process in this regard especially on the social side. The main driver from a political and potentially future regulatory perspective is probably the concept of a social taxonomy. In February 2022 the "Final Report on Social Taxonomy" was published by the Platform on Sustainable Finance, an expert group to assist the EU Commission in developing its sustainable finance policies. The subgroup (4) within this expert group, which works on the social taxonomy, is still pretty small, so it is doubtful that the multitude of aspects associated with social questions and answers are adequately represented. Nevertheless, the signal effect should not be underestimated and the echo in the capital market has already been varied. Compared to a former proposal, the new concept discards the idea of a "vertical" and "horizontal" dimension and adheres closely to the structure of the current EU (environmental) Taxonomy. This is to be welcomed, because it creates a conceptual synchronization that makes it easier for market participants and leaves open the possibility of combining both taxonomies in the future.

GENERAL OVERVIEW

The taxonomy proposal distinguishes the addressees, the objectives and the contribution of social activities. This approach is complemented by other aspects to derive or substantiate this process in more detail.

> FIGURE 7



Source: own illustration

THE SINGLE ASPECTS OF THE SOCIAL TAXONOMY

The starting point of the suggested structure within the social taxonomy is the addressees of social action in the context of business activities, defined here as **stakeholders**. These include an entity's own workforce (including value-chain workers), end-users/customers and affected communities (directly or through the value chain).

The next step in the concept is the definition of relevant goals that can have a positive influence on the live and livelihood of the groups of stakeholders. Based on the major social topics and established international norms and principles, three main objectives were formulated: decent work (including value-chain workers), adequate living standards and wellbeing for end-users such as inclusive and sustainable communities and societies. These main goals are complemented by a non-exhaustive proposed list of sub-goals to outline a wider range of social activities and to better illustrate the content of the keywords. Moreover, these explanations are required to meet the pragmatic requirement for the later application of the taxonomy.

A crucial question is which business activities promote the achievement of the proposed (sub-) objectives and how they can be measured. The current structure of the social taxonomy proposes, with reference to the environmental taxonomy, to use different types of substantial contribution to reflect these issues. The first one is to avoid and address negative impacts on workers, end-users and communities- where one or more stakeholder groups can be meant, depending on the respective objectives. Secondly, there are activities to enhance the inherent positive impacts of social goods/services and basic economic infrastructure, f.i. providing access to water, sanitation, housing, education or healthcare. Thirdly, economic activities are defined which enable a substantial contribution to be made in other activities. While the first and third types can be used for all objectives, the second one is applied for only two goals: 'adequate living standards and wellbeing for end-users' such as 'inclusive and sustainable communities and societies'.

This core structure of the social taxonomy, consisting of stakeholders, objectives and substantial contribution, is supplemented by further aspects, which are intended on the one hand to ensure consistency with the procedure of the environmental taxonomy and on the other hand to deal with questions and concerns that have arisen in the course of the previous discussion.

The proposed **Do No Significant Harm (DNSH)**-criteria play the same role as in the environmental taxonomy: to ensure that an activity which serves a certain social objective, does not violate other social goals. As in the environmental taxonomy, it will be challenging to define criteria that complement features used to concretize substantial contribution without overburdening the users of the future social taxonomy in terms of content and administration.

The same applies to the **Minimum Safeguards**, which are included in the existing Taxonomy Regulation (Article 18) and should therefore be used in the social taxonomy. However, various considerations still need to be specified.

Furthermore, the current proposal for the social taxonomy also discusses how special sectors can be assessed and selected. A basic distinction is proposed between so called high-risk sectors on the one hand and sectors with an implicitly positive social footprint on the other hand. While the negative impacts of the high-risk sectors shall be addressed and avoided, the positive impacts of the other sectors, e.g. the ones providing social or basic economic infrastructure, shall be enhanced. Once again, the NACE system could be used to build this sector framework.

Finally, the activities affected by the taxonomy are discussed in terms of whether they are **CapEx**, **OpEx or turnover** and how this could potentially be viewed.

Further explanations relate to questions of governance, metrics and the identification of so-called harmful activities. The relationship between social and environmental taxonomy is also discussed in detail. This is especially interesting because two models are presented that show how the two taxonomies can be aligned or, in any case, how they do not contradict each other.

EVALUATION OF THE "FINAL REPORT ON SOCIAL TAXONOMY"

All in all, the proposed structure of the social taxonomy tries to build on the existing EU taxonomy regulation and to reflect the basic elements of the environmental taxonomy, which is positive in terms of a coherent approach of social and environmental aspects and the future handling of the relevant business activities.

It is also important to note that there is thematic overlap between the proposed social taxonomy and other frameworks that already exist or are being discussed, e.g. the Corporate Sustainability Reporting Directive (CSRD). Therefore, it is pointed out that the social taxonomy relates to the activities of the market participants concerned, while most other regulations define reporting requirements for entities. Nevertheless, the boundaries are sometimes blurred or difficult to discern, which is why the present proposal for social taxonomy also attempts to include the perspectives of parallel regulations.

In any case, the final report contains a multitude of new ideas and considerations but also many question marks on the way to developing a social taxonomy.

1.6 A SUSTAINABLE HOUSING MARKET: TOWARDS A NEW ECOSYSTEM SUPPORTING THE TRANSITION ECONOMY

By EMF-ECBC Secretariat

The current geopolitical context, the resulting energy crisis and climate change are making it increasingly necessary to radically rethink the regulatory framework and market best practices of the European housing finance sector. The need for a real step-up in pace in the coordination of national and European policies opens new scenarios that perhaps have never been seen before.

This turning point is already having a profound influence on current political and legislative debates on crucial market dossiers such as the EU Taxonomy, the Energy Performance of Buildings Directive, the implementation of the final Basel III reforms and, more generally, all issues related to digitalisation and sustainability.

The key to interpreting these new dynamics must be found in the political perimeter outlined by the NextGenerationEU package, which is intended to lay the foundations for a common European home and provide the keys to a future full of opportunities for upcoming generations.

The housing sector is key to the development of a clear market roadmap that will enable the European Union to achieve its goal of reducing greenhouse gas emissions. Indeed, housing is a strategic sector not only because homes are the main place where people spend their lives and, increasingly, work, but also because they account for 40% of CO_2 emissions in continental Europe.

The scale of the investment needed to improve the energy performance of more than 220 million homes to meet the EU's energy saving targets is immense and cannot be achieved by the public sector alone. The private financial sector in the EU has a central role to play in the transition to a more sustainable economy, reducing energy poverty for households, especially those that struggle to meet the transition challenges, safeguarding consumers' wealth in terms of disposable income and asset value, and supporting economic growth and job creation. In this context, it is of strategic importance to align the interests of lenders, investors, SMEs, utilities and, above all, consumers in multi-service platforms at European level. If we are to reach our 2030 targets, almost 500,000 homes in Europe must be upgraded every week.

The real breakthrough of a net-zero Europe will come through the large-scale use of green mortgages. Today, the mortgage market is equivalent to around 46% of the EU's GDP. Facilitating the transition to green mortgages is crucial to achieving a climate neutral economy, as highlighted by the Energy Efficient Mortgages Initiative (EEMI)[1], which seeks to introduce a greener, sustainability-focused system for purchasing, renovating and living in homes. There is therefore a need for in-depth energy renovations.

In this respect, it is important to ask how much it costs each owner, whether individuals or families, to make the necessary jump in energy class: the answer is an investment of at least EUR 25,000-30,000. There are not many who can afford such sums without systemic help or stimulus. The problem is that if the necessary "green" improvements are not made, there will inevitably be a net and tangible loss in energy consumption.

Member States cannot fully assume this huge burden via public debt, which would mean shifting the cost to future generations, so we have to build a mechanism which brings together public and private stakeholders, working in coordination and leveraging each other's contributions and actions. The contribution of financial markets, if combined with public intervention and structured in the right way, can give life and impetus to a genuine green renaissance, capable of giving an economic boost not only to the mortgage, construction, and real estate industries, but to the entire economy.

The positive repercussions would be felt not only from an environmental point of view, but also in terms of employment, research and development, certification and the professional skills involved in this work.

1 https://energyefficientmortgages.eu/

At the heart of the Energy Efficient Mortgages Initiative (EEMI) are efforts to boost and support consumer demand for buildings' energy renovation by way of an energy efficient mortgage 'ecosystem'. Bringing together a wide range of relevant market players, including lenders, investors, SMEs and utilities, the EEMI is aligning strategies and actions through a new, innovative market mechanism focused on a green "fulcrum" of products, services and data, delivered by way of a "one stop shop".

With the overall objectives of optimising the end-to-end customer journey and experience, deploying market interventions and partnerships that support delivery, and therefore maximising benefits for consumers, the EEMI is concretely building an open source platform at the centre of the "ecosystem", which will:

> Provide access to and guide consumers towards the most efficient and cost effective, integrated technical and financial products, services and advice, whilst ensuring commercial neutrality and offering a European approach to delivering market-specific actions.

> Deliver a continuous flow of material data for lending institutions, investors and SMEs on building energy performance (improved EPCs, primary energy demand), EU Taxonomy alignment and ESG counterparty assessment and ratings.

> Favour the implementation of market best practices to secure gradual but continuous market transition and alignment with EU legislative requirements.

The EEMI is building a constellation of national platforms focussed on local characteristics and implementation needs but with a European footprint. The EEMI governance structure[2], combining the European-level EEM Label and Advisory Council with the EEMI national hubs, will provide the European coordination of national actions, including institutional interventions, which will support timely and cost optimised coordination between and amongst the public and private market sectors. The Energy Efficient Mortgages Initiative brings together all market stakeholders and provides them with the opportunity to share innovative solutions through its "green platform", which promotes the idea of the EU's New European Bauhaus.[3] Since November 2020, the Initiative has organised 13 successful EEMI Bauhaus events with the twofold aim of building a community and stimulating market development towards the green transition.[4] There is also another key aspect to this new green ecosystem narrative. The home is a very special place, a social driver for economic growth and cultural integration where our lives are built and our future is dreamt. On average, people spend between one third to more than half of their lives in their homes. This makes it an ideal focal point for financial education for citizens as consumers by embedding a new culture with greener microeconomic decisions in support of a transition economy.

Such an exercise should not be seen as "just" a philanthropic decision taken by already environmentally conscious people who also tend to be more affluent. It will be a win-win solution, especially for those families for whom it is more difficult to make ends meet and who are more likely to live in less energy-efficient homes and for whom running and living costs represent a larger share of their budget.

In this time of unprecedented crisis, we must turn challenges into opportunities, looking the next generation in the eyes. Our homes, the place where we raise our children, are at the heart of our lives and interests: exactly like the word "Home", οἴκος (oikos) at the heart of the ancient Greek word "oikonomia".

A sustainable economy must be built around the concept of "home", the cornerstone of citizens' interest, centred on an ESG "ecosystem" that promotes green values and raises environmental awareness.

2 www.energy-efficient-mortgage-label.org

3 www.coveredbondlabel.com

4 www.energy-efficient-mortgage-label.org

THE ENERGY EFFICIENT MORTGAGE LABEL (EEML)

The first building block of this new ecosystem lies in the Energy Efficient Mortgage Label (EEML)[5], launched in 2021, which is a quality toolbox for consumers, lenders and investors, aimed at identifying energy efficient mortgages in lending institutions' portfolios. Under the Label, banks commit to develop specific mortgage products to finance energy efficient homes or home energy renovation.

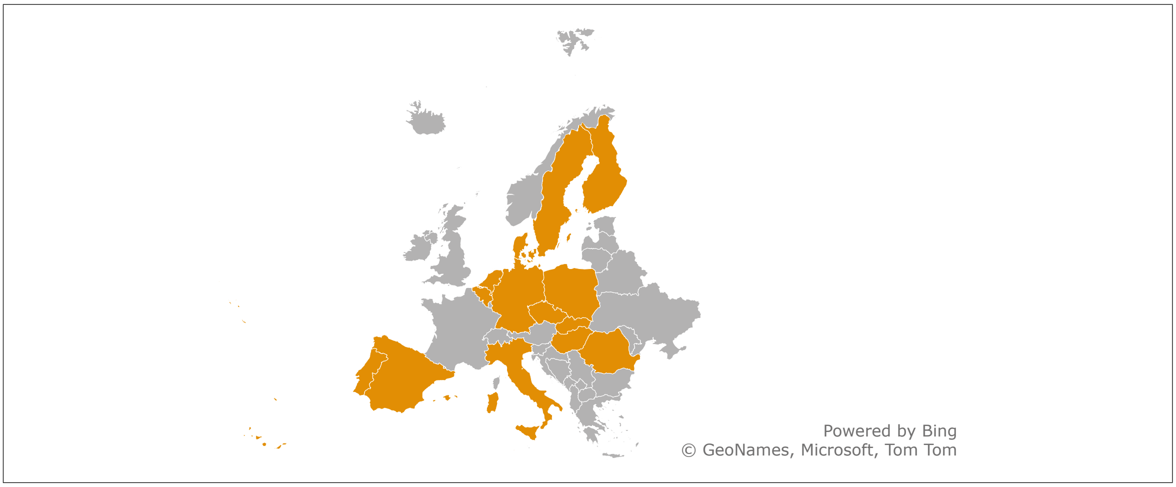
The EEM Label was created to deliver a quality market benchmark supporting recognition of and confidence in energy efficient mortgages. This was intended to be achieved by ensuring access to relevant, quality, and transparent information for potential borrowers, regulators, and other market participants. In addition, the Label aims to facilitate a process of standardisation to secure and enhance overall regulatory recognition of the asset class.

Before the official launch of the Label, the Energy Efficient Mortgages Initiative (EEMI) designed its core elements, including the IT platform and legal texts. The Label is built around the EEM Label Convention[6] and a process of self-certification, both of which are overseen by the label governance[7] structure consisting of: the Label Committee, the Label Secretariat and the Label Advisory Council.

The EEM Label has been developed using the Covered Bond Label[8] as a blue-print, which is managed by the EMF-ECBC and can look back on a 10-year success story, a period during which it has established itself as the global reference point and data collection benchmark for the nearly EUR 3 tn. outstanding covered bond asset class. It is the intention that the EEM Label emulates this goal in the field of Energy Efficient Mortgages and in the wider field of financing of energy efficient renovation, scaling-up volumes and best practices on both retail activities and funding policies in the ESG sector.

The initiative comes at a pivotal point in time, where efforts are underway at EU level to redesign the regulatory and monetary policy framework to address climate change and transition risks. As of August 2022, 38 pioneering lending institutions from 14 countries[9] have adopted the Energy Efficient Mortgage (EEM) Label, covering the four corners of the Old Continent, large and small lending institutions, traditional banks and FinTech platforms.

> FIGURE 1: GEOGRAPHICAL BREAKDOWN OF EEM LABEL LENDING INSTITUTIONS



Source: EEM Label Data

5 https://www.energy-efficient-mortgage-label.org/
6 https://www.energy-efficient-mortgage-label.org/about-us/convention
7 https://www.energy-efficient-mortgage-label.org/governance/structure
8 https://www.coveredbondlabel.com/
9 https://www.energy-efficient-mortgage-label.org/issuers/directory

The EEML provides information on the portfolios of energy efficient loans as assets to be included in green covered bonds, allows for enhanced evaluation and tracking of their financial performance relative to alternatives and provides greater transparency regarding climate risks and resilience.

The EEM Label is granted either to a specific product offered by a lending institution or to the entirety of mortgages which are aligned with the EEM Label Convention. At the time of writing there are 53 labelled products registered. Considering the heterogeneity of alternative available loans to support the energy efficient improvement of dwellings, on the EEM Label website there is also a section for "complementary products" where financial institutions can upload general information on other products, such as personal loans, green accounts, renovation loans and loans to acquire energy savings solutions.

KEY ELEMENTS OF THE EEM LABEL

To be part of the EEM Label interested parties need to *self-certify* that they are a lending institution with products aligned with the *EEM Label Convention*, for which they need to disclose at least on a quarterly basis relevant information using the *Harmonised Disclosure Template*.[10]

The EEM Definition and the Label Convention

The EEM definition was launched in December 2018 and consists of high-level, principles-based guidelines for the technical assessment and valuation of eligible properties. The definition provides clear eligibility criteria for assets and projects that can be financed by energy efficient loans and for the tagging of existing assets in banks' portfolios. The EEM definition provides the protocols to ensure appropriate lending secured against properties that are likely to have both lower credit risk and support climate change mitigation and adaptation.

> In the context of the EEM Label, this definition currently forms the basis of the Convention and serves as the technical benchmark of the Label:

> *Energy Efficient Mortgages (EEMs)[11] are intended to finance the purchase/construction and/or renovation of both residential (single family & multi-family) and commercial buildings where there is evidence of: (1) energy performance which meets or exceeds relevant market best practice standards in line with current EU legislative requirements and/or (2) an improvement in energy performance of at least 30%.*

> *This evidence should be provided by way of a recent EPC rating or score, complemented by an estimation of the value of the property according to the standards required under existing EU legislation. It should specifically detail the existing energy efficiency measures in line with the EEM Valuation & Energy Efficiency Checklist.*

> *Lending institutions are committed to providing regular information enabling investors to analyse the Energy Efficient Mortgage products, following the Harmonised Disclosure Template.*

Importantly, the EEM Label Committee is working on the revision of the Definition/Convention to ensure alignment, as appropriate, with the EU Taxonomy.

Finally, it is worth noting here that in recognition of the availability of different types of energy efficient/green financing products, the EEM Label website also provides the possibility to label unsecured consumer loans for energy efficient renovation purposes.

10 https://www.energy-efficient-mortgage-label.org/hdt

11 Footnote to definition: In the context of the EEM Label the term "mortgage" refers to residential and commercial property loans which fall within the scope of the Capital Requirements Regulation (Regulation 2013/575/EU) and/or Mortgage Credit Directive (Directive 2014/17/EU) or under equivalent legislation outside of the EEA.

Closing the data gap by providing the housing sector with global ESG data disclosures best practices: The Harmonised Disclosure Template

The Harmonised Disclosure Template

With a growing focus on sustainable finance – from regulators, market participants and investors alike – transparency and disclosure are becoming crucial drivers in harmonising best practices and in mitigating the "green-washing" risk in the capital markets arena, securing investors' confidence and financial stability in the ESG space. Considering this, the Harmonised Disclosure Template (HDT) allows for improved comparability of energy efficiency mortgages. The key is to establish centralised and up-to-date qualitative and quantitative information, which will be available for investors, regulators and other market participants.

The objective is to stimulate the creation of a positive incentive sequence across the mortgage value chain for more consistent and standardised data collection and management, as well as for better linking loan information, property and energy efficiency characteristics in a single common template. Standardisation will facilitate investors' due diligence, facilitate regulatory reporting requirements in this area and enhance overall transparency in the EEM and (covered) bond markets. To strike the balance between the standardised structure valid for all labelled EEM products and the national peculiarities in reporting specific data points such as the breakdown of loan size, the HDT provides for the introduction of nation-specific breakdowns managed by national coordinators.

The HDT is based on the Master Template delivered under the Energy efficient Data Protocol & Portal (EeDaPP)[12] Project, which organises EEM "input" data and is also inspired by the successful Harmonised Transparency Template (HTT) of the Covered Bond Label. Indeed, efforts have also been undertaken to align the HTT and the HDT as much as possible to facilitate completion and due diligence by banks which have both an EEM Label and the Covered Bond Label. The HDT is furthermore fully compliant with existing regulatory and market disclosure requirements.

The HDT must be completed for each labelled EEM product at least every quarter and has the following structure:

> **A1. EEM General Mortgage Assets**: Tab where information on the general mortgage portfolio is requested (e.g. location, size, ESG, repayment type, LTV, NPL, type of building). The information is also subdivided for type of real estate (residential or commercial).

> **B1. EEM Sustainable Mortgage Assets**: Tab which requests the same set of information as tab A1, but focused only on the subset of mortgages which are EEM compliant.

> **EEM Harmonised Glossary**: Tab where definitions and further comments on the sections of the HDT can be introduced

In order to be aligned with market best practices and with regulatory requirements, the HDT undergoes an annual revision process which culminates with the approval of the updated HDT in September/October. This effort is supported by both the lending institution community and by the Disclosure Working Group comprising national coordinators[13], EEM Label Committee members and interested representatives of the lending institutions to support the Secretariat in gathering potential amendments to the HDT based on suggestions related to overarching and national-specific reporting and disclosure issues.

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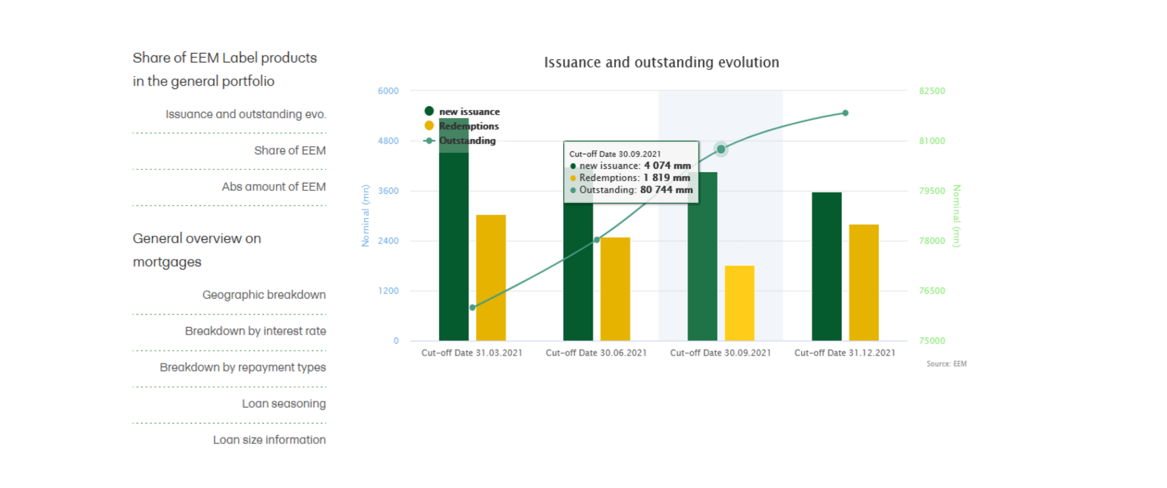
12 The **Energy Efficiency Data Protocol and Portal (EeDaPP) Initiative** – led by European Mortgage Federation-European Covered Bond Council (EMF-ECBC), Ca' Foscari University of Venice, CRIF, European DataWarehouse, Hypoport, SAFE Goethe University Frankfurt and TXS – aims to design and deliver a market-led protocol, which will enable the large-scale recording of data relating to energy efficient mortgage assets, via a standardised reporting template. The data will be accessed by way of a common, centralised portal, allowing for continuous tracking of the performance of the energy efficient mortgage assets, thereby also facilitating the earmarking of such assets for the purposes of energy efficient bond issuance.

13 https://energyefficientmortgages.eu/national-hubs/

Currently, 12 lending institutions have disclosed HDTs on 17 products that are available on the EEM Label website. As with the Covered Bond Label, for the EEM Label the HDTs are exclusively publicly available via the lending institutions' own websites whereas on the EEM Label website a reporting tool using direct links to the HDTs creates a graphical representation of the data contained therein as shown in Figure 2.

> FIGURE 2: HDT DATA PRESENTATION ON THE EEML WEBSITE



Source: EEM Label website: https://www.energy-efficient-mortgage-label.org/products

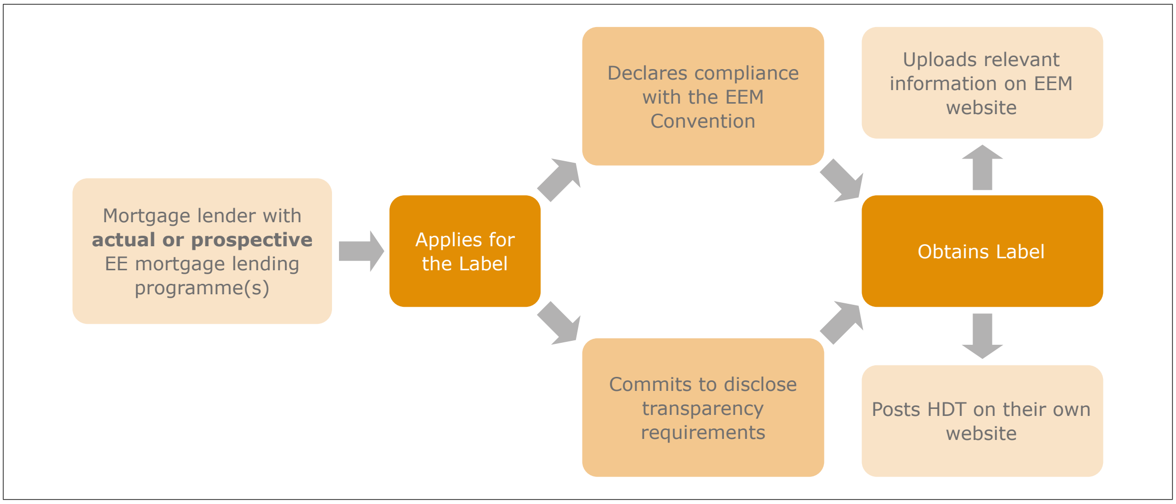
For the time being, complementary products are not required to present an HDT, but the Label Committee is already planning to develop adapted HDTs and/or extra tabs in the existing HDT to accommodate new and diversified data requirements.

Self-certification

Again, drawing on the experience of the Covered Bond Label, the EEM Label is based on a process of self-certification, according to which lending institutions signal their compliance with the Convention. The process of self-certification is detailed in Figure 3.

The self-certification process highlights and testifies a real ESG engagement and strategy for labelled lenders. This process of self-certification pioneered by the Covered Bond Label has proven to work very efficiently as a result of subsequent scrutiny by other market participants, including investors and rating agencies, of the publicly disclosed HTT, representing a form of "third-party verification". This has given rise to a market-led mechanism which effectively polices itself with the result that the cost of not accurately disclosing data or falsely declaring compliance with the Convention is high in terms of reputation and potential impact on the underlying product or ratings. This will help to mitigate any risk of "green-washing".

> FIGURE 3: EEM LABEL SELF–CERTIFICATION PROCESS



Source: Energy Efficient Mortgage Label

REGULATORY COMPLIANCE: EEM LABEL TAXONOMY TASK FORCE

The EEML is intended to scale-up private market support for the NextGenerationEU vision, the EU Renovation Wave Strategy and the EU Green Deal, by acting as a catalyst for consumer demand and a driver of the qualitative upgrade of the energy profile of lending institutions' portfolios and of enhanced asset quality. Following on from the ECBC's Covered Bond Label, the EEML will allow for identification, exchange and implementation of market and legislative best practices at European and international levels, particularly in light of the adoption of the EU Taxonomy.

Against this background a specific Taxonomy Task Force has been established which produced a first report in spring 2022 making the following recommendations to the Label Committee:

> The EEM Label's Definition, as laid down in the EEM Label Convention, should remain as it is and allow its users to gradually develop their existing green loan and mortgage products towards EU Taxonomy alignment.

> Based on discussion within the EU Taxonomy Task Force, it became clear that incorporation and full alignment with the EU Taxonomy is demanding from the business, retail origination and IT perspectives in the short-term.

> In the HDT template, it was recommended to include a "Taxonomy dimension" (optional input until 2024) to identify lending institutions which are gradually evolving and embracing the EU Taxonomy criteria in relation to their portfolios.

> Alignment with the EU Taxonomy will make the EEM Label a powerful initiative and will underpin ongoing efforts to secure a dedicated regulatory treatment and, where the EU Taxonomy's definition is not clear, the EEM Label initiative should take the lead by helping to identify and develop market best practises.

> The products which already have a Label should be "grandfathered" up until the moment of change, which means that they retain their Label status based on the previous iteration of the EEM Label.

These discussion points have triggered a reflection in the Label Committee, which is discussing whether to include in the revised HDT a separate Taxonomy Tab in order to provide the possibility to lending institutions to report, where available, initial quantitative evidence that the labelled mortgages are EU Taxonomy compliant.

CONTINUOUS MONITORING OF MARKET REALITY AND ESG DEVELOPMENTS: EEM LABEL AFTER A YEAR OF OPERATION

After a year of operation of the EEM Label, the EMF-ECBC surveyed both lending institutions and non-lenders through two surveys focusing on the appropriateness of its governance, scope, core elements and communication activities. The surveys aimed to provide insights into the user experience and expectations, which can guide improvements of the Label's functioning and support in the further development of standards for quality and transparency in relation to energy efficient mortgages.

From the responses received to the surveys, it is apparent that the majority of actors are very satisfied with the EEM Label's functioning and performance to date, whether this be in relation to the impacts of the EEM Label from the retail, funding and macroprudential perspectives, where multiple benefits are highlighted, or in relation to the governance structure, the HDT or strategic alignment and communication activities, for example.

Significantly, the responses also provide important indications in terms of room for further improvement in light of new and ongoing challenges. These indications pertain to access to and availability of comprehensive energy efficiency data to facilitate completion of the HDT, the extension of the HDT to include the request to expand the scope beyond mortgage products to cover personal/consumer loans, and the potential for the EEM Label to provide strategic guidance to the market with regard to the EU policy landscape.

This feedback is extremely relevant and will help steer future discussions of the EEM Label Committee with a view to addressing the points raised. Positively, the infrastructure is already in place to manage these issues, for example, by way of the EEM Label Taxonomy Task Force and the EEM Label Disclosure Working Group, which are seeking, respectively, to ensure alignment of the EEM Label with EU regulations and the EU Taxonomy in particular, and to ensure a timely revision of the HDT. Regarding access to and availability of Energy Performance Certificates (EPCs), the feedback received reconfirms the mandate given to the EEM Label Secretariat to seek policy changes at EU level which secure access of credit institutions to EPC data and registers. These efforts are ongoing and, in light of the feedback received, will continue, particularly in the context of the recast of the Energy Performance of Buildings Directive (EPBD).

CONSUMERS AT THE HEART OF THE EEMI ECOSYSTEM

The EEM Initiative and the EEM Label were designed to raise consumer awareness and appetite for buildings' energy efficiency, which represents a core element of the market transition. Against this background, the EEMI identified the main drivers of consumer demand with a focus on the appeal, relevance and understandability of EEMs across European markets.[14] This latest consumer research has generated key insights with regards to EEM market developments. These findings further support the need for a standardised approach in terms of information exchange between the different actors that constitute the EEM ecosystem, namely lending institutions, small and medium enterprises active in the refurbishment of the building stock, and providing energy efficient solutions for mortgage holders.

In this context, the EEM Label has undertaken several actions to introduce a product feature grid[15] that succinctly collects the key features of the labelled products in order to provide a clear overview of the various products of the EEM Label. The grid was created to reinforce the value of the EEM Label for consumers by providing easy access to all labelled products and guiding them towards the most efficient and cost-effective financial products. All these efforts seek to scale-up the EEMI's work, demonstrating the end-to-end customer journey and the EEM life-cycle.

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14 https://energyefficientmortgages.eu/wp-content/uploads/2022/04/EeMMIP-2022-Complete-Report-Consumer-Insights-Green-Mortgage-Propositions-Feb-2022.pdf

15 https://www.energy-efficient-mortgage-label.org/products/compare

> FIGURE 4: EEM LABEL PRODUCT FEATURE GRID

Table

Filter results : Lending institution ▾ Type of loan ▾ All countries ▾ | download excel sheet

Product Name	Product 1	Product 2	Product 3	Product 4
Lending Institution	Institution 1	Institution 2	Institution 3	Institution 4
Product Type	Residential Real Estate	Commercial Real Estate, Residential Real Estate	Commercial Real Estate, Residential Real Estate	Residential Real Estate
External Product Link				
Country				
Year start	2021	2015	2021	2021
Product Features				
Special loan conditions[1]		Yes		Yes
Access to ecosystem and service providers[2]				Yes
Target market	• New building • Existing building • Building renovation • Construction	• Existing building • Building renovation • Construction • New building	• New building • Existing building • Building renovation • Apartment renovation	• New building • Existing building • Building renovation • Apartment renovation • Construction
EPC/Energy requirements[3]	• A • B • C • D		• A • B	
Key eligibility criteria	• Minimum 30% Energy performance improvement • A B C and D EPCs		• Minimum 30% Energy performance improvement • Buildings with EPC A and B • Buildings build after 2009	• Minimum 30% Energy performance improvement
Target client	• First Time Buyers • Construction Companies • Second time buyers		• Private homeowners • Multifamily houses	• First Time Buyers

Rows per page : 10 ▾ 1-7 of 7

Source: EEM Label website: https://www.energy-efficient-mortgage-label.org/products/compare

CONCLUSION

The Energy Efficient Mortgages Initiative is leading the market towards a real cultural change in the housing sector by proposing coordinated and integrated solutions at global level for retail, funding, marketing and risk analysis strategy in the banking sector. This will accompany lenders in building common best practices and deliver new green products and solutions for consumers. This pivotal change will not only support the appetite for ESG assets in capital markets but, more importantly, help mitigate green washing, thereby facilitating investors' due diligence and reinforcing the overall financial stability perspective in the ESG space.

The Initiative aims at scaling-up volumes, solutions, and opportunities for the entire value chain with the end goal of bringing into the hands of consumers a real and affordable microeconomic advantage when renovating their homes.

Against this backdrop, we must remember that the real decision-makers in the housing transition economy are the owners of properties who need to be encouraged to make informed decisions for the future benefit of their children, looking at the world from a new perspective. This revolutionary behaviour should be supported by the appropriate toolbox of incentives, regulation and subsidies. The banking sector is ready to provide the magnifying glasses helping them to look for a new path in their consumer journey by supplying new green products and renovation opportunities.

With the EEM Ecosystem, the mortgage and covered bond industries are laying the foundations for a win-win market paradigm that secures both economic growth and financial stability. This, it is hoped, will give rise to a Green Renaissance rooted in a new perspective of sustainability, digitalisation and social inclusion, to fund the hope for a better, greener future.

1.7 COVERED BOND INVESTOR VIEW: PRIVATE BUYERS RETURN AS THE ECB STEPS BACK

By Florian Eichert, Crédit Agricole CIB, Frederik Kunze, Nord/LB and Niek Allon, Nationale-Nederlanden Bank

Investing in covered bond markets has been a rather challenging affair in recent years. For much of last year, we were faced with low gross and negative net issuance volumes, heavy CBPP 3 buying, poor levels of liquidity in secondary markets, tight spreads, flat spread curves and negative yields for the bulk of the market. Not exactly pleasant unless one is on the issuing side of the equation and a number of investors did indeed either temporarily focus on alternatives to covered bonds or left altogether. However, with us moving into 2022, almost all of those points have at least begun to change. Issuance volumes have surged as have re-offer yields, spreads vs EGBs and SSAs have been as high as they have been in years and with the PEPP ending net settlements at the end of March, net APP settlements coming to an end on 1 July and CBPP 3 orders dropping further to 20%, the Eurosystem's impact is also becoming less pronounced.

If there ever was a time when classic multiple choice questionnaires to get investor feedback were not fit for purpose, then it is this year. Hence, unlike in previous editions of the ECBC factbook, we have decided that we need more nuanced and detailed feedback from investors and have as a result conducted a series of interviews with around ten key covered bond investors with a wide range of backgrounds, both investor type as well as location wise.

What we want to do below is to briefly highlight what the ECBC has been doing in terms of engaging with the covered bond investor base in these tricky times. Niek Allon, the moderator of the ECBC Investor Task Force will run you through this. We then thought it is useful for Frederik Kunze to run you through a short section highlighting the evolution of classic investor distribution statistics in EUR benchmark covered bond markets. And last but not least, Florian Eichert will outline the main highlights from our interviews.

ECBC INVESTOR TASK FORCE

In 2021 the ECBC established the Investor Task Force (ITF). The reason for the establishment of the task force is to strengthen the active involvement of covered bond investors in the activities and plans of the council. As they cannot become members of the ECBC an active dialogue with a wide range of investors is crucial to get feedback on the publications issued and the activities organized by the council. The ITF has the objective to engage with investors, to build a platform for and with investors, to share information, discuss developments and requirements and to connect investors with ECBC members.

The Task Force started with a series of interviews with a group of 12 covered bond investors. The interviews presented us with a number of interesting insights:

- Investors are willing to be actively involved in ECBC activities, roundtables and discussions
- The ECBC fact book and Covered Bond Label initiative are very highly valued
- Investors use the CB Label website and Harmonized Transparency Templates (HTT) intensively for their daily activities. Some investors have automatic links from the label websites to their internal systems and reporting. In addition, investors indicated that they can not invest in covered bonds if the issuer does not publish an HTT. At the same the time the presence of an HTT allowed them to look at alternative (also non-core EU) jurisdictions and issuers.
- Going forward investors show interest being involved in the ECBC and ITF activities
- Further disclosure of date related to the EU Taxonomy, EPC indexes and other ESG topics would be appreciated.

The interviews presented the ITF with sufficient positive feedback to start building the investor platform, to continue the dialogue and conversations with investors and to organize issuer and investor events. The interviews we conducted for this article are a nice follow up and the first event will be organized around the ECBC Plenary meeting in Vienna in September 2022.

EUR BENCHMARK COVERED BOND INVESTOR DISTRIBUTION STATISTICS

Before going into the interview feedback, let's zoom out quickly and first of all take a look at distribution stats in EUR benchmark covered bond primary markets to highlight the multi-year trends that have been at play in covered bond markets.

Although the Eurosystem continues to act as a price-insensitive buyer in the primary market for covered bonds, the general market environment has changed and the asset class has become more attractive to an increasing number of investors. In particular, the return of covered bond yields to positive territory, caused mainly by the significant rise in swap rates, can be seen here as paving the way for a stronger participation of real money investors in primary market transactions.

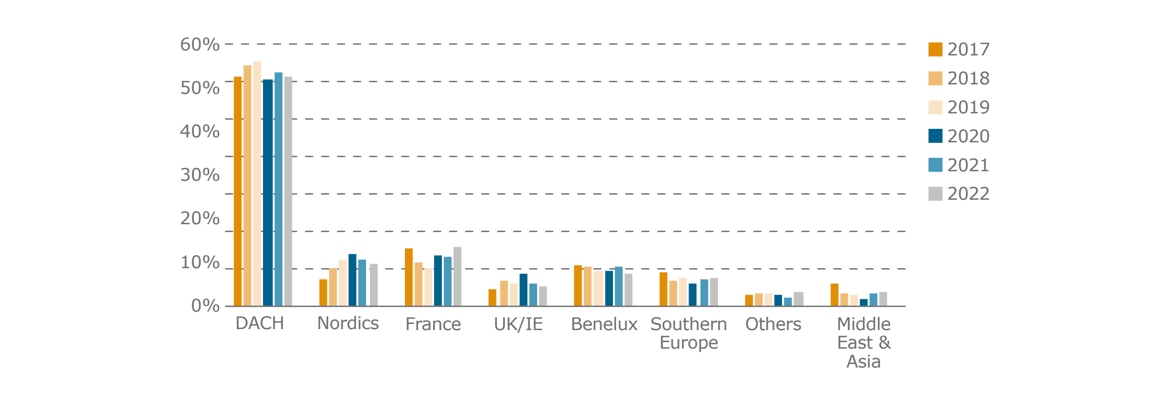
This different market environment is increasingly having an effect on the distribution statistics in primary markets. However, when comparing ytd 2022 data with 2021, the differences are not yet dramatic. One reason for this is the fact that for much of 2022, the ECB still placed significant orders in eligible new issues. Until the end of March we were still talking about 40% of the expected issue size, until the end of June 30% and since then it has been at 20%. However, central banks outside the common currency area as well as supranational investors were also active investors in the primary market, which ultimately kept the share of central banks and public institutions in the allocated bond volume at a high level even as the ECB started to reduce orders.

Having said that, similar to last year, bank treasuries continued to be the largest investor category in covered bonds. At 40.3% (2022 ytd), the share of banks is at the same level as the entire previous year (40.8%). The Central Banks/OI category now ranks second with 29.8% (previous year: 27.0%). Asset Managers & Funds have a share of 23.3%, which initially marks a decline compared to the average value for 2021 as a whole (25.9%). With regard to the Insurances & Pension Funds category, there is a discreet increase to 5.8% (2021: 5.3%). However, currently, the shares of the Insurance & Pension Funds category are higher, especially in the longer maturities (initial maturity >10y: 29%).

In terms of the geographical distributions in primary markets, allocations to the DACH region continue to dominate, with Germany again carrying the greatest weight. Similarly to the distribution by investor type, the pure statistics mask some of the underlying trends, though, as Eurosystem central bank demand from for example France is being replaced by private sector investors such as for example French insurance companies.

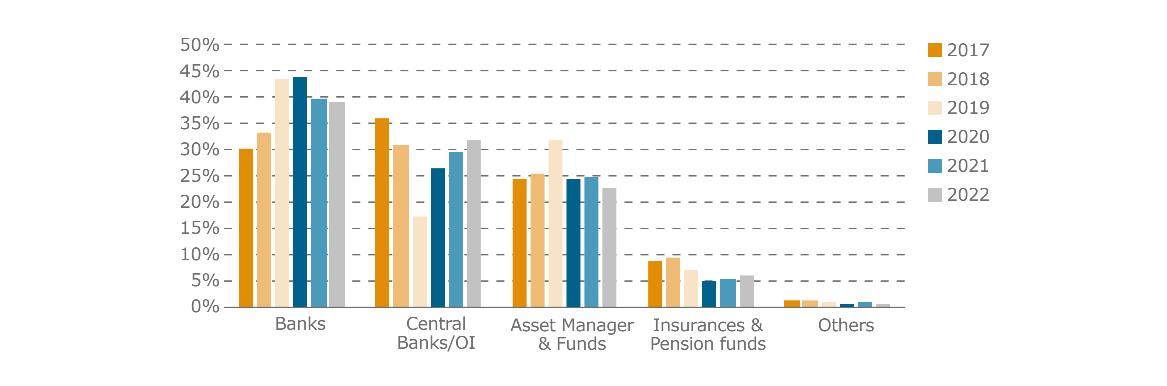
It can be assumed that with a further reduction in the ECB's activities in covered bond markets, the return of investors who had been forced out will continue to gain momentum. Additionally, the new interest rate environment together with a general shift to safer assets will bring in new demand too.

> Figure 1: Investors from DACH region still dominate



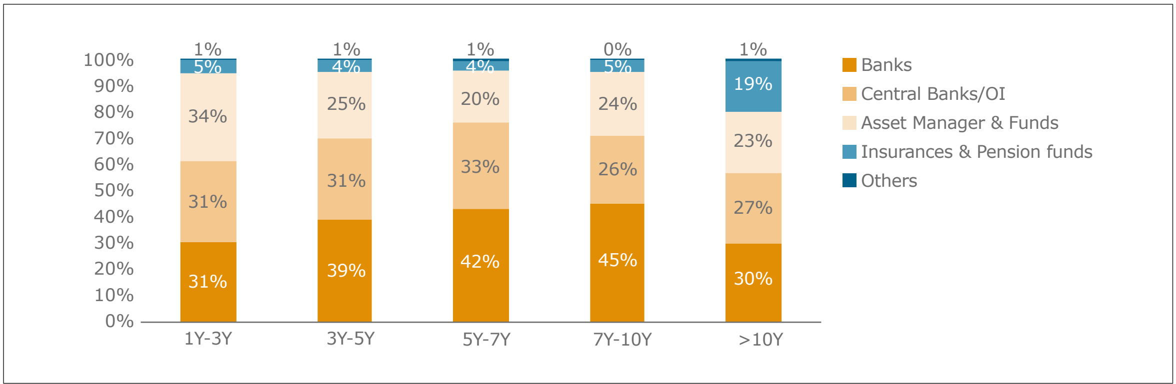
Source: Nord/LB

> Figure 2: Banks still with largest investor share



Source: Nord/LB

> Figure 3: Investor distribution by initial maturity bucket (2022ytd)



Source: Nord/LB

INTERVIEW FEEDBACK

Having gone through the deal statistics and having highlighted that they do not fully show some of the underlying trends, let's focus on the more detailed interview feedback we have gathered from our discussions.

How have investors dealt with the market until last year?

While the reaction was slightly different across investor types, responses in our survey did typically centre around investors having become somewhat less active in covered bond markets without, however, materially changing their previous approaches. Only one of those we interviewed said they had actually stepped back from covered bond markets altogether as relative value to other asset classes, tight outright spreads and low yields no longer made sense to them. Bank treasury and insurance buyers in our survey did predominantly say that they had shifted towards SSA markets while within covered bond space, portfolios were tweaked marginally to include the odd new name or jurisdiction. One bank investor for example mentioned having expanded from buying only LCR and ECB repo-eligible assets to also buying LCR but non-ECB repo-eligible ones (i.e. Australia, New Zealand). On the asset management side, we also heard of a stronger focus towards corporates or in the case of one Nordic investor a stronger push in non-EUR currencies. However, none of the investors we surveyed went for a complete strategy change by going materially longer, materially adding risk or embracing conditional pass through structures for the few extra basis points.

We did ask investors also about what they had seen as the biggest distortion in covered bond markets. While the majority view on liquidity was actually better than one could have thought (one respondent saying that bid-side liquidity has never been better), the vast majority responded that a lack of spread differentiation as well as curve flatness had been the biggest issues for them.

Have investor views changed in early 2022 and can all of this issuance be absorbed at all?

We mentioned in the intro that the start of 2022 has produced a material shift in how covered bond markets feel. The investors in our survey acknowledged this and while some said we are still in the early stages of the normalisation, the stepping back of the ECB and normalisation on the funding side has clearly refocussed attention onto covered bond markets. Investors mentioned above all the materially wider spreads vs EGBs and SSAs as well as higher absolute levels of yields as important factors. Especially for shorter dated covered bond issuances some of the asset management participants reported they had begun to receive internal interest in covered bonds from even high yield portfolios wanting to park liquidity, which comes on top of renewed interest from externally managed LCR funds as well as aggregate mandates.

On the back of this cautiously optimistic view, virtually all of the participants in our survey said that investors would be able to absorb the higher issuance volumes (with one abstention). After all, the interest has resumed across a number of investor groups with outright yield buyers back as well and even the Eurosystem staying in the market via re-investments. However, we did have some more critical voices as well highlighting the threat of too much comparable issuance taking a short-term toll on markets and valuations (as we have seen at the very end of H1) and we had some of the respondents re-stressing the fact that more spread differentiation would be needed to absorb also issuance from smaller jurisdictions and issuers.

We did also ask one question around what investors believe will be the biggest difference in a post-net APP additions world compared to the 2021 market, higher levels of liquidity, wider spreads, steeper curves and more sector and issuer differentiation. The predominant response was really all of the above. Effectively, investors expect the trend that we have started to see at the beginning of 2022 and the factors they have already highlighted above to continue. Equally to the question around the biggest distortions, changes in the level of liquidity does not really feature very prominently as a factor highlighting that covered bond markets are a long way from (and have never been close) EGB and SSA markets where a name such as the EU would these days attract a lot of short-term, trading oriented fast money flows. Covered bond investors and traders continue to not dare to go short and they still predominantly take a strategic view in primary rather than a tactical one in secondary markets.

Last but not least, we did ask a final market related question. Do investors believe covered bonds can continue to play the role of safe haven and a place to hide from volatility in EGB, SSA and credit markets even in a less ECB-supported environment. The resounding answer was yes with one investor rightfully so pointing towards this remaining valid for as long as underlying fundamentals stayed solid. Volatility may pick up also in covered bond markets, but the product would continue to be less volatile than its surrounding markets / products and hence, continue to be a good fit for long-term insurance buyers as much as an interesting asset for asset managers' aggregate portfolios and bank treasury HQLA books.

Fundamental risks, how worried are investors and how relevant is fundamental analysis?

While differences in underlying risks across issuers, cover pools and jurisdictions have not had much of an impact on spread valuations and hence made spending time on it a rather unprofitable exercise, investors have nonetheless paid attention. There was not a single investor in our survey that did not stress the need to have a clear view of the underlying risk profile of the covered bonds as well as the issuing entities. Whether we are talking about the impact of the war in the Ukraine and the geographic cover pool profile as well as general business exposure of covered bond issuers, whether we are talking about Covid and the exposure to commercial real estate assets or more recently the impact of higher rates on residential mortgage portfolios. Investors do have a strong interest and while they may not be able to arbitrage different covered bonds based on their relative fundamental qualities just yet, they can at the very least factor in fundamentals when looking at whether or not to participate in new issues. Also, while Covid and the Ukraine may have sharpened the focus on fundamentals and while higher yields and wider spreads make going into the details more worthwhile, the need to analyse has always been there, hence, it is nothing new.

Getting up-to date, harmonised and comparable information on underlying cover pools across issuers and jurisdictions has been at the centre of the ECBC covered bond label's Harmonised Transparency Template (HTT). Especially with the Covered Bond Directive (CBD) in force now, getting updated information in line with the new transparency requirements has lifted the HTT's profile even more. Hence, we simply had to ask the question if investors already use it. The short answer is the vast majority of those we interviewed do already use the HTT and the one investor who had never seen it, told us he would going forward. The responses were still not all without criticism as there is sometimes still some manual work needed by investors when running analysis and the timeliness of the publications was seen as a problem for some names and policing delays more actively was seen as a sensible thing to do to improve the overall quality and usability by investors.

Covered bond harmonisation

With the CBD having come into force on 8 July, we have certainly had our fair share of questions from investors as well as issuers around just how things will be different. In general, though, the CBD aims to raise the game of the previously weaker frameworks while leaving room for gold plating as well as national specificities. To see what investors make of it we asked them whether the CBD makes their life any easier and whether it could even have a spread impact.

The consensus across investors we surveyed was that the CBD is indeed helpful and positive. However, since important differences will remain, it does not mean the amount of work needed to analyse various covered bond products will be reduced materially. In terms of spread impact, one of the investors did mention that in times of stress, stronger frameworks do of course limit the extent of any widening. However, another actually even pointed out the short-term risks around the time of the implementation. Having for example the ECB collateral as well as purchase programme eligibility tie into CBD alignment when issuer reporting may still need some fine-tuning early on, especially for those not working with an ECBC covered bond label, can actually lead to uncertainty at first before the positive long-term impact. According to some of the investors interviewed by us, the one area that could really have a spread impact is on third country equivalence. However, with this still being years away, it is too early to focus on this at this point.

ESG in covered bond markets

Last but not least, we cannot end any survey or round of interviews without touching on the element of ESG in covered bond markets. Green, social or sustainability covered bonds are still a niche rather than mainstream as above all difficulties in identifying assets on bank balance sheets that comply with covered bond frameworks as well as the issuers' green or social bond frameworks is what has been limiting supply in covered bond markets.

First of all, we wanted to know whether investors look at the more specific ESG credentials of covered bonds or whether they take a more holistic approach focussing on the issuer. While responses varied across the investors we interviewed, we could probably sum up the answers as the assessment of the issuer is crucial and for issuers scoring very highly on ESG metrics, adding an ESG theme to a covered bond is of course positive but not crucial. However, issuers that score poorly on ESG metrics can indeed benefit from issuing green or social covered bonds. Hence, holistic approach of the issuers while bond specific considerations are above all helpful to those scoring poorly at the issuer level. Last but not least, whether or not an ESG theme at the bond level helps depends on the mandate in question. A dedicated green bond fund will not buy conventional covered bonds from an issuer with strong ESG credentials of course.

With varying standards competing for attention in ESG markets as well as the EU taxonomy and further down the line European Green Bond Standards (GBS), we also wanted to know what investors focus on in covered bond markets. Similar to the previous question, opinions differed. The majority of the investors we interviewed said that taxonomy and GBS alignment would eventually be crucial, especially the asset managers we spoke to stressed this point. However, at the same time, a bank treasury investor mentioned to us that with nuclear and gas being part of the taxonomy they will continue to focus on other, stricter standards.

Finally, there was no clear view on pricing differentials between green or social covered bonds and conventional ones.

BOTTOM LINE

2022 can certainly be characterised as a structural break for covered bond markets. With the ECB finally ending net CBPP 3 purchases and issuers finally normalising their funding away from long-term central bank liquidity, covered bond markets are finally wiggling free from years of Eurosystem-related distortions.

One big question over the past years had always been whether private sector investors would be back to take over from the Eurosystem to support banks' funding normalisation. Looking at the exceptionally high issuance volumes so far this year, the corresponding deal statistics as well as the feedback from the interviews we conducted for this article, it is fair to say that they are back or at the very least are starting to be back. The higher yields, wide spreads vs sovereign bonds and SSAs and also increasingly wider spreads vs swaps (at least in primary markets) have all contributed to this.

It is fair to say that the ECBC Investor Task Force was created just in time to accompany this trend. After all, it aims to keep an active dialogue between the ECBC and the covered bond investor community, a task that is more crucial these days than ever as we are not only talking about a different environment in the market. Despite being seen as a long-term positive by the investors we interviewed, the implementation of the Covered Bond Directive has also created short term uncertainty and the ECBC is aiming to assist investors through updated reporting templates to take into account the new requirements from Article 14 as well as updates to the ECBC comparative database to include the recent law amendments across jurisdictions.

Speaking of the investor interviews, the responses we received show how critical a role covered bonds have played and still play in many investors' portfolios. The past few years saw many of them take a step back as especially a lack of yield as well as spread differentiation made covered bonds unattractive on the back of

Eurosystem purchases and little supply. However, the moment the environment began to change, they began to come back. Looking ahead, none of the investors we interviewed see capacity constraints to absorb the increased issuance volumes. However, the vast majority said that with the ECB retreating they do see the need for more differentiation across issuers and sectors as well as steeper curves. In other words, they expect to see a more normalised market environment in which underlying fundamentals do play a role again.

For issuers this means, they will have to tread markets more carefully and be prepared to pay up to get investors to engage. However, the good news also for the issuer community is that we are talking about relative pricing and not about chasing investors that do not care to engage at all. Private sector investors are back. However, the ECB stepping back does mean that the balance of power has shifted back towards them after a number of years with issuers firmly in command.

1.8 COVERED BOND MARKETS AND CENTRAL BANK POLICY IN THE LIGHT OF THE COVID-19 CRISIS

By Frederik Kunze, NORDLB, Maureen Schuller, ING, Frank Will, HSBC, Franz Rudolf, UniCredit

INTRODUCTION

With regard to the international covered bond markets, a formative influence was exerted in particular by monetary policy, but also by the fiscal impulses in the course of the pandemic development. The aim of this article is to give the reader an overview of the implications of these measures while focusing on monetary policy. To this end, we first present a recap of the decisive policy responses to COVID-19 and then go into the effect of crisis intervention on banks and cover pools. We then discuss in detail the monetary policy related changes in market dynamics emphasizing supply-side effects, give an assessment of the demand-side effects and spread developments, and conclude with the question of how unwinding of monetary-policy support measures evolve.

A RECAP OF THE DECISIVE POLICY RESPONSES TO COVID-19

The **targeted longer-term refinancing operations (TLTRO)-III** were one of the most important measures used by the European Central Bank (ECB) to ease the impact of the pandemic. TLTRO-III gave banks access to an unprecedented amount of 3yr liquidity. The ECB also offered banks access to liquidity via its non-targeted pandemic emergency longer-term refinancing operations (PELTROs). Eurozone banks borrowed only EUR 30 bn under the PELTROs. Instead, banks borrowed EUR 2.3 tn under the TLTRO-III, up from EUR 740 bn under the TLTRO-II operations.

When the pandemic reared its ugly head, the ECB stepped up its asset purchases. Most purchases were made through the **pandemic emergency purchase programme (PEPP)**. This programme included all the assets eligible under the asset purchase programme (APP), plus non-financial commercial paper. However, it mainly focussed on buying public sector assets. The ECB ended its net purchases under the PEPP in March 2022, when the programme had a size of EUR 1,718 bn, of which EUR 6 bn covered bonds. The net APP purchases were halted per July 2022. By the end of June 2022 the APP had a EUR 3,265 bn size of which EUR 302 bn in covered bonds (CBPP3). The ECB will reinvest redemptions under the APP until well after its first rate hike which took place 21 July 2022. The ECB also adopted **temporary collateral easing measures**, to facilitate the participation in liquidity operations and to support bank lending. These measures will be phased out or are already phased out gradually again per 8 July 2022. In June 2023 the collateral valuation haircuts will be fully normalised, while in March 2024 the remaining pandemic collateral easing measures will be phased out (for details please refer to the table below).

> Table 1: ECB monetary policy measures eased or introduced in light of the COVID-19 pandemic

Asset purchases		Start	End*	Holdings end June '22 (EUR bn)	Reinvestments until
Asset purchase programmes	Covered bonds	20-Oct-14	30-Jun-22	302	Well beyond first rate hike
	Asset backed	21-Nov-14	30-Jun-22	25	Well beyond first rate hike
	Public sector	09-Mar-15	30-Jun-22	2,593	Well beyond first rate hike
	Corporates	08-Jun-16	30-Jun-22	345	Well beyond first rate hike
	TOTAL			**3,265**	
Pandemic emergency purchases	Covered bonds	18-Mar-20	31-Mar-22	6	At least end 2024
	Asset backed	18-Mar-20	31-Mar-22	-	At least end 2024
	Public sector	18-Mar-20	31-Mar-22	1,644	At least end 2024
	Corporates	18-Mar-20	31-Mar-22	42	At least end 2024
	Commercial paper	18-Mar-20	31-Mar-22	4	At least end 2024
	TOTAL			**1,696**	

TLTRO-III operations	Tranche	Settlement date	Maturity	Drawings (EUR bn)	Repaid by end June '22 (EUR bn)
	III.1	25-Sep-19	28-Sep-22	3	2
	III.2	18-Dec-19	21-Dec-22	98	34
	III.3	25-Mar-20	29-Mar-23	115	27
	III.4	24-Jun-20	28-Jun-23	1,308	110
	III.5	30-Sep-20	27-Sep-23	174	15
	III.6	15-Dec-20	20-Dec-23	50	2
	III.7	24-Mar-21	27-Mar-24	331	6
	III.8	24-Jun-21	26-Jun-24	110	12
	III.9	29-Sep-21	25-Sep-24	98	3
	III.10	22-Dec-21	18-Dec-24	52	5
	TOTAL			**2,339**	**215**
Collateral rules		**Easing**	**Phasing out (1) 8-Jul-22**	**Phasing out (2) Jun-23**	**Phasing out (3) Mar-24**
Temporary reduction collateral valuation haircut		*20%*	*10%*	*0%*	
-covered, ABS, senior bonds used in reverse transactions		4.0%	4.5%	5.0%	
-own use covered bonds CQS 1 & 2		6.4%	7.2%	8.0%	
-own use covered bonds CQS 3		9.6%	10.8%	12.0%	
Higher usage limit for senior unsecured instruments		*10%*	*2.5%*		
Removal EUR 25,000 non-uniform minimum size limit domestic credit claims					*x*
Eligibility marketable assets downgraded < rating threshold after 7-Apr-20			*x*		
Eased eligibility additional credit claims (ACC)					
-frequency of loan level reporting			*x*		
-acceptance requirements banks' own credit assessments (IRB systems)			*x*		
-eased requirements on public sector guaranteed loans to corporates					*x*

* Net asset purchases were also halted from 1 January 2019 until 31 October 2019

Source: ECB, ING

Also other central banks responded to the pandemic, albeit not necessarily all in the same way. In the UK, Australia and Denmark, central banks provided banks with access to cheap funding facilities. In the case of Australia and the UK, these were longer-term facilities of respectively 3yr (last expiration date June 2024) and 4yr (with an option to extent some advances up to 10 years). The Norwegian and Canadian central banks made temporary adjustments to their collateral eligibility criteria, including for covered bonds, to give banks the opportunity to post sufficient collateral to attract central bank funding. These measures were phased out in 2021. In Sweden, the Riksbank opted for asset purchases, which included sovereign bonds, municipalities, covered bonds and corporate bonds. Albeit less than during the crisis, the Riksbank was still buying bonds in 2H 2022. The UK, Canadian and Australian central banks also bought sovereign and corporate bonds in response to the crisis, but never covered bonds.

> Table 2: Summary overview of central bank measures on the back of the COVID-19 pandemic

Region	Liquidity	Collateral eligibility	Asset purchases
Eurozone	✓	✓	✓
Sweden			✓
Norway		✓	
Denmark	✓		
United Kingdom	✓		✓*
Australia	✓		✓**
Canada		✓	✓*

Source: Central bank information, * no covered bonds, ** no corporate and covered bonds

NON-MONETARY POLICY MEASURES

Alongside liquidity measures, regulators also allowed banks to operate at lower capital levels. In Europe for instance, banks were given room to temporarily run below the Pillar 2 guidance, the capital conservation buffer and the liquidity coverage ratio requirements. Counter-cyclical capital buffer requirements were also relaxed. Meanwhile, the option for banks to meet part of their Pillar 2 requirements with AT1 and T2 instruments (instead of only CET1 capital) was moved forward. Besides, to improve their loss absorption capacity and support lending, banks were recommended not to pay dividends during the crisis. Regulatory authorities also gave banks a break on their loan loss provisioning, by being more lenient on the classification of moratoria as forbearances or past due loans as defaulted. Furthermore, they allowed banks to temporarily deduct central bank exposures from the leverage ratio total exposure measure, to offer them space to attract central bank liquidity.

Also public sector authorities gave it their best effort to reduce the implications of the pandemic. This stretched beyond measures taken to ensure good access to health services. Think for instance of the facilitation of working hour reductions to avoid layoffs, the offering of income support to households and businesses affected by the pandemic, state guarantee schemes supporting the financing of companies, and of the tax relief measures for companies and households. These measures have all been of utmost importance, not only from a broader economic and bank fundamental perspective, but also in terms of preserving the strong quality of covered bonds, as we will discuss in the next paragraph.

POSITIVE SIDE EFFECTS AND CRISIS PREVENTION

The dual economic shock of the COVID19-crisis, also came with risks regarding the credit quality of covered bonds. This was due to the fact that at the outbreak, uncertainties with regard to the short-, medium- and long-term consequences were extremely high. With regard to covered bonds, there was thus, among other things, the risk of a negative impact on the credit quality of issuers. In addition, there was a risk to the value of bank assets that a sustained economic shock with lower economic activity and rapidly rising unemployment would have a massive impact on the solvency of borrowers.

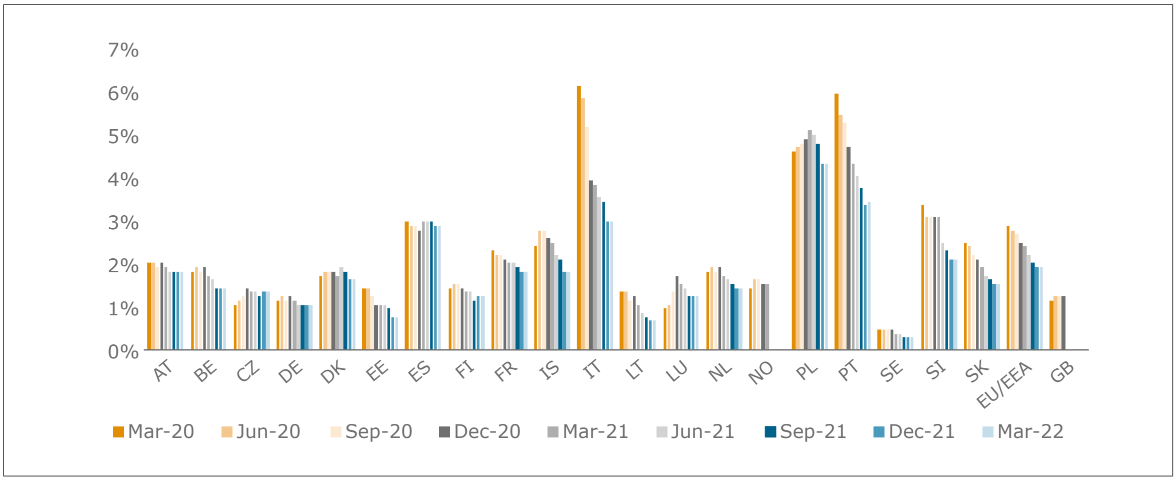
In view of the possible consequences for cover pools, these developments were also associated with a high loss potential. This is true at least subject to the theoretical implications of rampant unemployment, significant setbacks in real estate prices, but also in the event of general distortions on the capital markets, which could have drastically reduced the cash flows of the cover assets and thus the liquidity of the cover pools. Even if the management of cover pools enables or requires the replacement of non-performing or persistently delinquent receivables, a broad and deep crisis could have narrowed the scope for issuers to act. This risk was initially conceivable for mortgage pools and could have materialized especially for those characterized by a high proportion of commercial real estate mortgages.

In fact, the described interventions averted a deep, broad and, in particular, sustained crisis. With regard to fundamentals of covered bonds, one should think here in particular of those measures, which have averted liquidity tensions. Additionally, a rapid and sustained rise in unemployment has been averted and temporary easing of capital requirements for banks has strengthened their ability to lend and at the same time made it easier to comply with the required capital ratios.

The success of the interventions depended both on the short reaction time of the decision makers and on the size and scope of the steps decided upon. As mentioned above, central banks acted shortly after the potential extent of the crisis began to reveal itself. Liquidity tensions could thus be averted. Legal requirements, for example on payment moratoria for private households and for companies, were also regulated quickly – also in the spring of 2020. Particularly on the public sector side, the aggregate scope of support measures is revealed by the designs of special budgets.

Focusing on covered bonds the crisis prevention yielded primarily to the observed stability in the financial sector also shown by rare downgrades for issuers. The monetary policy measures prevented liquidity crunches and supported to a large extend the property prices and, together with moratoria and employment protection schemes, prevented delinquencies or defaults on the mortgage side. To sum up the positive side effects of the crisis prevention measures we use data from the latest EBA risk dashboard. The data reveal decent capitalization of banks together with shrinking NPL-quotas and comfortable liquidity positions.

> FIGURE 1: NPL DATA OF EEA BANKS



Source: OECD, NORD/LB Floor Research

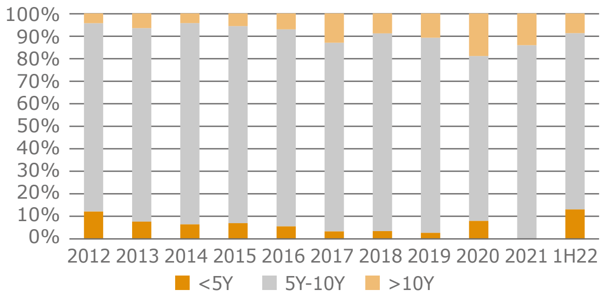
IMPLICATIONS OF MONETARY POLICY MEASURES ON COVERED BONDS

Focusing on the underlying factors for the market dynamics for covered bonds, especially the monetary policy measures outlined above brought forth significant structural changes. We will discuss these changes focusing on the impact on tenors and especially the supply and demand side of the covered bond market.

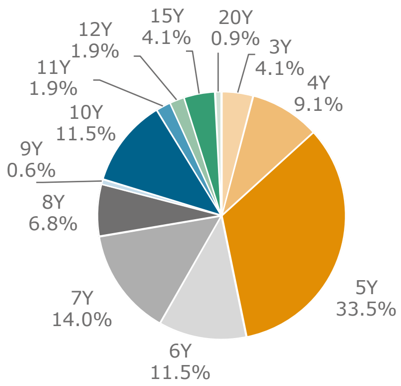
IMPACT ON TENORS

As regards tenors the yield environment as a consequence of the ECB's monetary policy altered substantially. Over the past decade, tenors of publicly placed bonds have gradually increased. Besides the low yield environment, one of the drivers was that especially shorter maturities up to five years faced strong competition from funding opportunities in the context of central bank measures. As a consequence, the tenor of publicly placed covered bonds was extended. While in 2012 around 12% of publicly placed EUR benchmark covered bonds had a tenor of below five years, this share dropped to 8% in 2020 and to 0% in 2021. At the same time, the share of long-dated covered bonds (>10y) increased from 4% in 2012 to 14% in 2022. In 1H/22, this trend has reverted with the share of shorter dated covered bonds increasing considerably and the share of long-dated paper declining (see following figures).

> Figure 2: Past decade maturity split of EUR benchmark Covered Bonds



> Figure 3: 1H22 Maturity split of EUR benchmark Covered Bonds

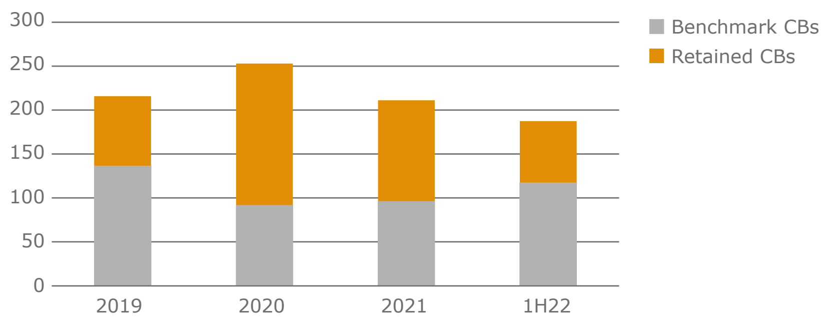


Source: Bloomberg, UniCredit Research

SUPPLY IMPLICATIONS

Much more striking and long lasting effects have materialized themselves on the supply side. Especially the TLTRO-III conditions had a strong effect on supply in 2020 and 2021. Irrespective of the before mentioned record low yields, gathering TLTRO-III funding was a very attractive option for banks. The consequence was a shift from publicly placed covered bonds towards retained issues (see figure below). Banks decided to issue large amounts of retained covered bonds in order to place them as collateral. According to the ECB between Q1/20 and Q1/22, the covered bond volume posted as collateral for ECB transactions had risen by almost 90% to more than EUR700 bn, while the eligible covered bond universe had increased by only 7%.

> Figure 4: Covered Bond supply – Benchmark vs. Retained Covered Bonds



Source: ECB, UniCredit Research

Therefore, the volume of retained covered bonds exceeded the amount of publicly placed covered bonds significantly. In 2021, around EUR 114 bn of retained covered bonds have been issued, following EUR 161 bn in 2020. These large volumes are comparable to levels seen only in 2011/2012. However, in contrast to the past, the highest volumes were generated by banks from markets such as the Netherlands, Germany or France and not from countries like Spain or Italy. While in 2019 the share of publicly placed benchmark covered bonds was 63%, this share dropped to 36% in 2020.

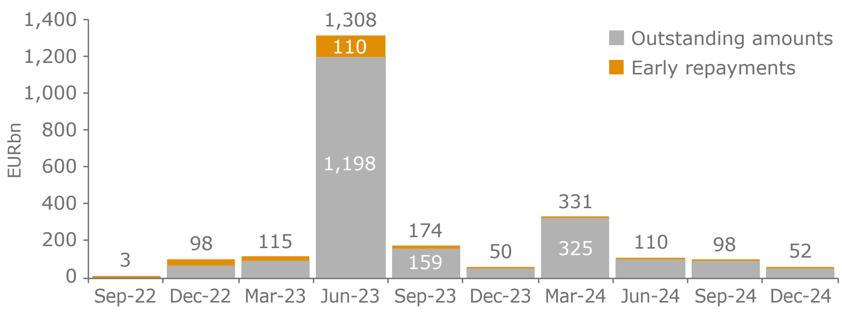
Nevertheless, compared to the peak in 2020, the proportion of retained covered bonds in relation to publicly placed covered bonds declined to 46% in 2021. This trend continued in the first half of 2022 and reached levels comparable to those in 2019. Due to the reduced issuance of publicly placed benchmarks, the net supply in 2020 and 2021 was negative, which compares to a positive net supply in 2019. Also this trend has reversed in the first half of 2022.

HOW WILL TLTRO-III COME TO AN END FOR COVERED BONDS?

As outlined above banks have borrowed more than EUR 2.3 tn under TLTRO-III. Despite early repayments since September 2021, the size of the TLTRO-III programme remains at a staggering residual volume of more than EUR 2.1 tn. Between September 2022 when the first of the ten tranches matures and June 2023 (which is the maturity date of the large fourth tranche, see table above and chart below), the outstanding scheduled redemption volume amounts to more than EUR 1.35 tn. While some banks might have used the TLTRO-III for carry trades which do not trigger any funding needs if unwound, other banks have to refinance the maturing ECB funding in one form or another. Many of the latter banks will probably use covered bonds as a funding source then.

On 23 June 2022, the 50bp special rate discount ended, which increased borrowing costs for banks, and on paper, reduces the incentives for banks to use TLTRO funding. However, for banks that have met the various ECB lending benchmarks, the TLTRO-III interest rate from 24 June 2022 is calculated as the average deposit facility rate over the life of the respective tranche. Depending on the hike expectations, this still provides banks with an arbitrage opportunity until the end of the term of the respective tranches and lowers the incentives for banks to make use of early repayment options.

> FIGURE 5: MATURITY AND OUTSTANDING AMOUNTS OF THE TEN TLTRO-III TRANCHES



Source: HSBC, ECB, Bloomberg (as of August 2022)

The end of the TLTRO-III programme over the next two and a half years means banks will need less collateral for ECB repo transactions. Moreover, in the case of retained covered bonds, they might increase their covered bond issuance to repay their ECB funding. This means that when TLTRO-III runs out, there could be less bank treasury demand for covered bonds and potentially even higher covered bond supply volumes in the primary and secondary market. Importantly, the ECB stresses that it monitors the bank funding conditions and that it will ensure the maturing of TLTRO-III does not hamper the smooth transmission of its monetary policy (ECB, 21 July 2022).

Having said that, in the first half of 2022, many issuers took advantage of the favourable sentiment towards covered bonds to get funding, also under the aspect of the fading of TLTRO III and, focusing on the demand-side developments, expectedly lower ECB participation in the primary market, with shares of the ECB of around 40% at the beginning of the year gradually declining to around 30% and around 20% in mid-2022. In addition, the overall higher yield levels made covered bonds more attractive. Supply volumes of publicly placed covered bonds have thus again significantly increased compared to previous years.

SECONDARY MARKET PERFORMANCE AND SPREAD SUPPORT OF CBPP3

The unprecedented measures taken by central banks have proven to be extremely effective in terms of easing the impact on performance. Nonetheless, not even the significant drop in covered bond supply due to the cheap central bank liquidity offered, has managed to maneuver covered bond spreads back to the negative levels seen last in 2018. However, the low supply of covered bonds in combination with continued strong demand from investors and the ECB kept asset-swap-spreads steady at levels of around 0bp for the *iBoxx EUR Covered*.

The primary market purchases allowed issuers to price the CBPP3 eligible new issues at tighter spread levels as they could rely on the price-inelastic ECB demand. The secondary market purchases have impacted spreads in two ways: directly as they increased the actual demand and indirectly as they provided some form of back-stop bid for traders as they typically were able to sell the bonds to the ECB as the largest buyer. The running out of the net purchases has resulted in an increase in risk premiums as investors distinguish more between the credit quality of their covered bond investments.

> Figure 6: Asset-swap spreads of iBoxx Covered Bonds

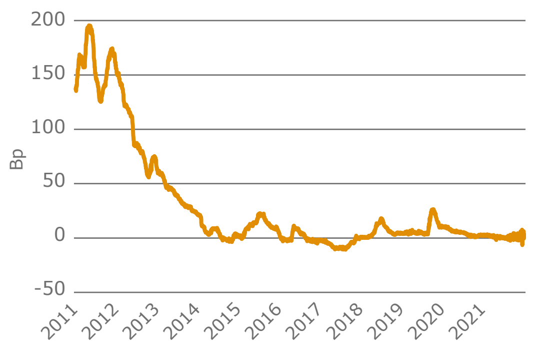


Figure 7: Yields of iBoxx Covered Bonds

Source: Bloomberg, UniCredit Research

GENERAL CROWDING OUT

The less price-sensitive ECB purchases resulted in tighter spreads and lower yield levels. The latter were of course also driven by other ECB measures such as various key policy rate cuts, the TLTRO programme, other APP purchases and the PEPP. As a result, many real money investors had been crowded out over the past few years and focused on higher yield alternatives such as unsecured bank debt and corporate bonds. Particularly pension funds and insurance companies reduced their participation levels as covered bond yields were just too low for many of them. Bank treasuries on the other hand continued to be an important investor class as many Eurozone treasuries used ECB-eligible covered bonds as collateral for TLTRO-III and other repo operations.

EFFECTS OF ECB TIERING ON DEMAND

In September 2019, the ECB Governing Council introduced a two-tier system for reserve remuneration. Since 30 October 2019, a certain amount of the banks' excess reserve holdings* were exempted from remuneration at the deposit rate and were remunerated at 0% instead. This allowance is calculated as a multiple of an individual bank's minimum reserve requirements and is the same for all institutions. The ECB stated set the initial multiplier at six.

The two-tier system led to a redistribution of liquidity and prompted some banks to increase their central bank balances in order to take full advantage of their own exemption allowances. According to the Bundesbank, the resulting redistribution of liquidity between banks began as soon as the two-tier system was introduced and took place largely via the money market. Redistribution could be observed both domestically and within banking groups as well as across national borders, and it enabled almost all euro area banks to make full use of their allowances resulting in exemption allowances being very largely used up (Bundesbank, January 2021).

One of the drivers of the decision to introduce the two-tier system were concerns by the ECB that a long-lasting environment of low or even negative interest rates could hurt lending. Particularly given that the non-standard liquidity-providing monetary policy measures further increased the excess liquidity holdings of Eurozone banks. Under the two-tier system, banks are no longer required to pay the Eurosystem negative interest on a certain portion of the excess holdings which reduce their interest expenditure. Moreover, banks were even able to generate additional interest income by borrowing funds at negative interest rates and depositing them in their central bank account at the zero interest rate. As regards covered bonds, the two-tier system might have had its impact on the demand side for covered bonds. However, this has been rather a theoretical issue for the times of negative yielding covered bonds, which might have been less attractive than the rate for excess liquidity within the exempted amount.

**Excess reserves are the amount a bank holds on current accounts with the central bank which exceeds its minimum reserve requirements. Excess reserves do not include the deposit facility.*

CONCLUSION – READY FOR THE NEXT CRISIS TO COME?

Financial markets barely moved on from the COVID-19 pandemic, or the next crisis presented itself: the war between Russia and Ukraine. While a decade of low inflation helped central banks offering full monetary accommodation, including at the highs of the COVD-19 crisis, times changed rapidly this year on the back of accelerating energy prices and rising inflation. Central banks across the globe are not merely looking anymore at a tapering of the quantitative easing put in place during the pandemic, they are on full alert to act on inflation. However, one thing is sure: if it had not been for the decisive reaction of policy makers to the pandemic, bank and covered bond fundamentals would have been in worse shape today when facing the new inflation and geopolitical uncertainties. However, the unwinding of these measures is needed and already underway. Albeit rather slowly one might say when looking at the still existing influence of the ECB on the covered bond market. But with an end to net purchases and TLTRO III-maturities soon underway the clock is ticking.

1.9 LIQUIDITY AND TRADING VOLUME IN THE EU COVERED BOND MARKETS

By Joost Beaumont, ABN AMRO, Jonny Sylvén, ASCB, Lars Ravn Knudsen, Finance Denmark, Steffen Dahmer, J.P. Morgan and Michael Weigerding, *former* Commerzbank

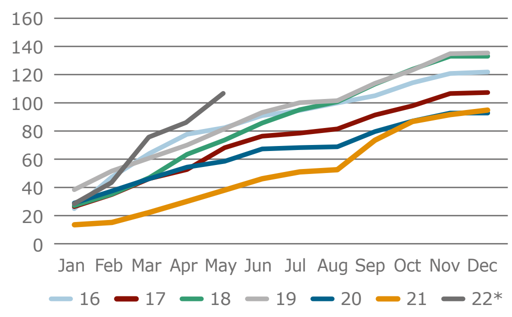
INTRODUCTION

The international covered bond benchmark segment, which started as an interbanking market-making (head to head) market in the 90s, transformed during the crisis into a pure investor market-making market. A functional repo market constantly increases the liquidity of the Covered Bond market, as a consequence of which the Covered Bond benchmark market is one of the most significant and liquid market segments. Covered bonds are viewed in different ways: thanks to their nature and rating some view them as part of the rates world, others clearly see credit elements and consider Covered Bonds as the strongest product in the credit world.

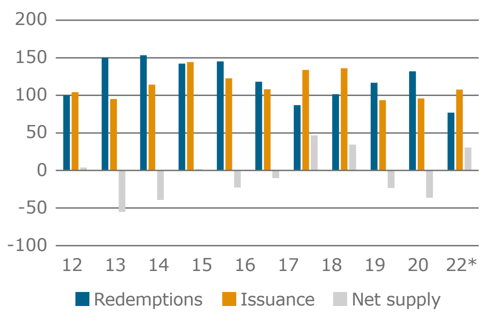
As is the case for any other market in the rates or credit world, the Covered Bond market faces regulatory requirements which result in a more prudent approach to trading books in terms of balance sheet allocation. In short, bank inventories have gone down and often only axed trading books are able and willing to show competitive prices and sizes to investors.

However, the tide seems turning, as the covered bond market has started to grow again in 2022 after it had been shrinking for two years after the outbreak of the Covid-19 pandemic, which induced central banks to introduce large monetary support measures. These are now (gradually) coming to an end, while central banks have also stopped net asset purchase programmes. This is likely to result in less covered bonds being bought by the Eurosystem, which, in turn, should support liquidity of covered bonds. Another positive development in 2022 is that new issue sizes of euro covered bonds have started to become larger. This probably signals a break with the trend seen in recent years, with EUR 500mn becoming more and more the standard benchmark size for issuers. In other markets such as GBP, issue sizes have increased, as more than half of new deals had a minimum issue size of GBP 1bn from 2019 onward, up from GBP 500-750mn before. Meanwhile, in USD's the "regS only" market often targets 600mn (to match the regulatory important 500mn + EUR equivalent) while 144a or SEC registered deals are often larger than/or at least USD 1bn. The Swedish or Danish Kroner Covered benchmarks can grow over time to a significant size often larger than in Euro or Dollar benchmarks. Obviously smaller benchmark volumes often lead to smaller secondary turnovers given that the various Covered Bond markets are dominated by a majority of buy and hold investors.

> FIGURE 1: ISSUANCE OF EURO BENCHMARK COVERED BONDS, CUMULATIVE EUR BN



> FIGURE 2: GROSS AND NET SUPPLY OF EURO BENCHMARK COVERED BONDS, EUR BN

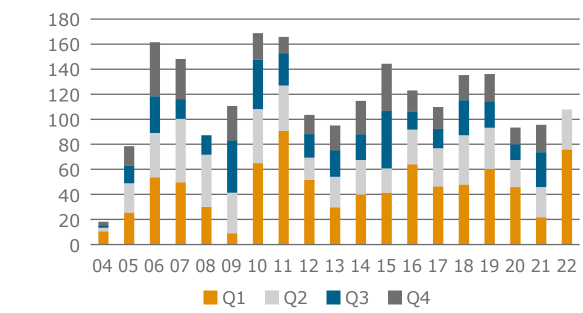


Source: ABN AMRO, Bloomberg, * January-May period

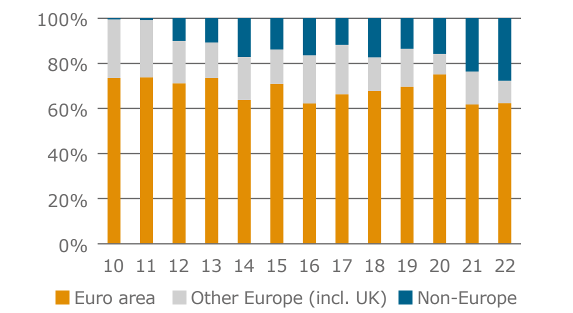
In summary, it indeed seems that liquidity conditions are improving again, after it had been negatively affected by a few years of negative net supply, lower-sized deals, a change of regulatory requirements and the nature of the investor base. Gross supply of euro benchmark covered bonds stood well above EUR 100bn at the end of May 2022, which already exceeded issuance during the full year in 2020 and 2021. Relatively favourable new issue conditions in the covered bond market supported new supply in the first five months of 2022. Indeed, covered bonds proved again their resilience this year after volatility in financial markets flared up related to major central banks shifting course on the back of ongoing high inflation, and also after the outbreak of the war in Ukraine (and also Covid-19 related lockdowns in China). Despite investors generally shifting into a more risk-off mode, conditions in the primary market for covered bonds remained relative good during these turbulent times, with issuers being able to place large amounts of covered bonds with investors.

Meanwhile, issuance was likely supported by this year's large redemptions (around EUR 137bn) as well as issuers anticipating a lower presence of the Eurosystem in the market as QE would come to an end. The latter of course is likely to have boosted issuance of issuers located in the euro area. However, issuance has also been boosted by Canadian issuers, which had issued more than EUR 20bn of euro benchmark covered bonds in the first five months of 2022, which set a new record as it already exceeded the roughly EUR 15bn that they issued in 2015 (the record year so far). The jump in this year's volume of new supply has also implied that net supply was firmly positive in the January-May period. It was EUR 31bn positive, given that redemptions equalled around EUR 77bn.

> Figure 3: Issuance of euro benchmark covered bonds, EUR bn



> Figure 4: Issuance of euro benchmark covered bonds by region, % share of total



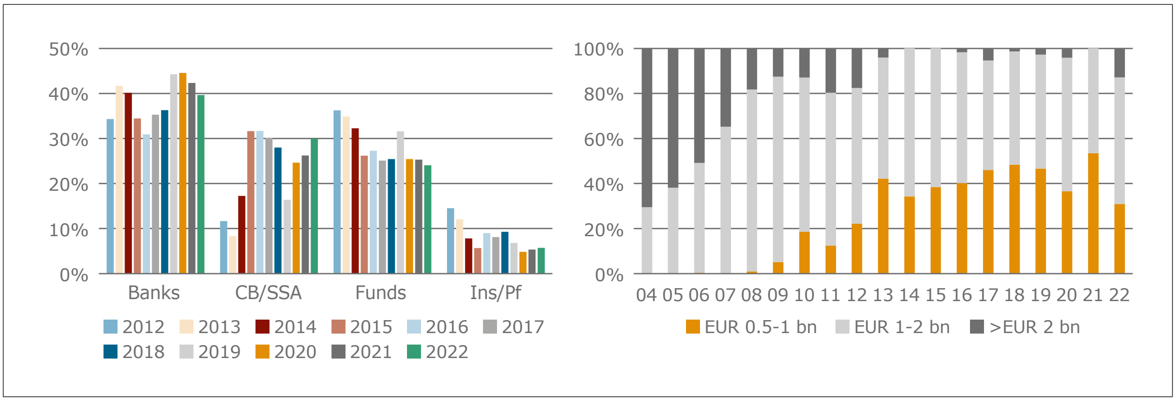
Source: ABN AMRO, Bloomberg

A regional breakdown (see graph above right) shows that euro area issuers account for the majority of new issuance, with their share remaining rather constant at 62% of total issuance. This reflects for a large part France and Germany, the largest markets of euro benchmark covered bonds, although issuance from Austria and the Netherlands had also been rather strong in 2022 so far. Meanwhile, non-European issuers gained further ground in 2022 so far. Their share in total issuance rose to 28% in the January-May period in 2022, up from 24% in 2021 as a whole. Moreover, this compares to a share of only 10% ten years ago. However, as said, this mainly stems from a strong rise in covered bond issuance of Canadian issuers, which can likely be explained by the fact that all support measures that the Bank of Canada took after the outbreak of the pandemic have been stopped, implying that Canadian banks need to meet their funding needs more and more on wholesale funding markets. Meanwhile, Australian banks have also increasingly found their way to the covered bond market, adding to the rising share of non-European issuers. More generally, it shows that covered bonds have expanded their global presence.

The fact that net supply has been positive so far this year, has also been reflected by a rise in the total outstanding volume of euro benchmarks in the covered bond indices. The Bloomberg-Barclays euro covered bond index had an outstanding amount of EUR 821bn in May 2022. This marks a 6% increase compared to a year ago.

> FIGURE 5: NEW EURO BENCHMARK COVERED BOND DEALS BROKEN DOWN BY INVESTOR TYPE, %

> FIGURE 6: NEW EURO BENCHMARK COVERED BOND DEALS BROKEN DOWN BY SIZE, %-SHARE



Source: ABN AMRO, Bloomberg

Let us again look at the evolution of the investor base as an angle for liquidity. If the share of buy-and-hold investors has risen in the past few years, this should have reduced liquidity of covered bonds. The graph above left shows the average allocation share per investor type in new euro benchmark deals. The graph clearly illustrates the crowding out impact of the Eurosystem's third Covered Bond Purchase Programme (CBPP3). The share of central banks/SSAs rose again after the restart of net covered bond purchases within CBPP3 at the end of 2019 (the Eurosytem only reinvested maturing principles between January and October 2019). The share of central banks/SSAs rose to 25% in 2020, up from 16% in 2019 and 8% in 2013. It's share increased further to 26% in 2021, reaching even 30% in 2022. The later likely signals that euro area issuers started to allocated higher amounts to the Eurosystem in 2022 as they expect the central bank to be less active once it will stop net asset purchases in July. In any case, the rising share of central banks has come at the expense of other investors. Asset managers have seen the biggest drop in their share, to 24% in 2022 from 36% in 2012. As these can be regarded as the most active portfolio managers, it seems fair to conclude that the change in the investor base in recent years has not supported liquidity of covered bonds. Furthermore, participation of banks in new deals has remained above 40% in recent years, likely reflecting that covered bonds are an attractive asset class in LCR portfolios. Unfortunately, most banks are buy-and-hold investors, so this does not support liquidity in the end neither. Ending on a more positive note is that it is likely that the share of central banks will drop from the second half of 2022, with that of, for instance, asset managers rising. This should support liquidity.

Finally, the larger the issue size, the better the liquidity. Also in this respect, there are some positive developments, with issuers having increased deal amounts. The graph above right depicts the share of new deals broken down by issue size. The share of deals with an issue size below EUR 1bn dropped significantly to 31% in the first five months of 2022, down from 53% in 2021 and a 46% average in the past five years. However, this is still well above the 22% share of such deals ten years ago. The drop in lower-sized deals is mirrored by a rise in new deals with minimum size of at least EUR 1bn. In 2022, 56% of new euro benchmark covered bonds had a size between EUR 1bn and EUR 2bn, which was up from 47% in 2021, and five percentage points higher than the average in the past five years. What is more, 13% of new euro benchmark deals even had a size above EUR 2bn, which has become rare since 2014. 2022 even saw the largest deal being issued (EUR 2.75bn) since

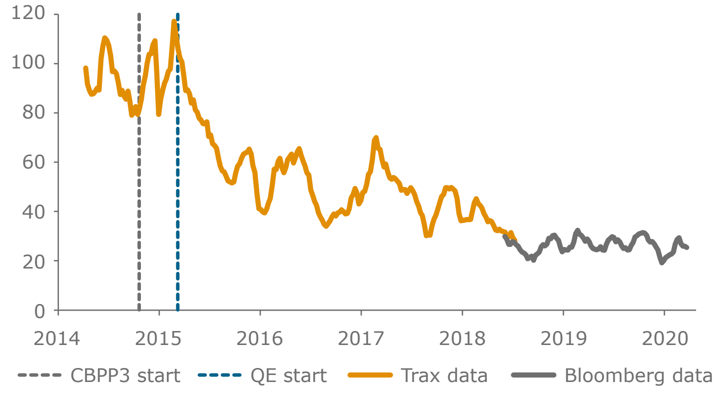
2006. Although part of the increase in deal size might be related to issuers allocating higher amounts to the Eurosystem, larger deal sizes suggest that liquidity in the covered bond market should have improved this year.

How much, how often and where? Secondary market trading in the euro covered bond market

Each time the covered bond segment came under general spread pressure in recent years, its (lack of) market liquidity came into the spotlight again. In view of the defensive stance taken by many market makers in general, it has become all the more difficult for investors to buy or sell larger positions in some segments, if required. But how was liquidity in the covered bond market before the outbreak of the pandemic?

In order to gain a broader overview, we analyse the trading volumes that are aggregated by Bloomberg as part of MiFID (Markets in Financial Instruments Directive) reporting. After adjusting the data, we can identify a total trading volume of around EUR 201bn for EUR benchmarks via Bloomberg for the 12-month period from April 2019 to March 2020. On a weekly average, this was just under EUR 4bn or 0.4% of the outstanding volume. Moreover, as is well known, it is by no means unusual when even younger covered bonds fail to trade at all in individual weeks. Calculated across all benchmarks, we see this happening on average every third week. A glance at the ticket sizes confirms this assessment. Naturally, the number of transactions processed on stock exchanges significantly exceeds that of other sources. However, their volumes are usually negligible. If one excludes stock exchanges, there are around 111,000 transactions left between April 2019 and March 2020. Their average ticket size was only around EUR 2.5mn. This figure corresponds to the ballpark figure suggested by Trax data in the past and should therefore reflect the current state of the market quite well. This highlights the fact that liquidity in the covered bond market has stabilised, although at a relatively low level compared to the period before the ECB's CBPP3 set in. The data and the graph does not capture environmental components such as defensive or inactive investor and trading behavior. In times of stress and or volatile market conditions the share which goes directly or indirectly to the ECB and its PEPP or CBPP3 programs are much higher, the percentages which are with those programs are lowering the free float of available bonds and therefore also the trading activities.

> Figure 7: Trading activity has stabilised on a relatively low level
Turnover of EUR benchmark covered bonds recorded by Bloomberg in accordance with MiFID rules or Trax, respectively, 8-week moving average of indexed turnover data (100 = H1-14)



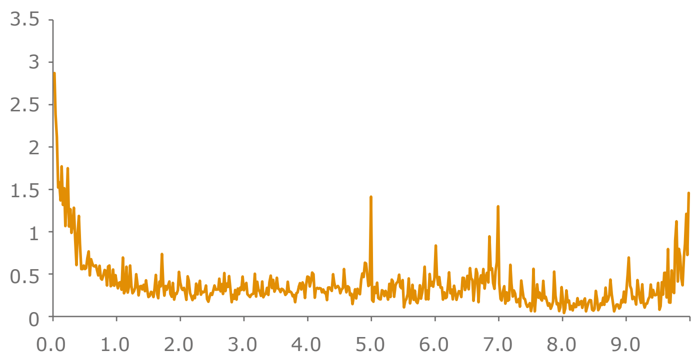
Source: Bloomberg, Trax, Commerzbank Research

Which other factors influence trading volume?

Whether the liquidity of a covered bond is high or low is not easy to determine. For one thing, market liquidity is difficult to measure. We therefore focus on trading volume here. Furthermore, there are naturally a number of different factors that influence the liquidity or trading volume of bonds – and these must be taken into account when comparing individual covered bonds. In addition to the age of a bond, its size and market risk, these include seasonal factors, the quality of its allocation, demand during book building and primary market supply. We have recently verified these liquidity drivers in three detailed studies.[1] Our dataset for the turnover recorded by Bloomberg between April 2019 and March 2020 confirms most findings there. For example, the average trading volume of a covered bond increases with its size. Trading volume grows at a slower pace though: the turnover of a EUR 1bn – EUR 1.24bn bond was roughly 75% higher in the mentioned period than that of a EUR 500mn – EUR 749mn issue. An additional element might be, that larger i.e. 1bn and above, qualify for more investors and are eligible for additional indices which certain investors are required to follow

However, by far the most important factor for the trading volume of a covered bond is its age. While switch trades, profit taking or follow-on purchases support the turnover, over time, volume increasingly seeps away due to buy-and-hold investors. Our data show that, on average, the weekly turnover falls below 1.0% of the outstanding volume after only one quarter. After one year this rate is only 0.35%, and in the long run it typically levels off between 0.2% and 0.3%. On the market as a whole, the turnover is likely to be higher, but the trend should be the same.

> Figure 8: Liquidity follows an L-shape: turnover drops rapidly within a few months
Average trading volume of a EUR benchmark from April 2019 to March 2020, by age of bond in years, in % of the nominal outstanding

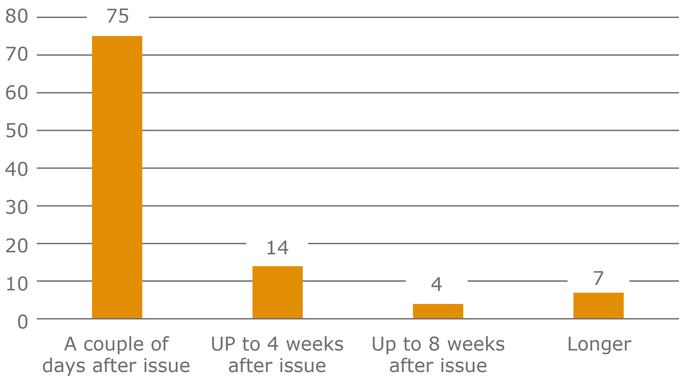


Source: Bloomberg, Commerzbank Research

The fact that liquidity reduces quickly after a new bond has been issued also follows from the investor interviews held for this Fact Book. Respondents noted that it was fairly easy to buy new bonds in the secondary market a few days after issuance. However, only 14% of investors noted that it was easy to buy bonds up to four weeks after issuance, while only 7% of investors indicated that this was still the case around two months after the issuance date.

1 see How new bond issuance influences the liquidity of covered bonds. *The Journal of Fixed Income*, vol. 29 (2), pp. 44-60; Seasonal liquidity effects and their determinants on the covered bond market. *The Quarterly Review of Economics and Finance*, forthcoming; and *Liquidity drivers on the covered bond market*.

> FIGURE 9: INVESTOR INTERVIEWS: HOW LONG IS IT POSSIBLE TO BUY A NEW BOND RELATIVELY EASILY IN THE SECONDARY MARKET AFTER ISSUANCE? % OF RESPONDENTS



Source: ECBC

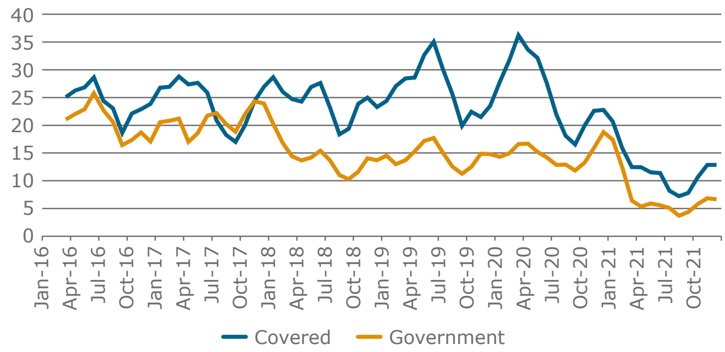
THE SWEDISH COVERED BOND MARKET

The Swedish domestic market for covered bonds is of great importance for the domestic capital market. Before Sweden implemented a law for covered bonds in 2004 a liquid market for mortgage bonds had been around since the beginning of the 80s. The outstanding volume of covered bonds in SEK was EUR 195.8 bn at year end 2020. That was more than twice as much as the outstanding volume of government bonds.

Swedish bond market investors appreciate liquidity. The large banks issue their covered bonds as benchmarks which mean that large amounts are issued and that several dealers are contracted to show both bid and offer prices. Also, only benchmarks are deliverable in the future contracts. When a new benchmark-bond is issued, the issuers make sure that the amount issued meets the requirements for a benchmark sized deal. After the initial day of issuance, the issuer can, without further notice, issue "on tap". The benchmark bonds can amount to volumes of about SEK 60 bn. Sweden has a liquid and smoothly operating repo market with almost all banks and broker firms involved in the trading. The issuers offer their market makers a repo-facility in their own bonds. The repo transaction is viewed as a 'sell-buy back' or 'buy-sell back' deal and the ownership of the security has to be transferred.

Overall, this system has been working for a long period of time. The recently implemented legislations have not been observed to have had any significant effects on the liquidity in the Swedish covered bond market. The Swedish Central Bank (Riksbanken) has been aggressive in its Quantitative Easing (QE) policies for some years. During the pandemic the Riksbank increased their buying of bonds. Before the pandemic they just bought government bonds but during the QE-period they have also been buying Covered bonds and other bonds. The Riksbank owned 20 percent of the outstanding amount of SEK covered bonds in the end of 2021. The Riks-bank has now announced a slowdown of the acquisition of bonds. During the beginning of the pandemic there where an increase in trading activity but the activity has been diminishing throughout the pandemic. During the period of more intense QE the turnover in the market has decreased.

> Figure 10: Daily turnover, 3m moving average, without repos, SEK bn



Source: Riksbanken

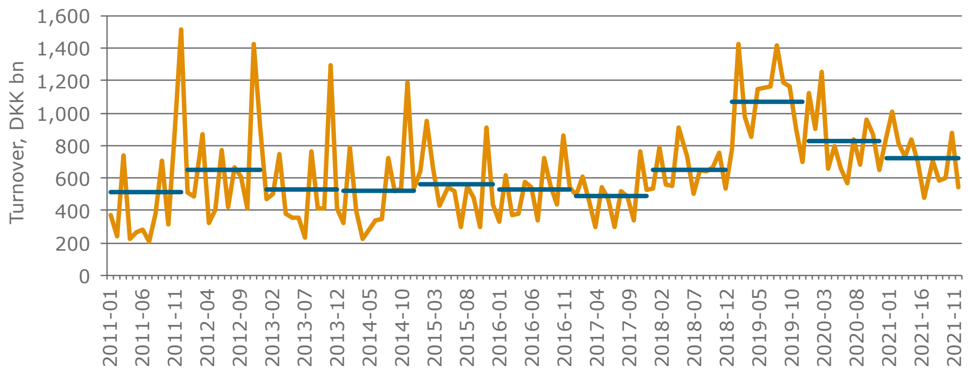
THE DANISH COVERED BONDS MARKET

The type of bonds making up the Danish covered bond market fall into three major segments: callable bonds, bullet bonds and floaters with or without a cap. The market comprises a great number of securities, but the vast majority of the nominal value is concentrated on a relatively small number of large series.

With an outstanding volume of EUR 455 bn the Danish covered bond market is the largest in Europe. Trades in mortgage covered bonds are reported to the Danish exchange, Nasdaq Copenhagen, including over the counter trades and excluding repos.

Average monthly turnover on Nasdaq Copenhagen including over the counter trades and excluding repos in the period 2011 – 2021 came in at around DKK 638 bn (app. EUR 86 bn). In 2021 average monthly turnover was DKK 725 bn (app. EUR 97,5 bn), cf. Figure 11. On average this means that approximately 21,5 percent of the outstanding volume was traded every month of 2021. After a record high remortgaging activity in 2019, issuance of callable bonds in the primary market financing, e.g., remortgaging and home purchases, was also a driver for turnover in 2020 and 2021.

> Figure 11: Turnover in Danish covered bonds, monthly turnover in DKK bn.



Source: Nasdaq Copenhagen

Note: Data is for nominal value Non- Repo Mortgage Bond transactions including OTC. Horizontal lines indicate yearly averages. From 2018 a new transaction reporting was implemented. Data before and after 2018 is not directly comparable.

By end of 2021 foreign investors owned around 25 percent of Danish covered bonds. Even during the spring months of 2020, the foreign investors share of Danish covered bonds remained on a constant level despite the corona outbreak. Foreign investors have a positive effect on market turnover and liquidity.

FACTORS AFFECTING TURNOVER AND LIQUIDITY IN DANISH COVERED BONDS

Pass through, tap issuance, quarterly refinancing auctions and frequent early repayment activity are all characteristics of the Danish covered bond market, which among other more universal factors affect the level of market turnover. The strict balance principle deployed by Danish mortgage banks incorporates pass through and means that mortgage covered bonds are tap issued on the go, in sync with demand for mortgage loans. Following the initial tap issuance, mainly bullet bonds and to an extent floaters, are refinanced by the issuance of new bonds at refinancing auctions over the life of the loan.

Borrowers' early repayments also influence liquidity in the Danish covered bond market. Any Danish covered bond can be bought back by the borrower at the current market price and delivered to the issuing mortgage bank – the buyback option – or in the case of fixed rate mortgages it is also possible to redeem at par. This type of early redemption activity gives rise to an increase in transactions both when bonds are bought back (the buyback option), and when new bonds are issued.

Due to tap issuance, the market maker function of universal banks is handed a central role providing liquidity in the covered bond market, as professional investors are mostly unwilling to buy in small batches. Onwards, market makers remain the main source of liquidity in the Danish covered bond market. However, higher capital charges, liquidity rules and the low interest rate climate have put pressure on the profitability of market making. To a lesser extent, market makers will be providers of market liquidity, rather than makers between buyers and sellers in the market.

1.10 EXTENDABLE MATURITY COVERED BONDS: A NEW ERA ON THE HORIZON

By Elena Bortolotti, Chairwoman of the RAA WG & Barclays, Joost Beaumont, ABN AMRO and Claudio Domingues, Millennium BCP

Over a decade ago, extendable maturity covered bond structures emerged as an alternative response to an intrinsic shortcoming of traditional hard bullet covered bond maturities: refinancing risk and liquidity risk. The risk of cover pool sale proceeds being insufficient to repay matured covered bonds that the issuer was unable to refinance was only partly addressed by soft bullet maturities. In effect, the typical 12-month extension of their expected maturities, aiming at a timelier liquidation of the cover pool assets in the event of non-payment or issuer insolvency, may still prove short in an illiquid market.

Rating agencies reflect this in both credit ratings and required levels of overcollateralisation (OC). These in turn drive costs of funding and how efficiently mortgage portfolios are used. This became particularly burdensome when the 2007-8 financial crisis morphed into the subsequent liquidity crisis. Lowered covered bond ratings, sometimes as a consequence of lowered country ceilings, translated into higher funding costs and, as ratings dropped below required minimums, increased difficulty in utilizing covered bonds as collateral for ECB funding.

Taking a page of the securitisation book, the first conditional pass-through programme emerged in 2013. Keeping the same fundamental principles such as the double recourse, upon insolvency or non-payment, maturities could now be extended for much longer periods. During these periods, due interest and principal amounts would be paid out of cover pool cash flows, passed through to the covered bond holders, thus eliminating completely the asset-liability mismatch adversely treated by rating agencies. In a liquidity-stricken continent, this proved crucial to lower the costs, or even accessing, both capital markets and ECB funding, with an instrument benefiting now from a multi-notch rating uplift.

However, the disparate nature of triggers causing the extension and the consequences of such extension, across jurisdictions soon became apparent. Also, investors showed reservations regarding the uncertainty surrounding bond duration. The need for harmonization across jurisdictions merited a special section of the new Covered Bond Directive (CBD). Article 17 requires Member States to introduce clear conditions for extendable maturity structures, with maturity extension only being allowed as long as it is subject to objective triggers specified in the Member States national legislation, and not at the discretion of the credit institution issuing the covered bonds. These triggers need to be specified in the terms and conditions of the covered bonds and, alongside the consequences of extension and the role of supervising authorities, be part of the information disclosed to investors. Addressing duration uncertainty, the final maturity of the covered bonds needs to be determinable at all times. All this while the initial sequencing and ranking of the covered bonds of the initial maturity schedule remains unchanged and the double recourse and bankruptcy remoteness is unaffected.

Below, we provide an in-depth overview of the various extension formats; we then take a closer look at how Member States have transposed Art.17 of the CBD and at market developments related to extendable maturities. Finally, we examine the motives of issuers on the one hand and the reactions of investors on the other as well as issuance trends.

What are the main difference between the covered bond redemption formats?

The most fundamental idea of covered bonds is safeguarding a full and timely repayment even in the case of an issuer default. Once the issuer ceases to exist, the cash flow stemming from a separate portfolio of assets is used to cover all claims due to bondholders. The two most significant sources of risk threatening the ability to satisfy the claims are (i) credit default risk, which potentially leads to an overly impaired cover pool and (ii) market risk – first and foremost in the form of liquidity risk – which potentially leads to a sufficiently large cover pool, which, however, is no longer able to satisfy claims due to illiquidity.

In the past, the rating agencies and other market participants assumed that, following an issuer default, the cover pool administrator could easily monetise the assets in the cover pool either by disposing parts of the cover assets or in an indirect way, i.e. by bundling them into an asset-backed security (ABS) or – if applicable – by using the refinancing register. Some covered bond structures may also be able to raise new debt either in a technically "unsecured" way or in the form of covered bonds. In particular, against the backdrop of uncertainty regarding the functionality and the efficiency of these tools, it is particularly important that the cover pool administrator is equipped with a broad set of instruments, so he is free to pick the most efficient one.

In cases involving hard bullet structures, issuers tried to enhance the effectiveness of the tools by regularly calculating pre-maturity tests or by maintaining a certain amount of liquid assets in the cover pool – a costly exercise for issuers since liquid assets usually come with a negative carry. By extending the maturity, the liquidity challenge is handled differently. This was achieved by either using soft bullet structures or pass-through structures. Soft bullet structures have a limited extension period of usually one year. However, since the soft bullet timeframe might still turn out to be too short, the idea of pass-through aimed at completely eliminating any refinancing risk by eliminating pressure to sell assets at the expense of a maximum timeframe for the payment deferral.

There is no regulatory definition of the various covered bond extension formats but the convention is to refer to covered bonds as hard, soft or conditional pass-through. The ECBC and its members have agreed on a set of definitions (available on their website) with the intention to give market participants a guideline when using each term[1].

> **Hard bullet covered bonds**: are repaid on the scheduled maturity date. Neither the documentation nor the legal framework contain provisions for a maturity extension. Failure to repay the final redemption amount of a hard bullet covered bond on the scheduled maturity date could trigger the default of the relevant covered bonds and, possibly, the liquidation of the cover pool depending on the respective national insolvency rules.

> **Soft bullet covered bonds**: Soft bullet covered bonds have a scheduled maturity date (SMD) and an extended maturity date (EMD). If objective, predefined, and transparent criteria have been met, the maturity of a soft bullet covered bond can, and in some cases, will automatically, be prolonged up to the EMD. During the extension period, the covered bond may be redeemed using cover pool proceeds. Failure to repay a covered bond on the EMD triggers the default of the relevant extended covered bonds (unless multiple extensions are allowed).

> **Conditional pass-through covered bonds (CPTCB)**: Conditional pass-through covered bonds have a scheduled maturity date and an extension mechanism. By itself, the failure to repay the CPTCB on the scheduled maturity date does not lead to an acceleration of the covered bond but to an extension of the maturity date of this and potentially other relevant covered bonds. The extension requires that objective, predefined and transparent criteria are met. In such circumstances the maturity of a CPTCB can be prolonged to the EMD, which is typically linked to the maximum legal maturity of the underlying assets. During the exten-sion period, cash flows received or generated from the cover assets will be distributed to the covered bond investors. Regular attempts are in general made to sell the cover pool assets to redeem the covered bonds. Such sales are subject to predefined criteria intended to protect the interests of all investors under the same programme. In certain jurisdictions and programmes, CPTCB may feature an initial soft bullet extension.

1 The definitions do not reflect the transposition of the Covered Bond Harmonisation Package.

Conditions for extendable maturity structures

As part of the harmonisation effort, the CBD introduced for the first time the concept of extendable maturities and in particular the need to harmonise the various extension options that many covered bond programmes had contractually introduced. To assure investor protection, Art.17 of the CBD clearly outlines the requirements issuers need to meet to be able to issue covered bonds with extendable maturities. Namely, the CBD requires Member States to include objective triggers specified in national law and not at the discretion of the issuer, that will cause the covered bonds to extend.

As Member States have been transposing the CBD, we have seen how they have decided to satisfy this requirement. In particular, we can group the triggers into two main groups: (i) countries where the extension is a tool available for the covered pool administrator to avoid/delay the insolvency of the issuing entity and/or (ii) countries where the extension can occur prior to the insolvency of the issuing bank and will be triggered simply via non-payment of principal or interest on the covered bonds. It is not surprising that each Member State has identified slightly different triggers; finding *one solution fits all* would have been arduous mainly due to the fact that across Member States we have at least three covered bond issuance models: ring-fencing on balance sheet, specialist banking model and SPV guarantor structure.

The below table summarises the objective triggers that have been introduced by Member States who have fully transposed the CBD at the time of writing.

Jurisdiction	Conditions for extension
Germany	The cover pool administrator may only extend the maturity up to 12 months, at the maturity date, if: 1) the extension is necessary to avoid the imminent insolvency of the Pfandbrief bank with limited business activity, and 2) the Pfandbrief bank with limited business activity is not overindebted, and 3) there is reason to believe that the Pfandbrief bank with limited business activity will be able to meet its liabilities then due after the expiry of the maximum possible extension date, taking into account further possibilities for extension.
France	The maturity date of a covered bond may be extended, if: 1) the issuer or sponsor bank falls into insolvency or resolution, or 2) subject to the decision of the French prudential regulation authority (ACPR), the issuer breaches the 180-day liquidity coverage requirement
Spain	The issuer or the administrator may seek permission with the Central Bank to extend the maturity date of a covered bond, under certain circumstances: 1) clear risk of failing to make payments on the covered bonds due to liquidity problems in the cover pool or the issuer, or 2) issuer bankruptcy or insolvency, or 3) resolution of the issuer, i.e., issuer is declared inviable according to Art. 8 Law 11/2015, or 4) severe market disturbances (as acknowledged by AMCESFI via a formal communication).
Austria	Following the insolvency of the credit institution, the insolvency administrator may trigger a postponement of maturity provided that, at the time of the postponement of maturity, the insolvency administrator is convinced that the liabilities can be serviced in full on the extended maturity date.
Estonia	Any suspensive condition included in the terms and conditions of covered bonds which, when fulfilled, will extend the maturity of the payment obligation arising from a covered bond, shall be void unless both of the following requirements are met: 1) the suspensive condition does not allow the issuer to extend the maturity of the payment obligation at its discretion, 2) it is possible to unambiguously determine the new maturity of the payment obligation on the basis of the terms and conditions of the covered bonds.
Hungary	A mortgage credit institution may issue a mortgage certificate with an extendable maturity structure if: (a) the triggering events that allow for the extension are objective conditions, independent of the mortgage credit institution's discretion, pre-determined at the time of the issue, through which the mortgage credit institution seeks to prevent default, in particular by addressing liquidity shortages, market failures or market disturbances, (b) the conditions allowing for the extension of the maturity as set out in point (a) are included in the terms and conditions of the mortgage certificate, (c) the information provided to investors on the maturity structure describes the risks of the mortgage bonds and includes a detailed description. In the event of the insolvency or resolution of the mortgage credit institution issuing the mortgage certificate, the extension of the maturity date does not affect the order of the holders of the mortgage certificate or reverse the order of the original maturity schedule of the mortgage certificate scheme. The mortgage bonds may be extended once and may not exceed 12 months.

Jurisdiction	Conditions for extension
Latvia	The special administrator has the right to use the extendable maturity structure if it is so provided for in the covered bond programme in conformity with the following conditions: 1) both events causing the extension of the maturity have occurred: a) the declaration of the insolvency proceedings or liquidation of the issuer, the application of resolution or reorganisation measures; b) the circumstances that give reason to believe that it will not be possible for the issuer to make current payments to investors within the time periods provided for; 2) the information provided to investors on the extendable maturity structure is sufficient to be able to assess the risks related to the fulfilment of the covered bond liabilities and the information shall include a description of the following: a) the events causing extension of the maturity; b) the consequences of the declaration of the insolvency proceedings or liquidation of the issuer, the imposition of resolution or reorganisation measures on the extension of the maturity of the covered bonds.
Luxembourg	The cover pool administrator may extend a covered bond's maturity for up to 12 months if: 1) the maturity extension is necessary to avoid the issuer's insolvency, and 2) there are objective factors upon which it is reasonable to assume that the maturity extension will allow to meet the extended deadline.
Belgium	The issuer or the cover pool administrator may extend the maturity date of a covered bond by up to a year (or more if a waiver is granted by the Central Bank) if: 1) there is the incapability, on the issuer's part, of meeting the payment on the covered bond as and when due, or 2) there is an issuer insolvency or resolution. In the case of liquidation/resolution procedures, the extension is decided by the cover pool administrator.
Cyprus	The issuer or the covered bond monitor may extend the maturity date of a covered bond if 1) the choice not to extend will bear an impact on the issuer, or 2) there is the inability, on the issuer's part, to issue a new covered bond on same or better terms, or to make a payment at maturity, or 3) there is an issuer insolvency.
Italy	Covered bond programmes may entail automatic maturity extension in the following instances: 1) failure to pay by the issuer, or 2) issuer insolvency, or 3) activation of early intervention measures or resolution procedures against the issuer.
Portugal	Maturity extensions must be approved by the CMVM, under certain conditions: 1) the issuer's authorisation as credit institution is revoked, or 2) there is a prospective or actual non-payment of principal or interest under the covered bonds at the initial maturity date. The issuer shall notify the CMVM of the extension and its grounds 10 days in advance of the extension (or as soon as possible, if such 10 days advance notice is not possible). CMVM can then oppose to such extension within 10 days.
Ireland	The maturity of a covered bond may only be extended by the issuer if: 1) the issuer fails to pay the principal due on the scheduled maturity date (as extended by any applicable grace period), or 2) the Authority or manager directs the issuer to extend the maturity of the securities.
Netherlands	The maturity date of a covered bond may be extended, if: 1) there is an issuer default (failure to pay) or if the issuer is in liquidation, insolvency or resolution, and 2) the CBC has insufficient means to repay the principal amount of the bond at the SMD, or cannot fulfill the OC requirement.

Source: National covered bond frameworks

Conditional pass-through structures becoming even more of a niche

It has been almost ten years since the first conditional pass-through structures was introduced in the covered bond benchmark universe. NIBC was the pioneer issuing a EUR 500mn 5Y benchmark covered bond in October 2013, although it was in 2015 that this redemption format started to gain momentum. Additional issuers took the conditional pass-through path with UniCredit SpA, Van Lanschot Bankiers and Aegon Bank entering this market. Meanwhile, Banca Monte dei Paschi di Siena converted its programme from soft bullet to conditional pass-through and Banca Carige followed in 2016 with a new CPT programme. CPT programmes can also be found in Portugal (Novo Banco and Caixa Económica Montepio Geral), in Austria (Anadi Bank), Germany (a structured covered bond programme of Deutsche Bank), and in Australia with Bank of Queensland. In 2017, the Greek Banks also started issuing covered bonds off their CPT programmes. However, most CPTCBs have been used for retained issuance rather than being sold publicly. In June 2022, 21 CPTCBs were included in the iBoxx EUR Covered Index, with a total amount of EUR 13bn (1.6% of the total index). This was roughly half of the amount of CPTCB outstanding at the end of 2021. This, in turn, is mainly related to all Dutch CPTCB issuers having switched to soft bullet programmes. Key reasons for the change have been the introduction of harsher haircuts by the ECB for CPT covered bonds as well as their non-eligibility for the third covered bond purchase programme (CBPP3), while Dutch issuers also wanted to have more flexibility in terms of issuance tenors (i.e. Dutch issuers prefer issuance at the very long end of the curve, which for CPTs implies a higher execution risk). Overall, there are today still circa 20 covered bond programmes, across jurisdictions, structured in conditional pass-through format.

In CPTCB programmes in general, following an issuer default, a particular covered bond will only become pass-through once a covered bond reaches its SMD and the available cash is insufficient to fully redeem the bond. Other outstanding covered bonds will not turn into pass-through covered bonds as long as they are paid as scheduled. It goes without saying, that the switch to pass-through on the SMD does not prevent the cover pool administrator from trying to sell assets in order to improve the liquidity of the cover pool and, in doing so, making the switch to pass-through less likely. The maturity extension and switch to pass-through aims to reduce refinancing risk, i.e. the risk of losses resulting from cover pool fire-sales. In order to generate sufficient cash flows to repay the covered bonds due, the cover pool administrator is empowered to sell a randomly selected part of the asset portfolio as long as the conditions of the amortisation test are met.

Following issuer default, the amortisation test has to be passed. The amortisation test is designed to ensure that cover assets are sufficient to repay the outstanding covered bonds. Key aspects in that respect are the level of OC in the programme as well as provisions to address transactions risks like servicing. If the test is failed, the commonly used structure is that all covered bonds become pass-through. In this case, the covered bond company will be required to use all funds available to redeem all covered bonds on a pro rata basis, while interest continues to accrue on the unpaid part of the covered bonds.

An important feature in the CPTCB is the minimum OC, which is needed to allow for the programme to switch to pass-through. Shortage of collateral, which could arise from paying administrative costs as well as covering potential credit losses, would otherwise instantly trigger a failure of the amortisation test and an acceleration of payments to bondholders. This is the reflection of the fact that cover pool credit risk is the key remaining source of loss in the cover pool asset-liability management. In order to eliminate market risk completely, the legal final maturity is extended to beyond the maximum maturity date of the cover pool assets. The extension period usually ranges from 31 years to 38 years, depending on the respective programme documentation.

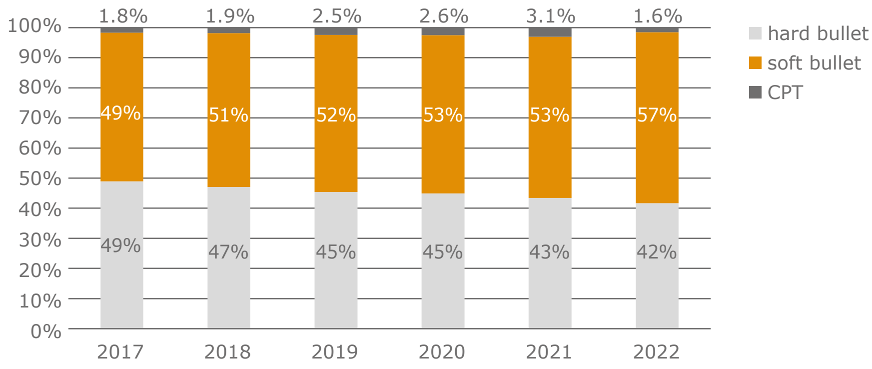
The increased number of CPT programmes in the past few years has led to a relatively broad diversity of structures, for example showing different extension triggers and procedures following the failure of the amortisation test. While within countries like the Netherlands, CPT structures are relatively homogenous, they are less homogenous in Italy, Greece and Portugal and differ quite substantially between countries. Hopefully, the transposition of the CBD will address the lack of standardised structures in the market.

Soft bullet covered bonds keep dominant position in covered bond market

In June 2022, 25 jurisdictions had covered bonds with extendable maturity structures outstanding in the iBoxx EUR Covered Index. The total amount of soft bullet and conditional pass-through covered bonds outstanding in those countries was EUR 466bn as of June 2022, up from EUR 400bn five years ago.

Soft bullet covered bonds became the dominant structure in the euro benchmark covered bond market in 2018 and have expanded their dominance ever since. The share of soft bullet covered bonds in the iBoxx index rose to 57% in June 2022, up from 53% at the end of 2021. In volume terms, the June 2022 index comprised EUR 453bn of soft bullet covered bonds, up from EUR 386bn at the end of 2017. Meanwhile, the share of conditional pass-through covered bonds (CPTCB) was 3.1% at the end of 2021, but it had already dropped to 1.6% in the first half of 2022. Finally, the share of hard bullet covered bonds declined to 42% (or EUR 334bn) in June 2022, down from 43% and 49% at the end of 2021 and 2017, respectively.

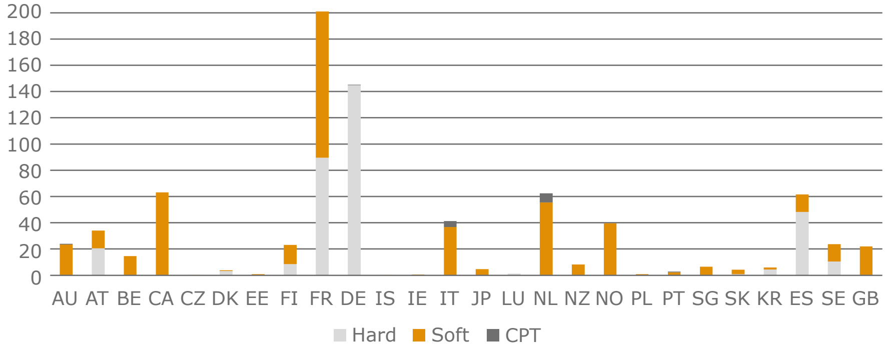
> Figure 1: Outstanding covered bonds in iBoxx EUR covered bond index by maturity structure (%, with labels showing amounts in EUR bn, June 2022 index)



Source: Bloomberg, ABN AMRO

A breakdown by country shows that Germany and Luxembourg are the only countries with pure hard bullet covered bonds, although there is one structured CPTCB in Germany. Meanwhile, hard bullet covered bonds also still have a share of more than 50% of the total amount of euro benchmark covered bonds in Denmark (88%), Spain (78%), South Korea (76%), and Austria (61%). However, more countries are likely to see a rise of covered bonds with extendable maturity structures now that the CBD has become effective. Therefore, covered bonds with extendable maturity structures are set to expand their dominance in coming years.

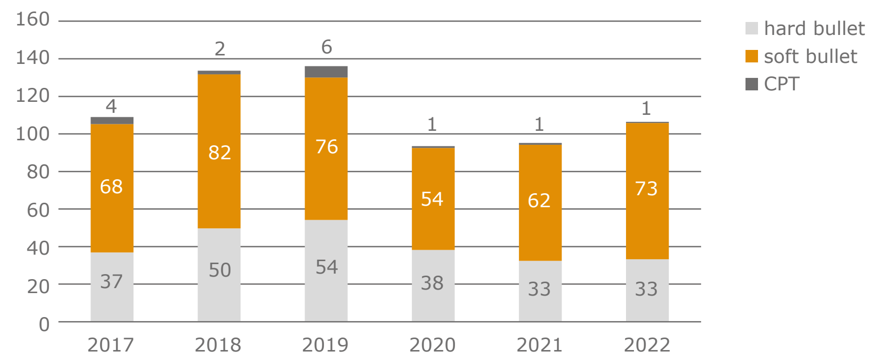
> Figure 2: Volume of outstanding covered bonds in the iBoxx index by country and maturity structure (EUR bn, June 2022 index)



Source: Bloomberg, ABN AMRO

Turning to new issuance of euro benchmark covered bonds, the share of covered bonds with extendable maturities had risen to 69% in 2022 at the time of writing, well above the 63% average seen in the past five years. The majority (68%) consists of soft bullet covered bonds, as CPTCB issuance has been on a declining trend. As said, this largely reflects developments in the Netherlands where all CPTCB issuers have switched to soft bullet programmes, with NN Bank even having successfully asked investor consent to switch outstanding CPTCB into soft bullets. As a result, it is likely that no new Dutch CPTCB will be issued, while the outstanding amount of CPTCB will probably also decline if more issuers ask investor consent to switch to soft bullet structures. The only CPTCB issued so far was from Bank of Queensland.

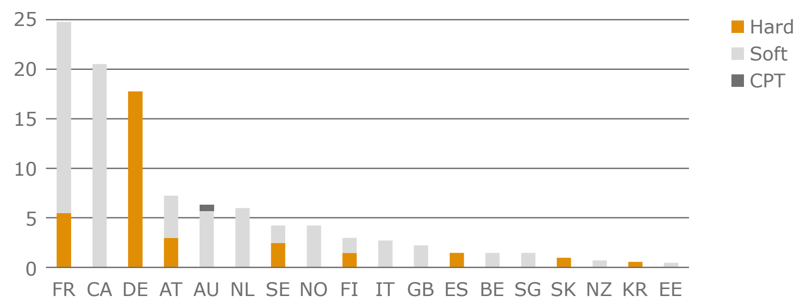
> Figure 3: New issuance of EUR benchmark covered bonds by maturity structure (%, with labels showing amounts in EUR bn)



Source: Bloomberg, ABN AMRO - as of 6 June 2022

The rise in the share of soft bullet covered bonds mainly stems from relatively large issuance volumes of Canadian issuers, which are all in soft bullet format. This has not been offset by larger issuance volumes of German and French hard bullet covered bond issuers. Looking forward, it will be interesting to see if issuers will stick to hard bullet format now that soft bullet structures will be an option for almost all issuers in all countries. As such, it is expected that the share of soft bullets in new issuance will rise strongly in the coming years.

> Figure 4: New issuance of EUR benchmark covered bonds by country and maturity structure in 2022, EUR bn



Source: Bloomberg, ABN AMRO - as of 6 June 2022

Conclusion

Only a few years ago, extendable maturity covered bond structures were the exception rather than the rule. Today, their market share has steadily risen, with extendable maturity covered bonds now being the majority in covered bond indices. The CBD has solved the issue of fragmentation in extension triggers across countries and programmes. Moreover, more and more countries have embraced the maturity extension structure when transposing the CBD into national law. As a result, soft bullet covered bonds will further enlarge their footprint, with CPTCB slowly disappearing. This will also likely lead to greater investor acceptance, although the vast majority of investors is already able to invest in covered bonds with maturity extension features.

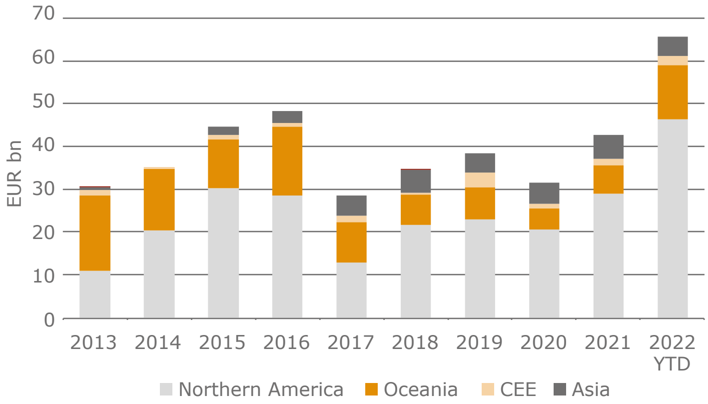
1.11 THE RISE OF NEW COVERED BOND MARKETS

By Antonio Farina, S&P Global Ratings, Colin Chen, DBS & Chairman of the ECBC Global Issues Working Group, Richard Kemmish, Consultant, and Maureen Schuller, ING Bank N.V.

OVERVIEW

Despite extended coronavirus containment measures that pushed the world into the deepest recession since the Great Depression, the covered bond market remained open throughout the crisis, reaffirming the product's role as a reliable funding tool in times of financial turbulence. Banks were able to find investors even at the peak of the market turmoil, both in traditional and in new covered bond markets. Cheap central bank funding partly replaced covered bond issuance, but investor-placed benchmark volumes in 2020 were only slightly down in new markets compared to the year before. Inflationary pressures and the easing of the COVID-19 pandemic meant that monetary policies began to normalize across several countries in the second half of 2021. As soon as central banks terminated their crisis-era liquidity facilities, covered bond volumes surged as issuers' funding plans began to normalize. Benchmark covered bond volumes in new markets already comfortably exceeded previous full-year totals by mid-2022, at over EUR 50 billion.

> FIGURE 1: ISSUANCE IN NEW MARKETS SURGED POST-COVID, LED BY AUSTRALIA AND CANADA



Note: Non-European benchmark covered bond issuance. Year-to-date figures as of August 2.
Source: S&P Global Ratings

Looking ahead, weakening macroeconomic conditions will constrain asset growth, so we expect the stimulus for further issuance will come principally through legislative and regulatory initiatives and evolving market conditions.

POLICY DEVELOPMENTS

On the policy front, the transposition of the harmonization directive and the implementation of the Basel reforms are gaining prominence.

The Transposition Of The Harmonization Directive

The main regulatory development in Central and Eastern Europe (CEE) has been the rapid evolution or update of covered bond laws to comply with the covered bond directive (the Directive), initially supposed to be transposed into national legislations by July 2021, and applicable by July 2022. In practice, notwithstanding some infringement notices launched by the European Commission as the 2021 deadline passed, July 2022 has been interpreted as the 'real' deadline.

Several CEE countries had either no covered bond laws or had antiquated frameworks that had fallen into disuse and had to be rewritten from scratch. These include:

> Latvia, which passed its law, fully compatible with the Directive, in May 2021. Although Latvia had a covered bond law in the past, it had not been used for many years and was rewritten from scratch. The Latvian framework, like those in Estonia and Lithuania, was drafted under a cooperation agreement between all three Baltic states to allow standardisation of conditions and ease of cross-border transfer of assets, wherever possible. That reflects the fact that many banks operating in the region operate on a cross-border basis and wish to use collateral from all three countries to back their covered bonds.

> Croatia passed its covered bond law in May 2022. This was the culmination of a long project undertaken in cooperation with the European Bank for Reconstruction and Development (EBRD), which had been 'on hold' pending other priorities and the need for clarity regarding the Directive to ensure full compliance with the new rules.

> Bulgaria, like Croatia, passed its covered bond law in early 2022, although after a much shorter preparation phase. Like Latvia, Bulgaria also had an existing, but unused covered bond law.

> In Lithuania, after a long period of development, the covered bond law was passed and came into force a few days after the July 8 deadline.

> Slovenia has had a covered bond law for several years and granted at least one license to issue bonds in 2012, but this was never utilised. According to the Bank of Slovenia, the ample liquidity in the banking system and the small mortgage portfolios made covered bonds uneconomic. The law was revised in September 2021, came into force in July 2022, and is now fully in accordance with the Directive. In particular the law allows pooling, in an attempt to address the problem of small mortgage portfolios.

Other CEE countries with established covered bond frameworks, including Slovakia, Hungary, and Poland, had to undertake some modifications to ensure that their frameworks were fully compatible with the Directive:

> The Slovakian law had been updated in 2018 in cooperation with the EBRD and with the expectation of the passage of the Directive. It introduced most of the features required under the Directive, such as the possibility of soft-bullet bonds, the 180 day liquidity requirement, and mandatory 5% minimum overcollateralisation (OC). The only subsequent amendment that was made was to align the asset class definition with the directive and allow assets other than residential mortgages to back covered bonds. Whether issuers will use this new option, given the availability of high class residential mortgage assets, is unclear.

> In Hungary revisions to the covered bond law were passed in 2021. These introduced some new features allowed or required in the Directive, including a requirement for a 180 day liquidity facility, the possibility of soft-bullet structures, and a more detailed role for the national bank as supervisor of the programmes.

> In Poland, minor changes to the, already mainly aligned, law were passed in April 2022. The small changes needed included aligning reporting requirements and swap counterparty rules. Two less common aspects of the Polish framework had to be addressed: Poland was one of the few countries to previously require OC over 5% – which has now been reduced to bring it into line with the directive – and mandatory conditional pass-through rules meant that the trigger events came more into focus. The mandatory rules are only triggered in the event of issuer insolvency, not resolution or restructuring as in some countries. Finally, it was decided that the new rules would also apply retroactively to existing bonds.

> In Czechia the law was amended in April 2022, introducing several features required by the Directive, such as a 180 day liquidity buffer, a requirement to take into account servicing costs (of 1%) in OC calculations, the possibility of soft-bullet bonds (which were previously possible but not mentioned in regulation), enhanced investor reporting, and a requirement to obtain permission from the Czech National Bank

before issuing bonds. The minimum OC for mortgage bonds remains at 2%, in line with the permission granted to national authorities to set a level lower than 5%, but is now 10% for public covered bonds. There is no requirement for a cover pool monitor, as is allowed under article 13 of the Directive, but in practice we expect most issuers to appoint a cover pool monitor voluntarily (without the need to comply with requirements set out in the Directive) and set a higher OC level.

Third country equivalence in Europe

The equivalent treatment of covered bonds issued by non-European economic area (EEA) credit institutions was left outside the scope of the Directive and of the amendments to Article 129 of the Capital Requirements Regulation (CRR). Instead, the European Commission will submit a report on third country equivalence to the European Parliament and Council by July 2024 at the latest. This report may be accompanied by a legislative proposal on whether or how an equivalence regime should be introduced. It is important to bear in mind however, that from July 8, 2022, the amended CRR no longer refers to the UCITS 52(4) requirements as one of the conditions for preferential risk weight treatment. Only for covered bonds issued before July 8, 2022 most old CRR requirements, including the UCITS 52(4) reference, may still be applicable under the transitional measures. Instead, from July 8, 2022, the new definition for covered bonds per Article 3(1) of the Directive becomes leading for preferential risk weight treatment. Unlike UCITS 52(4), Article 3(1) of the Directive does not reference the fact that covered bonds have to be issued by a credit institution with a registered office in an EEA member state.

However, without third country equivalence provisions, this would still imply that to benefit from a preferential treatment, third country covered bonds would a) have to meet all the mandatory requirements of the Directive per Article 3(1) of this Directive, plus b) the further requirements of the amended CRR with reference to the monitoring of property values, minimum 5% overcollateralization, and eligible substitution assets. In a separate Q&A document, the European Banking Authority (EBA) also confirmed on December 17, 2021, that as long as an equivalence regime has not been introduced, covered bonds that do not meet the criteria and requirements for eligible covered bonds according to the amended CRR Article 129(3), (3a) and (3b), in conjunction with Article 3 of the Directive, should not use the favourable 11.25% LGD for covered bonds under the internal rating based approach (CRR Article 161), but the 45% LGD for senior exposures instead.

The impact on the LCR treatment of third country covered bonds

Third country covered bonds are already eligible as level 2a high quality liquid assets under the European Union (EU) LCR delegated regulation if they meet the applicable requirements. The European Commission delegated regulation of February 10, 2022, amending the LCR delegated regulation, aligns the European LCR regulation with the amended Article 129 of the CRR and the covered bond Directive. The amendments apply as of July 8, 2022 and affect third country covered bonds as follows:

> The (semi-annual) transparency requirements of CRR Article 129(7) are replaced with the more detailed (quarterly) investor information requirements of Article 14 of the covered bond Directive.

> The valuation requirements of the covered bond Directive in Articles 6(2), 6(3)(a) and Article 6(5) should be met where the pool comprises loans secured by immovable properties. These replace the previous CRR Article 208 and Article 229(1) valuation requirements.

> The asset eligibility criteria for third country covered bonds remain virtually the same as they already excluded securitisation notes as eligible assets, but the Article 129(1)(c) minimum rating requirements for exposures to credit institutions will become more lenient.

The LCR amendments did not further discuss the required equivalence of the supervisory and regulatory arrangements of third countries to those applied in the EU. We do believe though, that the mandatory special supervision requirements from the covered bond Directive will probably be seen as the reference for the equivalence assessment of third country supervisory and regulatory arrangements as of July 8, 2022.

The Basel III reforms

In December 2017, the Basel Committee on Banking Supervision (BCBS) finalised its post-crisis regulatory reforms, which provide for the preferential risk-weights for covered bonds globally. The Basel-III reforms (often dubbed as Basel IV) should be implemented by January 1, 2023, after a one year postponement due to COVID-19.

The Basel III reforms on covered bonds

Definition of covered bonds

Covered bonds are defined as bonds issued by a bank or mortgage institution subject by law to special public supervision designed to protect bondholders. Bond proceeds must be invested conform the law in assets that can cover claims attached to the bonds during their term. In the event of a failure of the issuer, these proceeds would be used on a priority basis for the (re)payment of the principal and accrued interest.

Asset eligibility

The eligible cover assets are restricted to:

> Claims on/guaranteed by, sovereigns, their central banks, public sector entities or multilateral development banks;

> Claims secured by residential real estate with a loan-to-value (LTV) ratio of 80% or lower that meet the applicable requirements on legal enforceability, the claim of the bank over the property, and the ability of the borrower to pay, among others.

> Claims secured by commercial real estate with an LTV of 60% and lower that meets the applicable requirements;

> Claims on banks that qualify for a 30% or lower risk weight up to 15% of outstanding covered bonds.

Additional collateral may also include substitution assets and derivatives entered into for the purpose of hedging risks related to the covered bond programme.

Overcollateralisation

The nominal OC should be at least 10%. Where national legislations do not provide for a 10% minimum OC, the issuing bank should regularly disclose that the 10% requirement is met in practice.

Disclosure requirements

For covered bonds to be eligible for preferential treatment, the banks investing in the covered bonds should be able to demonstrate that it receives (at least semiannually) portfolio information on at least:

> The value of the cover pool and the outstanding covered bonds;

> The geographical distribution and type of cover assets, loan size, interest rate, and currency risks;

> The maturity structure of the cover assets and covered bonds; and

> The percentage of loans more than 90 days past due.

> Figure 2: Risk weight treatment for exposures to rated covered bonds

External rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-
Basel III (reformed)	10%	20%	20%	50%	100%
Basel III (current)	20%	50%	50%	100%	150%
CRR (current)	10%	20%	20%	50%	100%

Source: Basel Committee on Banking Supervision, European Commission

Several countries outside Europe have published their proposals translating the Basel III reforms into national law, although only some of them intend to provide for a preferential risk weight treatment of covered bonds. Singapore and South Korea do plan to fully implement the Basel requirements for such preferential treatment, for example. Australia aims to introduce favourable risk weights, but only for rated covered bonds. In Canada, the Office of the Superintendent of Financial Institutions (OSFI) does adopt the asset eligibility and disclosure requirements for covered bonds of the Basel reforms, but with a minimum OC requirement of 5%. Nonetheless, covered bonds will only receive a similar risk weight treatment as similarly rated (unsecured) bank exposures. In New Zealand, the banking prudential requirements of June 2021 do not make reference to separate risk weights for covered bonds.

MARKET OUTLOOK

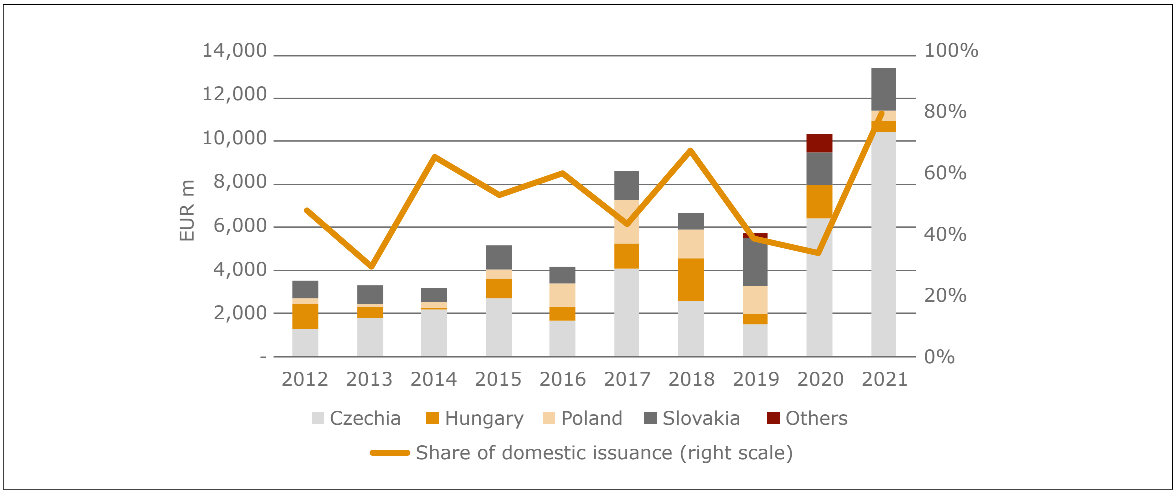
Central and Eastern Europe

The lack of funding needs for most banks in the region and strong demand from investors in local currencies meant that euro covered bond investors were again disappointed by supply from the region, with only one euro-denominated benchmark bond issued in 2021, and some smaller public transactions from Estonian issuers.

In Hungary the Mortgage Funding Adequacy Ratio, which stipulates the percentage of mortgages that must be funded with long-term securities, is set to be increased to 30% from the current 25%. The date of this increase was delayed for a year as a response to the pandemic. The National Bank also announced that their covered bond purchase programme would be replaced by a green mortgage bond programme.

Local currency issuance continues to dominate in Hungary, to the frustration of Eurozone investors, whilst issuance from Poland continues to be more balanced between the domestic and euro markets.

> Figure 3: Local Currency Issuance Boosts Volumes in Central And Eastern Europe



Note: Covered Bond Issuance. Sources: ECBC

As usual though there is optimism for future issuance. At least two Polish issuers have announced their intention to issue new green covered bonds, and in more general terms the funding needs in the region are growing as house prices increase and inflation eats into deposit balances.

The passage of laws in Croatia and Bulgaria is of particular significance for future supply prospects as both countries are now in the Exchange Rate Mechanism 2 mechanism and expect to fully adopt the Euro in 2023.

This will allow easier access to euro investors and, if precedent in other countries is to be believed, may result in significant growth in the mortgage market, which will require wholesale funding.

Outside the EU there was also progress on covered bonds in Georgia, where at time of going to press parliament was about to pass the covered bond law.

Outside Europe

Benchmark covered bond issuance outside Europe surged since the second half of 2021, as monetary policy normalization curtailed issuers' access to cheap central bank funding. Issuance was particularly strong in Canada and Australia, but banks in Singapore, Korea, and New Zealand were also active.

Current volatile market conditions, caused by geopolitical turbulence, tightening monetary policies, and a deteriorating economic outlook, could further support issuance. Established, highly rated issuers will probably use their covered bond programs more, especially if other sources of funding, such as senior unsecured bank debt, become relatively more expensive or difficult to place with investors.

Legislative and regulatory initiatives could also help. The first two Japanese programs have been established based on a contractual structure, due to the lack of dedicated legislation, but many market participants expect that the authorities will step in and introduce a dedicated framework as issuance grows. This may encourage new banks to set up programs and issue covered bonds. Asset encumbrance limits, which constrain volumes by capping the amount of banks' assets that can be included in cover pools, can also be revised. The Monetary Authority of Singapore has recently increased the asset encumbrance limit to 10% from 4% of the issuer's total assets. This could lead to an increase in existing programs' sizes and might incentivize new banks to establish programs.

In the medium term, we believe that Asian covered bonds should grow further, with new Asian banks benefiting from the funding diversification that they provide. We expect that housing finance needs in the region will grow substantially, and covered bonds could become an important instrument for mobilizing private capital toward mortgage financing, especially in emerging Asia.

Covered bonds in Latin America have a short and limited track record. Panama was the first country to see a covered bond issuance in October 2012. Since it does not have a dedicated legal framework, covered bonds were based on contractual agreements. Chile also saw limited and locally distributed covered bond issuance in the past. One factor preventing financial institutions in the region from issuing covered bonds is the lack of a dedicated legal framework. However, things are changing thanks to the legislative developments in Brazil.

In October 2014, Brazil introduced a framework for Brazilian local covered bonds ("letra imobiliária garantida" or "LIGs"), which became law in January 2015. Banks only began issuing LIGs after the presidential election of 2018, with private domestic placements. At the end of 2020, the Brazilian Securities Exchange Commission allowed public placements for LIGs, which could further support domestic issuance. The market is still waiting for legal and regulatory clarification on how international issuances could be done. Once this clarification is obtained, we believe that Brazilian banks will try to issue offshore LIGs targeting foreign investors. If covered bonds prove successful in Brazil, we may see other countries in the region follow its lead.

The outlook for covered bonds in Africa looks grim. Authorities in both Morocco and South Africa tried and failed to introduce dedicated legal frameworks. But things could change as the growth of the local middle class increases demand for mortgage funding, and authorities will try to help financial institutions diversify their funding tools.

CHAPTER 2 - GENERIC SECTION

2.1 OVERVIEW OF COVERED BONDS

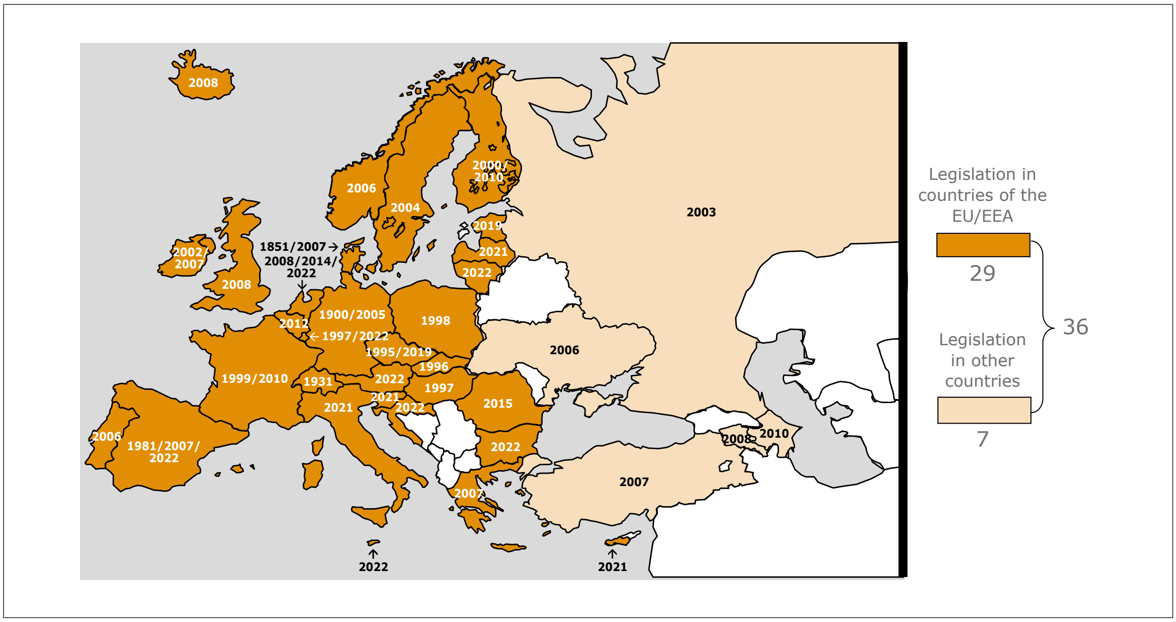
By Joost Beaumont, ABN Amro, Cristina Costa, Barclays and Otmar Stöcker,
Association of German Pfandbrief Banks

I. INTRODUCTION

The covered bond is a pan-European product with a long-standing history. Decisive milestones in its development were laid in Prussia (1770), Denmark (1797), Poland (1825) and France (1852). Traditional issuers ranged from public law "Landschaften" to private mortgage banks. Initially, the instrument's aim was to finance agriculture, but it later concentrated more on housing and commercial real estate.

Over the past 20 years, the covered bond market has developed into the most important segment of privately issued bonds on Europe's capital markets, with volume outstanding as of end-2021 of EUR 2.9 trillion. Today, there are active covered bond markets in 30 different European countries (please refer to the covered bond statistics section in chapter 5 for more information). The covered bond market has also expanded beyond European borders to become a global product: countries such as Australia, Canada, New Zealand, Singapore, South Korea, Brazil have established covered bond legislation, and others (Morocco, US, Japan, Mexico, Chile, India, Thailand, Malaysia, China, Croatia) are looking to establish CB frameworks.

> Figure 1: Covered bond legislation in Europe (as of July 2022)



Source: vdp

Why are covered bonds so popular?

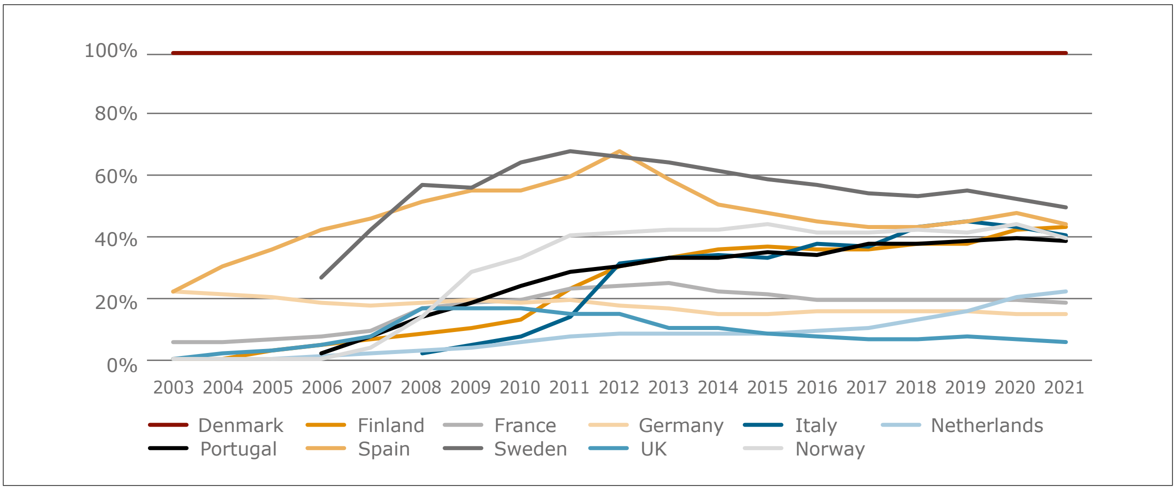
Covered bonds play an important role in bank wholesale funding, as they provide lenders with a cost-efficient instrument of long-term funding for mortgage or public-sector loans and offer investors good quality credit exposure on credit institution. Furthermore, the instrument has proved its resilience as a funding instrument at various occasions during the financial and sovereign crisis. During the COVID-19 pandemic and more recently as a result of Russia's invasion of Ukraine, covered bonds have shown their safe haven status and proved to be one of the only asset classes able to restore investor confidence and ensure issuers access to the debt capital markets in volatile times. The high importance of covered bonds from the financial system is demonstrated by the regulatory privileges these instruments enjoy in various areas of EU financial market regulation. The new EU legislation on covered bonds in Europe will further reinforce the conditions for granting preferential capital treatment to covered bonds by adding further requirements. At national level, in addition to the introduction of new covered bond legislations, there have been continuous evolutions/amendments to existing legislations, underlying the commitment of issuers, investors and regulators to take on board the best practice standards and further reinforce and enhance the quality of the asset class.

Covered bonds as a long-term funding tool for the real-economy: the example of housing finance

Covered bonds are an effective tool to channel long-term financing for high quality assets at reasonable cost. They improve bank's ability to borrow and lend at long-term horizons and, hence, represent a stable source of funding for key banking functions such as housing loans and public infrastructure. In this regard, we believe that covered bonds represent a key funding tool for the (European) banking industry.

The use of covered bonds as a funding tool depends largely on the size of the domestic mortgage market, and the availability of alternative funding tools for banks (and their costs). The figure below shows that in most countries mortgage backed covered bonds account for at least 30% of outstanding mortgage loans. Most of the countries have now reached stable relative size of the covered bond market after a phase of strong growth in 2007/2008, and a more moderate growth subsequently.

> FIGURE 2: MORTGAGE BACKED COVERED BONDS AS % OF RESIDENTIAL MORTGAGE LOANS



Source: EMF-ECBC

Benefits of covered bonds

From an issuer's perspective, covered bonds enable banks to enhance their funding profile and manage their liquidity. Benefits provided by covered bonds include:

> Providing banks a diversification of their funding mix, allowing asset liability management (ALM) teams to better adapt their funding strategy to market conditions;

> Extending the maturity profile of the liabilities, allowing banks to better match their long-term asset portfolios;

> Enabling issuers to increase diversification of the investor base, both in terms of geography and investor type, in particular to the more conservative rates investors. This phenomenon can also be evidenced by issuers turning to the issuance of green covered bonds, as they seek to broaden their investor base;

> Transforming less liquid mortgage loans into covered bonds which are eligible as collateral for central bank liquidity (including own use); and

> Servicing the industry as one of the most reliable funding tools, even in times of turmoil.

From an investor's perspective, the major strengths and regulatory advantages of covered bonds can be summarized as follows:

> Dual recourse to the issuer and a cover pool of high-quality assets (and therefore higher recovery in case of liquidation of the CB issuer);

> Higher rating and higher rating stability than unsecured debt;

> Lower risk-weighting for EEA covered bonds bought by EEA banks under the EU's CRR;

> Eligible as liquid assets under the EU LCR regulation;

> Exemption from bail-in under EU's BRRD;

> Privileged treatment of covered bonds under the EU large exposure rules (and upcoming Basel Committee on Banking Supervision (BCBS) rules);

> Favourable treatment under Solvency II;

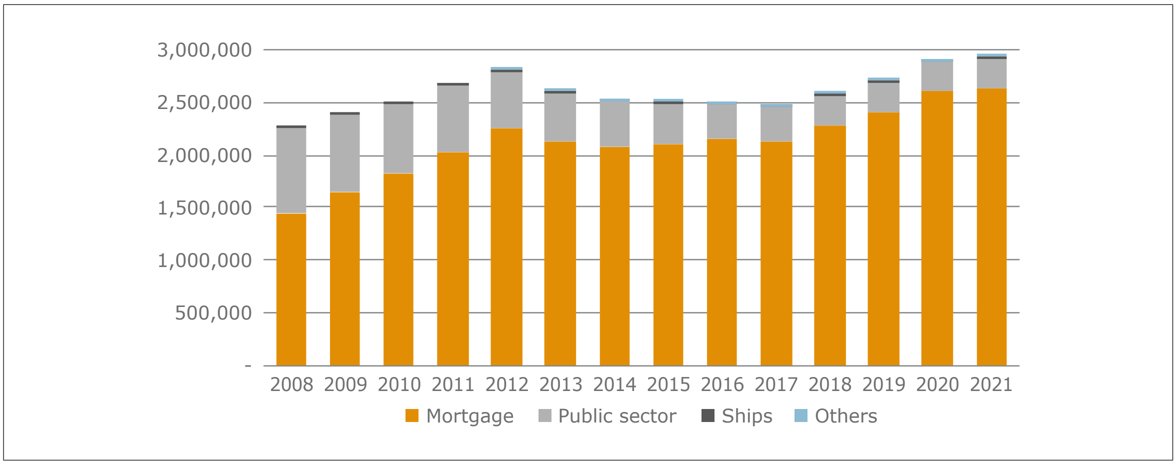
> Favourable repo treatment at the European Central Bank (ECB) and other central banks;

Resilient bank funding instrument

Covered bonds are the most reliable funding source, as they make banks less susceptible to adverse market conditions. They often offer issuers better wholesale capital market access, lower transaction execution risk, and decrease the reliance on senior unsecured funding and interbank markets. This is especially true during times of crises. During the European sovereign crisis of 2011-2012, covered bond issuers of some jurisdictions had, for instance, cheaper access to wholesale funding markets via covered bonds than their respective distressed sovereigns.

The development of covered bonds has also been shaped by regulation. The 2014 EU Liquidity Coverage Directive established covered bonds as eligible for Level 1 and Level 2A High Quality Liquid Assets (HQLA). As a result, bank treasuries have become regular buyers of covered bonds to include in their liquidity portfolios.

> FIGURE 3: TOTAL OUTSTANDING COVERED BONDS BY UNDERLYING ASSETS, 2008 TO 2021



Source: EMF-ECBC – Covered bonds outstanding at the end of 2021.

II. EU HARMONISATION OF COVERED BONDS

On 7 January 2020, the legislative package for the EU-wide harmonisation of covered bond (CB) frameworks entered into force, with the new measures having become effective from 8 July 2022.

The harmonisation package consists of a Covered Bond Directive (CBD) and an amendment of Article 129 of the CRR, which distinguishes the core group of traditional secured bonds issued by a credit institution more clearly from other kinds of covered bonds. The CBD regulates the requirements for covered bonds, which, up to now, were only laid down in a rudimentary fashion in Article 52(4) of the UCITS Directive; this provision has been accordingly amended and now refers to the CBD, as has the Bank Recovery and Resolution Directive (BRRD). Given that the CBD will become the new single reference point for regulation related to covered bonds, various other provisions on covered bonds in other directives that refer to Article 52(4) of the UCITS Directive are thus also indirectly amended.

1. Principle-based harmonisation

The regulatory discussion on the creation of the CB harmonisation package was characterised by the "principle-based harmonisation" aimed at by the EU regulatory framework. This means that the EU provisions lay down the minimum requirements for secured bonds issued by credit institutions and, in a number of ways, leave room for particularities and detailed regulations at the national level; this has also been the (almost) unanimous petition of CB issuers and other market participants. This is of fundamental importance both for understanding the regulatory package and for interpreting the individual provisions.

While the CBD builds on the essential traditional quality features of covered bonds, it leaves national legislators a wide margin of leeway in shaping their national CB laws. This is also illustrated by the fact that the CBD contains both mandatory and optional provisions. Some mandatory provisions also contain optional elements, and vice-versa.

2. Covered Bond – Directive

The recitals of both parts of the CB harmonisation package are worth reading, as they explain the aim of the harmonisation project and locate the new rules within the existing set of rules for covered bonds. The definitions listed in Article 3 of the CBD are also important for understanding individual provisions. The CBD consists of the following Titles:

- I. Subject matter, scope and definitions (Articles 1-3)
- II. Structural features of covered bonds (Articles 4-17)
- III. Covered bond public supervision (Articles 18-26)
- IV. Labelling (Articles 27)
- V. Amendments to other Directives (Articles 28-29)
- VI. Final provisions (Articles 30-34)

2.1 Dual recourse

Article 4 of the CBD describes the most important element of covered bonds, dual recourse. Although this term has been in use for a long time, there is often confusion as to what its two components should be. In fact, there are three components, as Article 4(1) of the CBD clearly illustrates in listing components a) – c):

a) a claim against the credit institution (the CB issuer); this is the most important difference to securitisations (such as asset-backed securities and mortgage-backed securities) where the investor has a claim against an SPV as a non-bank;

b) in the case of the insolvency of the CB issuer, a claim against the cover pool; and

c) if the cover pool is insufficient, a claim against the insolvency estate of the CB issuer. If this third claim is regarded simply as a consequence of a), then "dual recourse" is the correct term, otherwise "triple recourse" would be more precise.

2.2 Bankruptcy remoteness of covered bonds

Article 5 of the CBD makes only brief mention of the fact that payment obligations attached to covered bonds are not subject to automatic acceleration upon the insolvency or resolution of the CB issuer.

This ensures that investors will receive their capital and interest payments at the time specified in the terms and conditions of the issuance, even if the CB issuer becomes insolvent. This "timely payment" is a key requirement in investors accepting low interest rates and in rating agencies granting covered bonds high ratings.

As simple as this sounds, difficulties arise when determining the time specified in the terms and conditions of the issuance. The "hard bullet" versions of covered bonds have a fixed maturity. However, most legislators allow this date to be extended under certain conditions. Many credit institutions use this for their CB issuances, which are then called "soft bullet" covered bonds or conditional pass-through covered bonds. Article 17 of the CBD addresses this issue.

2.3 Eligible cover assets

In 2013, Article 129 of the CRR established the first uniform, EU-wide, and directly binding provision[1] on which cover assets could be used to back a covered bond in order to achieve a favourable risk weighting. These requirements continue to apply.

a) Article 6 of the CBD goes beyond the framework of Article 129 of the CRR and allows for additional cover assets. If such cover assets going beyond Art. 129 CRR are included in a cover pool, the covered bonds issued on this basis would lose their preferential treatment in accordance with Article 129 of the CRR, but can make use of the other special provisions directly linked to the CBD or other EU directives that refer to the CBD.

   Furthermore, according to Article 27 of the CBD, a covered bond whose cover assets meet the requirements of Article 129 of the CRR may be labelled as a "European Covered Bond (Premium)". However, the term "Premium" may not be used for covered bonds that go beyond this group of cover assets. In the meantime, the term "Directive-only covered bond" is sometimes used for these bonds in order to simplify matters and to distinguish them from "CRR Covered Bonds".

b) Article 6(1) of the CBD provides for four categories of eligible cover assets:

   (1) Assets that are eligible pursuant to Article 129 of the CRR:[2] These are mainly traditional assets, especially claims related to property financing, public financing, and ship financing. In this context, the following LTV ratios[3] apply to property and ship assets: residential immovable property mortgages 80%; commercial immovable property mortgages 60%;[4] and maritime liens on ships 60%.

1 Requirements for cover assets for covered bonds were included for the first time in point 68 of Part I of Annex VI of Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions. This directive together with Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions were usually collectively referred to as the "CRD I Package". For more details on the CRD rules for covered bonds, see Engelhard, Covered Bonds and the EU Capital Requirements Directive, ECBC, European Covered Bond Fact Book, 1st Edition, 2006, p. 179 (pp. 180 et seq.).

2 Point (a) of Article 6(1) of the CBD.

3 Loan to Value ratio. Article 129 of the CRR leaves it open as to whether national CB legislators define these LTV limits in absolute or relative terms (i.e., whether exceeding the loan amount leads to the result that the entire loan may not be used for cover, or whether the virtual division of the loan into a part for cover purposes and part outside of cover is permitted). The national CB laws differ considerably in this respect.

4 This can be exceeded up to a maximum level of 70% if the total assets pledged as collateral for the covered bonds exceed the nominal amount outstanding by at least 10%.

(2) High-quality cover assets:[5] exact criteria for the high quality of cover assets are not provided. Rather, it lists requirements that a cover asset has to fulfil by consisting of a claim for payment[6] and a collateral asset.

These cover assets can also be property and ship financing that exceed the LTV ratios provided in Article 129 of the CRR, while collateral assets can also be provided as "physical collateral assets"[7] or as "assets in the form of exposures".[8]

In the case of a mortgage loan, the collateral asset would be a lien encumbering a property (and thus a physical collateral asset). These physical collateral assets can be both movable and immovable assets. They require generally accepted valuation standards that are appropriate for the physical collateral asset concerned.

In addition, these physical collateral assets require the existence of "a public register that records ownership of and claims on those physical collateral assets."[9] This requirement was one of the main points of contention in the provision, as there are no registers for many assets. As such, the following text was added: "Member States may provide for an alternative form of certification of the ownership of and claims on that physical collateral asset, insofar as that form of certification provides protection that is comparable to the protection provided by a public register in the sense that it allows interested third parties, in accordance with the law of the Member State concerned, to access information in relation to the identification of the encumbered physical collateral asset, the attribution of ownership, the documentation and attribution of encumbrances and the enforceability of security interests."[10] The EU legislator has thus opted for a broad recognition of national covered bond regulations and national certification and recognition schemes.

(3) Public undertakings:[11] these include claims on loans to or guarantees by public undertakings within the meaning of Article 2 of the Transparency Directive.[12]

The reference to this legal definition of public undertakings makes the scope of this category very broad.[13] With its goal of classifying as many companies as possible as "public" (thus making them subject to transparency requirements), the EU Transparency Directive does not aim to define a group of high quality public borrowers or guarantors. Its application was a political compromise to settle the dispute about the scope of counterparties eligible for cover.

Further requirements are set out in Article 6(4) of the CBD. These contain several terms that are subject to interpretation, such as "provide essential public services" and "subject to prudential supervision".

(4) Claims against credit institutions and insurance undertakings: On the one hand, recital 16 of the CBD makes it clear that credit institutions and insurance undertakings should not be considered public undertakings. In consequence, claims against them cannot be eligible for cover in accordance with point (c) of Article 6(1) of the CBD.

5 Point (b) of Article 6(1) of the CBD in conjunction with Article 6(2) and Article 6(3) of the CBD.

6 In the case of a mortgage loan, eligible claims for payment would be, for example, claims for payment of interest and principal.

7 Point (a) of Article 6(3) of the CBD.

8 Point (b) of Article 6(3) of the CBD.

9 Point (a) of Article 6(3) of the CBD.

10 Last sentence of Article 6(3) of the CBD.

11 Point (c) of Article 6(1) and Article 6(4) of the CBD.

12 Recital 16 of the CBD. Commission Directive 2006/111/EC of 16 November 2006 on the transparency of financial relations between Member States and public undertakings as well as on financial transparency within certain undertakings, Official Journal of the European Union of 17 November 2006, L 318/17.

13 In accordance with the legal definition in Article 2 of the EU Transparency Directive 2006/111/EC, a public undertaking means "any undertaking over which the public authorities may exercise directly or indirectly a dominant influence by virtue of their ownership of it, their financial participation therein, or the rules which govern it. A dominant influence on the part of the public authorities shall be presumed when these authorities, directly or indirectly in relation to an undertaking: (i) hold the major part of the undertaking's subscribed capital; or (ii) control the majority of the votes attaching to shares issued by the undertakings; or (iii) can appoint more than half of the members of the undertaking's administrative, managerial or supervisory body;…."

On the other hand, however, they fulfil the requirements for public supervision in accordance with point (b) of Article 6(3) of the CBD. This means that any claim for payment, for whatever legal reason, to cover European covered bonds is eligible if it is guaranteed by a credit institution or insurance undertaking.

In discussions, the European Commission stressed that the aim of the negotiations was to allow payment claims against credit institutions and insurance undertakings for European Covered Bonds (without Premium) to be accepted as eligible for unlimited covered (i.e., not only payment claims guaranteed by them). The collateral asset required by point (b) of Article 6(3) of the CBD is in these cases the "ongoing public supervision of the counterparty's operational soundness and financial solvability" of the credit institution or insurance undertaking. Although the wording of Article 6 of the CBD is ambiguous, clarification is made in recital 16. Its mention of claims against credit institutions and insurance undertakings not only relates to guarantees, but directly to these claims.

In order to make this even clearer, on 12 September 2019, the EU expert group for the alignment of the various translations decided to change the order of the wording of recital 16 so that the statement that claims against credit institutions and insurance undertakings should be eligible for cover is presented in such a neutral manner that their direct eligibility for cover becomes even clearer. This change has been incorporated in a corrigendum, thus adopted and published with the CBD.

c) Given the multitude of conceivable cover assets, Article 10 of the CBD aims to make covered bonds more or less uniform in order to ensure homogeneity in the national transposition by the EU Member States, without however defining how this is to be interpreted. Article 10 of the CBD[14] leaves it to national legislators to decide how to regulate homogeneity. The more cover assets a national CB law permits, the more important it becomes to distinguish between them.

d) The complicated topic of allowing derivative contracts in the cover pool is regulated separately in Article 11 of the CBD.

2.4 Segregation of cover assets

Article 12 of the CBD prescribes the segregation of cover assets but does not regulate it. It is thus left to Member States or, at their discretion, even to the issuers to ensure segregation.

a) The legal structures of covered bonds cannot be harmonised

The basic legal structures of covered bonds vary widely and have developed over many years (in some cases centuries). In order to make it easier to compare and contrast these diverse forms, they are usually categorised in five different CB models based on the issuer: specialised funding institutions (vehicles), traditional specialized credit institutions, universal credit institutions, SPV models, and pooling models.

The fundamental differences are particularly evident in the rules governing the link between covered bonds and their cover assets, which are crucial for the segregation of both parts (of critical importance in the event of insolvency of a CB issuer) from the remaining assets of a CB issuer. The legal structure interacts with the degree of specialisation of CB issuers and their ability to integrate into banking groups, so any change in this legal structure would also affect the group structure.

Right from the start of the harmonisation work, the European Banking Authority (EBA) and the European Commission realised that the harmonisation of these fundamental features would not be feasible. It would have been necessary to intervene profoundly in the existing structures of active CB issuers and in well-functioning CB markets without being able to estimate the consequences and effort involved even approximately, and nobody wanted to examine the accounting and tax consequences of a model change in detail.

14 Recital 18 of the CBD is also clear in this respect.

As such, Article 12(1) of the CBD only provides the following:

> All cover assets have to be identifiable.[15] This can be done through entry in a cover register, as stipulated in most CB laws in EU Member States. This can also be achieved by establishing a separate legal entity for the cover pool[16] or even for the CB issuers,[17] so that the cover pool and total assets of this fully specialised company are basically identical; a cover register to decide on the distribution between the cover pool and the insolvency assets in the event of CB issuer insolvency is thus not necessary.

> The respective CB law has to provide for segregation of assets.[18]

> The cover assets have to be protected from any third-party claims.[19]

Limiting the provisions to these basic statements means that principle-based harmonisation also applies here, and the design is left to the national CB legislators.

b) Foreign cover assets and segregation of assets

The most challenging discussion in this context focuses on the questions of whether and to what extent foreign cover assets can be integrated into a cover pool or segregated under insolvency law – or, in other words, whether the protection of CB investors regulated by national law also extends to cover assets located abroad.

All CB laws aim to protect CB investors in the event of the insolvency of the CB issuer. If the registered office of the CB issuer is in the same country as the cover assets, the legislator may regulate the allocation of cover assets to the covered bonds because both are located in its territory and therefore subject to its regulatory competence.

Segregation of assets should also apply if the cover assets are located outside the country in which the CB issuer has its registered office. However, this is obviously no longer entirely in the hands of the national legislator.

This gives rise to two main questions: Could other parties than CB creditors seize cover assets abroad in order to gain access to the payments of the loan debtors? Could secondary or territorial insolvency proceedings be opened abroad in respect of the assets of the CB issuer there and, if so, would the preferential treatment of CB creditors under the CB law of the home country of the CB issuer be respected in foreign insolvency proceedings?

c) Cover assets from EU Member States

In answering these questions, the creation of the Directive on the Reorganisation and Winding-up of Credit Institutions[20] is of great importance for the legal area of the EU. This had to be transposed into national law by EU Member States by 5 May 2004.

This EU directive follows the principles of country of origin and universality. This means that the authorities and courts of the country in which the credit institution has its registered office are competent for recovery measures and consequently also for measures taken by banking supervisory authorities in advance of or

15 Point (a) of Article 12(1) of the CBD.

16 This is the case with the CB SPV models in Italy, the Netherlands, and the United Kingdom; here, the SPV is not a credit institution, but guarantees the covered bonds issuances of the universal credit institution with its assets acquired from the universal credit institution. This is also the preferred CB model outside Europe (e.g., in Australia, Canada, New Zealand, and Singapore).

17 France and Norway bear mentioning here. In these countries, the special purpose company is a credit institution that acquires the cover assets from a universal bank parent company and issues the covered bonds itself.

18 Point (b) of Article 12(1) of the CBD.

19 Point (c) of Article 12(1) of the CBD.

20 Directive 2001/24/EC of the European Parliament and of the Council of 4 April 2001 on the reorganisation and winding up of credit institutions, Official Journal of the European Union L 125/15 of 5 May 2001.

to prevent insolvency, which have to take effect in all other EU Member States.[21] This also applies to the opening and performance of winding-up proceedings.[22]

Creditors other than CB creditors cannot attach cover assets in other EU countries and thus cannot gain access to the payments of local loan debtors. It is not possible to open secondary or territorial bankruptcy proceedings against the assets of the CB issuer in other EU countries. The protective effect of the national CB laws is therefore fully effective within the countries of the EU.

d) Cover assets from third countries

The legal situation becomes more complicated with respect to cover assets located in third countries.[23] Neither national nor EU legislators can create regulations that impact third countries and override international enforcement and insolvency law or directly interfere with regulatory sovereignty of third countries. Consequently, attachment and secondary bankruptcy proceedings in third countries cannot be excluded by domestic legal measures. The EU CB legislator was aware of this. As such, the requirements of Article 12 and Article 7 of the CBD have to be considered in conjunction.

Article 7(1) of the CBD explicitly allows EU Member States to include assets from third countries as cover assets. Although Article 7(2) of the CBD contains requirements for comparability, these relate to collateral assets and their enforceability.[24]

The scope for flexibility in this area is also a consequence of principle-based CB harmonisation.

2.5 Cover pool monitors and public supervision

The provisions of Article 13 of the CBD on the "cover pool monitor" and, in particular, of Articles 18 to 26 of the CBD on "covered bond public supervision" are groundbreaking, as there has been nothing comparable on covered bonds in EU law until now.[25] Without the intensive work of the European Banking Authority (EBA), this density of regulation would not have been possible.

The very fact that Article 13 is located in Title II of the CBD (i.e. Structural features of covered bonds), and Articles 18 et seq. are located in Title III of the CBD (i.e. Covered bond public supervision), shows the decision of the EU legislator that the activity of a cover pool monitor cannot be considered part of public supervision.

It was highly disputed whether the function of a cover pool monitor should be required at all and how its independence should be structured. Here too, principle-based harmonisation is evident: As there are CB cover pool monitor regulations in most, but not all, Member States, the entire cover pool monitor provision has been regulated only as a possibility (i.e., as an optional provision, which, however, contains some mandatory requirements if the decision is made to set up such an authority). In addition, various versions of independence have been permitted with mention made both of a "cover pool monitor … separate and independent from the credit institution",[26] as well as of an "internal cover pool monitor"[27] when the function is not separate from the credit institution. However, neither the selection criteria nor the economic relationship[28] with the CB issuer are regulated for either cover pool monitor version, so this too remains within the scope of the national CB legislator's freedom of design.

21 Recitals 6 and 7, as well as Articles 3(1) and 3(2) of the Directive on the Reorganisation and Winding-up of Credit Institutions.

22 Recitals 14 and 16, as well as Articles 9 and 10 of the Directive on the Reorganisation and Winding-up of Credit Institutions.

23 According to EU law, third countries are countries outside of the EU and the EEA.

24 The content of this was adopted from Section 18(1) of the German Pfandbrief Act.

25 Article 52(4) of the UCITS Directive and all EU provisions on covered bonds that use the same wording or refer to it only contain the provision that there has to be "special public supervision". However, it has never been clarified how the terms "special" and "public" should be interpreted.

26 First sentence of Article 13(3) of the CBD.

27 Second sentence of Article 13(3) of the CBD.

28 In particular, the remuneration for the work of the cover pool monitor.

The attention to detail with which Articles 18 to 26 of the CBD regulate various issues concerning the competences and procedures of CB competent authorities is remarkable. In particular, the list of administrative penalties detailed in Article 23 of the CBD is extremely long. These provisions are the result of the deliberations of the EBA's CB working group, which brought together and (in part) summed up the existing national provisions.

2.6 Investor information

The provisions included in Article 14 of the CBD have been largely taken from Article 129(7) of the CRR. There is a discussion on how to transpose the requirement that CB issuers have to regularly publish information on credit risks into national CB law.[29]

Here too, the CBD aims at principle-based harmonisation. As such, if it does not regulate its objectives in detail, rather, it is up to the national CB legislators to decide on the details and scope, which will be based on existing standards.

The connection between this provision and Article 6 of the CBD is obvious. The wider the range of eligible cover assets permitted by national CB law beyond the traditional cover assets, the greater the consideration that needs to be given to including transparency provisions for the associated credit risks.

2.7 Coverage requirements

Article 15 of the CBD contains provisions on coverage principles[30] and coverage calculation. Although the nominal principle is provided for in general, national CB legislators may also allow for other principles of calculation, the details of which have to be regulated in national CB laws.[31]

For the first time, an EU provision has stipulated that winding-down costs are to be taken into account in the coverage calculation:[32] "the expected costs related to maintenance and administration for the winding-down of the covered bond programme."

In order to avoid the time-consuming and costly calculation of winding-down costs according to current (and therefore frequently changing) demand, EU Member States may allow their national CB laws to calculate these winding-down costs on the basis of a "lump sum calculation".[33]

Major discussions have been triggered by the question of whether the minimum overcollateralisation already provided for in many countries can be used as this lump sum. The European Commission has confirmed this in principle on various occasions. However, it was emphasised that these lump sums cannot be used twice. Thus, anyone using a statutory overcollateralisation provision to cover winding-down costs cannot use the same amount again to meet the overcollateralisation provisions of Article 129 of the CRR. This is already apparent from the fact that the calculation of coverage and the calculation of overcollateralisation are regulated by different pieces of legislation (i.e., the CBD and Article 129 of the CRR).

2.8 Requirement for a cover pool liquidity buffer

Article 16 of the CBD introduces a new element to EU legislation on covered bonds, as the requirement to maintain a liquidity buffer for the "next 180 days" can be found neither in Article 52(4) of the UCITS Directive, nor in Article 129 of the CRR. The aim of this provision is to enhance the quality of covered bonds by increasing the probability that CB creditors will receive timely payment in the event of the insolvency of a CB issuer.

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29 Point (d) of Article 14(2) of the CBD.

30 Article 15(2) of the CBD.

31 Article 15(6) of the CBD. This allows the continuation of the net present value calculation of cover as it is currently regulated in a lot of national CB laws.

32 Point (d) of Article 15(3) of the CBD.

33 Second sentence of Article 15(3) of the CBD.

There were intense discussions on how Article 16 of the CBD could be brought into line with the LCR requirements[34] of general banking supervision law,[35] which lay down criteria for the eligibility of covered bonds as "liquid assets".

Following a consultation period, the EU Commission published the amended LCR delegated regulation on 10 February. The amended LCR delegated regulation addresses the double-counting issue in the liquidity buffer by treating liquid assets in the cover pool that are held as part of the liquidity buffer up to the amount of the net liquidity outflow within the next 30 days as unencumbered. It also fixes ambiguous or outdated rules. In addition, the new rules clarify how the netting principle will work when calculating the liquidity buffer. The Regulation has a binding legal force throughout every EU Member State and shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union. It shall apply from 8 July 2022.[38]

Article 16(5) of the CBD simplifies matters further by permitting national CB legislators to allow maturity extension provisions to be taken into account in the calculation of the liquidity buffer. This also means that the liquidity buffer would only be required for interest liabilities falling due in the next 180 days if either no principal amounts fall due in this period or if principal amounts falling due according to the original payment schedule could be postponed by at least this period.[39]

2.9 Conditions for extendable maturity structures

For a number of years now, numerous CB issuers throughout Europe have outlined in their terms and conditions of issuance that the maturity of their covered bonds may be extended under certain conditions.[40] Given the major significance of this development, it was necessary to include the topic in the CBD.

Article 17 of the CBD grants EU Member States the possibility of allowing the issuance of covered bonds with extendable maturity structures; this is therefore an optional provision. However, at the same time, mandatory requirements apply to these provisions if they are used. The national CB laws can either regulate all details of maturity extension themselves,[41] or limit themselves to the basic principles and leave further design to the CB issuers.

A minimum requirement is that the national CB law has to specify the objective triggers for maturity extension (i.e., these may not be at the discretion of the CB issuer).[42] These maturity extension triggers are to be specified in the contractual terms and conditions of the covered bond.[43] When introducing provisions for maturity extension into national CB laws, the question thus arises of whether this is also possible for covered bonds that have already been issued (i.e., are in circulation). This can occur in two ways:

First, the CB issuer could ask the CB holders for their consent to a subsequent amendment of the terms and conditions of issuance (this approach could be quite costly). Second, Article 30 of the CBD may be applied,

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34 Liquidity coverage ratio. Commission Delegated Regulation (EU) 2015/61 of 10 October 2014 to supplement Regulation (EU) No 575/2013 of the European Parliament and the Council with regard to liquidity coverage requirement for Credit Institutions.

35 Article 412 of the CRR regulates the requirement that banks have to be able to provide liquidity for the next thirty days even under stressed conditions.

36 This, however, weakens covered bonds to a certain extent, as in the event of the insolvency of a CB issuer, for the first 30 days, the liquidity buffer would not be part of the cover assets segregated under insolvency law, but rather would be part of the general insolvency estate.

37 As the LCR provisions require all liabilities of a CB issuer to be considered, a solution has to be anchored in the LCR legislation.

38 Even during the work on the CBD, it was suggested that the LCR Delegated Regulation should stipulate that the cover assets should not be treated as encumbered for the purposes of the LCR liquidity analysis, so that they could be counted towards the LCR.

39 In the CB issuance practices of soft-bullet covered bonds to date, a maturity extension of one year is common, and some even go beyond that. Polish CB law also regulates maturity extensions of one year. There are no known provisions on extensions for less than 180 days.

40 For an overview of this topic, see Rudolf, Extendable maturity structures – the new standard, ECBC, European Covered Bond Fact Book 2019, pp. 85 et seq.

41 The first country to include detailed provisions for maturity extensions in its CB law was Poland, which did so in 2016.

42 Point (a) of Article 17(1) of the CBD.

43 Point (b) of Article 17(1) of the CBD.

according to which covered bonds issued until 8 July 2022 may be labelled as "Directive-only covered bonds" if, for example, they do not comply with the requirements of Article 17 of the CBD.[44]

A provision is also required whereby a maturity extension does not affect the ranking of CB investors or invert the sequencing of the original maturity schedule.[45] In this respect, it has already been intensively discussed whether this would exclude any change in the sequencing of the servicing of covered bonds in the event of the insolvency of a CB issuer.

Based on the precept of principle-based harmonisation of CBs, it is generally agreed that the CBD does not intend to interfere with the basic structure of CB systems. As such, this provision should be narrowly interpreted as well. Thus, the provision only prohibits changes in the sequencing that would result from the maturity extension and would be to the disadvantage of investors.

2.10 Labelling

Article 27 of the CBD lists two protected labels:

The label "European Covered Bond" may be used for covered bonds that meet the provisions of national law transposing the binding rules of the CBD that apply in the country where the CB issuer has its registered office; and

The label "European Covered Bond (Premium)" may only be used for covered bonds that also meet the requirements of Article 129 of the CRR.

Not every national CB law has to explicitly protect the labelling in the languages of all other EU countries. It is sufficient when a general provision is selected, such as that contained within Article 27 of the CBD.

2.11 Transitional measures

The Directive includes generous grandfathering provisions. The aim is to get a smooth transition towards the new Directive, which should prevent any unintended market distortions.

The grandfathering provision of Article 30(1) of the CBD permits covered bonds issued until 8 July 2022 to be designated as covered bonds in accordance with the CBD, even if they do not meet the requirements of various expressly mentioned provisions[46] of the CBD.[47]

However, during implementation procedure the question was asked in a few countries, whether Art. 30 CBD does not allow to apply the provisions, mentioned in Art. 30, to CBs, which were issued before 8 July 2022.

The purpose of Art. 30 CBD was ensuring that all outstanding (UCITS compliant) covered bonds (CBs) maintain their status quo as CBs even beyond 8 July 2022. The Article was conceived as a plain vanilla grandfathering provision preventing that the new CBD 'infects' existing cover pools and CB markets. Existing covered bonds (issued before 8 July 2022) should be "exempt" from certain new requirements of the Directive (see recital 41). The CB Directive aims at a principle-based harmonization (see recital 5). Therefore, Member States have a lot of discretion how to regulate their national covered bond law in detail. The scope of the grandfathering was conceived product specific. The nature of a principle-based harmonization gives room to national discretion, whether the provisions mentioned in Art. 30 CBD should be applicable only to CBs, which will be issued after 8 July 2022 or to CBs issued before as well.

44 However, without the additional label of "European" (and definitely not of "Premium") that results from the interaction of Articles 27 and 30 of the CBD.

45 Point (e) of Article 17(1) of the CBD.

46 Articles 5 - 12, 15, 16, 17 and 19 of the CBD.

47 For the application of Article 30 of the CBD when a statutory provision introduces an extension of maturity without (subsequent) changes in the terms and conditions of issuance, see III. 9. a) above.

With Art. 30 CBD it should be avoided that member states impose CBD provisions to outstanding CBs, which make no sense or would create a large burden to the CB issuers or even create turbulences in the CB market.

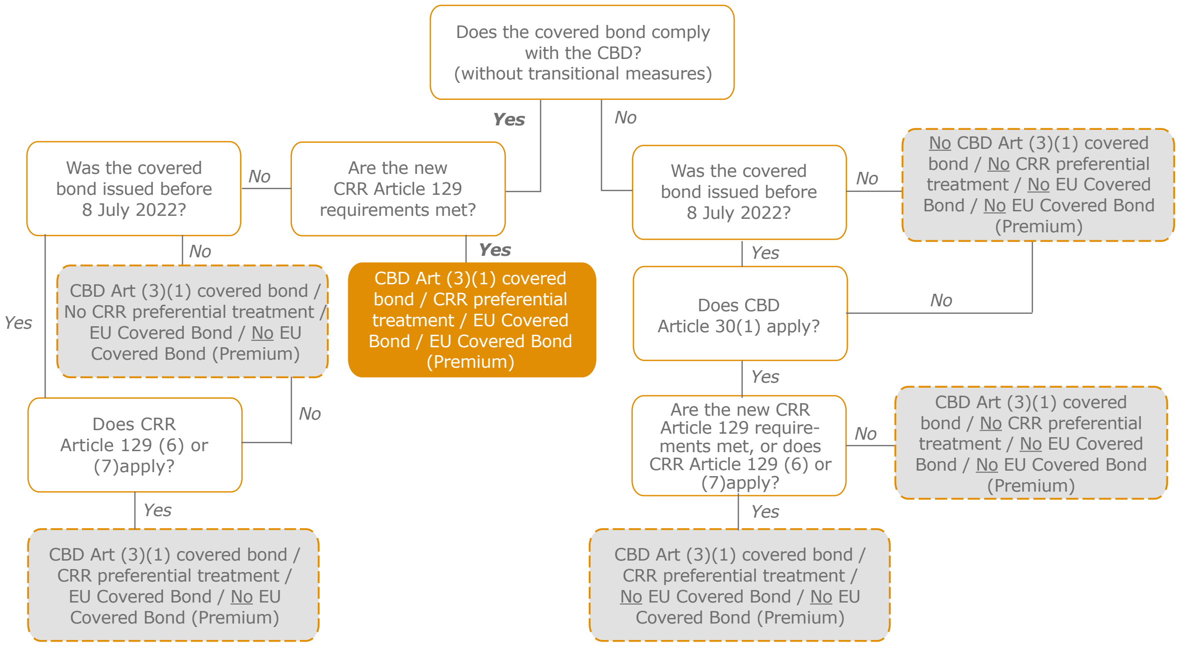
However, it does not mean that it is not allowed to apply these provisions, mentioned in Art. 30 CBD, to outstanding CBs where it makes sense.

All those provisions, which only make sense when being applied both to outstanding and new CBs, may be applied to both groups of CBs. This is obvious when there is only one cover pool for all outstanding and new CBs. It was not the purpose of Art. 30 CBD to oblige Member States or national legislators to create new and separate cover pools for new issuances.

During the harmonization procedure there was not mentioned an understanding of Art. 30 CBD not allowing Member States to apply the provisions for outstanding CBs as well. Such an understanding would have reverted the underlying principle of the grandfathering, which was understood as an important pillar of a smooth transition to the new and more harmonized CB regime. Its intention was clearly ensuring the continuation of existing cover pools and prevention of the appearance of new cover pools in order to safeguard the homogeneity and unity of the European covered bond market, avoiding adverse impacts of the new legislation for CB investors.

Therefore, the wording of Art. 30 CBD is misleading and has to be interpreted in a way that follows the principles of the CB harmonization.

> FIGURE 4: TRANSITIONAL MEASURES VERSUS LABELLING PROVISIONS



Maureen Schuller, ING, CECBC Warsaw 2022, Panel 1

3. Content of the amendment of Article 129 of the CRR

The most important amendment to Article 129 of the CRR is the provision on the minimum level of overcollateralisation. This minimum level of overcollateralisation is to be calculated based on the liabilities referred to in Article 15(2) and (3) of the CBD.

In accordance with the first sentence of Article 129(3a) of the CRR, the minimum level of overcollateralisation is to be 5%.[48] Here too, principle-based harmonisation comes into play, in that the third sentence of Article 129(3a) of the CRR grants the EU Member States the authority to set a lower level of overcollateralisation or to authorise their competent authorities to set such a level, provided that the minimum level of overcollateralisation is not lower than 2%.

The reduction applies to all immovable property cover assets whose valuation is subject to the mortgage lending value. For other cover assets, "the calculation of overcollateralisation is based on a formal approach where the underlying risk of the assets is taken into account";[49] such a reduction must therefore be risk-adjusted.

Art. 129 CRR now contains a grandfathering provision as well, which raises was discussed during implementation procedures.

Art. 129 (7) CRR as of 8 July 2022 states that covered bonds issued before 8 July 2022 and that fulfill all requirements of Art 129 CRR that were valid at the time of its issuance shall not be subject to the requirements laid down in the new paragraphs 3a and 3b and shall be eligible for preferential treatment under paragraphs 4 and 5 until their maturity. Hence, Art. 129 (7) CRR covers a grandfathering for outstanding covered bonds. Art. 129 (3a) CRR as of 8 July 2022 requires an OC and Art. 129 (3b) as of 8 July 2022 determines the eligibility of substitution assets.

Since Art. 129 (7) CRR refers to Art. 129 (3a) and (3b) only, the new requirement of Art. 129 (3) CRR (monitoring of property values) needs to be fulfilled for outstanding CBs as well.

However, this does not fit to the fact that Art. 129 (3a) and (3b) CRR refer to loans and not to CBs.

Therefore, those CB programs, where CB legislation does not foresee the opening of new cover pools but rather the continuation of existing cover pools, cannot benefit from this grandfathering provision of Art. 129 (7) CRR, and therefore need to fulfil the requirements of Art. 129 (3a) and (3b) CRR for outstanding CBs as well.

In the context of implementing the new OC requirements, it was discussed until when is it necessary to fulfill the requirements of Art. 16 CBD regarding liquidity buffer and Art. 129 CRR regarding OC to enjoy preferential treatment according to Art. 129 CRR.

OC and liquidity requirements aim at ensuring full and timely payment of CBs, if the CB issuer is insolvent. In insolvency procedure over the CB issuer, OC and liquidity buffer should be used for this purpose, if necessary. This means that the requirements cannot be upheld in insolvency procedure. Even though this is not stated explicitly in CBD and CRR, this must be interpreted according to the aims of these provisions.

However, the CBs of an insolvent CB issuer very likely will not be treated as CBD and/or CRR compliant CBs, if they do no longer have sufficient OC and liquidity buffer.

4. European Commission and EBA tasks

Through Article 31 of the CBD, the EU legislator has given several tasks to the European Commission and the EBA to complete:

> By 8 July 2024: The development of an equivalence regime for the regulatory treatment of covered bonds issued by third-country credit institutions;[50]

48 During the EU legislative process, a statutory minimum level of overcollateralisation as high as 10% was discussed. However, this was not included in the final version of the CB harmonisation package.

49 Point (a) of the third sentence of Article 129(3a) of the CRR.

50 Article 31(1) of the CBD.

> By 8 July 2025: The submission of a report on the implementation of the Directive in national law, as well as on the developments regarding permissions to issue covered bonds, cover assets, overcollateralisation, cross-border investments in covered bonds, the issuance of covered bonds with extendable maturity structures, and any recommendations for further action;[51]

> By 8 July 2024: The commissioning of a study on the risks and benefit arising from covered bonds with extendable maturity structures;[52]

> By 8 July 2024: The adoption of a report on the possibility of introducing a dual-recourse instrument named a European Secured Note (ESN).[53]

III. ECBC COMPARATIVE DATABASE

The implementation of the CBD has also implied that the ECBC's legislative comparative database (see here) needed to be updated. This has been work in progress with the aim of completing the update by the end of the summer 2022. In the end, the database will provide a comprehensive overview of the key legal details of the new/updated covered bond legislation in individual countries. As such, it will improve transparency about how national legislators have transposed the CBD into national laws, given the highly principle-based character of the CBD.

IV. SUCCESS OF THE INSTRUMENT

To conclude, the covered bond is one of the key components of European capital markets, providing a stable funding tool to banks and a high-quality investment to investors. The volume of covered bonds outstanding at the end of 2021 amounted to over 2.9 tn EUR (covered bonds covered by mortgage loans, public-sector loans and ship loans). In descending order, the five largest issuing countries in 2021 were Denmark, Germany, Sweden, France and The Netherlands.

Covered bonds play an important role in the financial system and thereby contribute to the efficient allocation of capital and ultimately economic development and prosperity. The importance of covered bonds is also evidenced by the broad variety of different bond formats and currencies under which the product is issued and by the large investor base. Both subjects are addressed in the key themes section.

51 Article 31(2) of the CBD.

52 Article 31(4) of the CBD.

53 Article 31(5) of the CBD.

> Figure 5: Volume outstanding covered bonds in Europe end of 2021 in EUR million

	Public Sector	Mortgage	Ships	Others	Mixed Assets	TOTAL
Austria	18,725	71,142	-	-	-	89,866
Belgium	1,211	41,462	-	-	-	42,673
Cyprus	-	650	-	-	-	650
Czechia	-	22,548	-	-	-	22,548
Denmark	14,778	433,812	6,110	-	-	454,700
Estonia	-	850	-	-	-	850
Finland	-	47,119	-	-	-	47,119
France	70,103	226,893	-	-	53,144	350,141
Germany	125,263	264,016	2,088	-	-	391,366
Greece	-	10,840	-	-	-	10,840
Hungary	-	4,483	-	-	-	4,483
Ireland	-	14,433	-	-	-	14,433
Italy	3,575	168,099	-	-	-	171,674
Latvia	-	-	-	-	-	-
Luxembourg	5,022	-	-	300	-	5,322
The Netherlands	-	172,181	-	-	-	172,181
Poland	49	5,000	-	-	-	5,049
Portugal	600	38,150	-	-	-	38,750
Romania	-	200	-	-	-	200
Slovakia	-	8,851	-	-	-	8,851
Spain	17,544	216,808	-	8,522	-	242,874
Sweden	-	242,018	-	-	-	242,018
Total EU	256,870	1,989,556	8,198	8,822	53,144	2,316,589
Iceland	-	4,270	-	-	-	4,270
Norway	1,953	130,030	-	-	-	131,983
Total EEA	258,823	2,123,855	8,198	8,822	53,144	2,452,842
Australia	-	57,864	-	-	-	57,864
Brazil	-	7,609	-	-	-	7,609
Canada	-	138,436	-	-	-	138,436
Japan	-	6,174	-	-	-	6,174
New Zealand	-	10,151	-	-	-	10,151
Panama	-	46	-	-	-	46
Singapore	-	11,087	-	-	-	11,087
South Korea	-	9,966	-	-	-	9,966
Switzerland	-	152,825	-	-	-	152,825
Turkey	-	895	-	-	-	895
United Kingdom	595	91,090	-	-	-	91,685
United States	-	-	-	-	-	-
Total non EU	2,548	620,444	-	-	-	622,992
Total non EEA	595	486,144	-	-	-	486,739
Grand Total	**259,418**	**2,609,999**	**8,198**	**8,822**	**53,144**	**2,939,580**

Source: EMF-ECBC

Notes: Please refer to section 5 for additional information on the ECBC statistics.

2.2 REGULATORY ISSUES

2.2.1 COVERED BONDS AND EU BANKING REGULATIONS

By Frank Will, HSBC & Chairman of the ECBC EU Legislation Working Group

Over the last decade, covered bonds were able to ensure a preferential regulatory treatment compared to many other asset classes reflecting the strengths and low risks of the product. The most important regulatory rules include the Bank Recovery and Resolution Directive (BRRD) which exempts covered bonds from bail-in, the Liquidity Coverage Ratio (LCR) which categorises covered bonds as highly liquid assets, the Capital Requirement Regulation (CRR) which assigned low risk weights to covered bonds and, last but not least, Solvency II which grants low spread risk factors to covered bonds. The last two play a very important role for the banking sector and the insurance industry, respectively.

In addition, there are currently several other initiatives by European and global regulators under way which could have wider implications for the covered bond product and the issuers of covered bonds. Above all, the European Covered Bond Directive and Regulation, which aims at further harmonising the covered bond market in Europe and will apply from 8 July 2022, will have a wide-spread impact on the covered bond markets not only in the Europe but also across the globe. Below we provide an overview of the planned or currently discussed major regulatory amendments which could affect covered bonds.

I. COVERED BOND HARMONISATION

In January 2020, the covered bond harmonisation package entered in force and the EU member states had until 8 July 2021 to transpose it into national law. Both the Covered Bond Directive and the Covered Bond Regulation will apply from 8 July 2022 onwards. The EU approach in harmonising the covered bond market is largely principle-based and incorporates many ideas that were initially suggested by the European Banking Authority (EBA). It consists of two parts:

> A new EU directive on covered bonds, replacing the provisions of Art. 52 UCITS and defining the key structural elements that should be common to all EU Covered Bonds. The idea is that the covered bond directive will be the point of reference for prudential regulatory purposes. It also introduces a European covered bond label.

> Amendments to Art. 129 CRR which include additional requirements that covered bonds have to fulfill in order to continue to benefit from a preferential capital treatment. This includes a new 5% minimum overcollateralisation (OC) requirement. National regulators may, however, apply a lower minimum OC if certain conditions are met. The limit cannot, however, be lower than 2%.

Figure 1 summarises the key features of the new directive and the proposed CRR amendments.

FIGURE 1: COVERED BOND HARMONISATION PROPOSAL BY THE EUROPEAN COMMISSION

Covered Bond Directive	Amendments of Art. 129 CRR
> Requirements for regulatory recognition of covered bonds; replacement of Art. 52 (4) UCITS > Base-line covered bond definition (dual recourse, segregation of assets, bankruptcy remoteness, public supervision, liquidity buffer) > Structural features include soft bullet and CPT features > Extended transparency requirements (moved from CRR)	> Enhanced requirements for preferential capital treatment > Credit risk related features: - eligibility of cover assets - substitution assets - LTV limits - minimum OC between 2-5%

Source: HSBC, EBA

Following the publication of the new covered bond directive in the Official Gazette on 18 December 2019 and the entering into force on 7 January, national lawmakers had 18 months until 8 July 2021 to transpose the Covered Bond Directive into national law, leaving scope for limited national discretion. The provisions of the national laws shall apply at latest 12 months after the transposition deadline. This means that starting from 8 July 2022 the amended national laws must apply.

The CRR amendments on the other hand do not have to be transposed into national law as the regulation is directly applicable and will apply from the same date the Covered Bond Directive is applied.

II. BASEL III

In December 2017, the Basel Committee on Banking Supervision (BCBS) published the Basel III reform package. It encompasses a long list of changes including a revision to the Standardised Approach, a cutback on the (advanced) internal ratings-based approach and the introduction of an output floor which will be phased in over five years from 50% in 2023 to 72.5% in 2028 after the implementation dates were deferred by one year in March 2020 in light of the COVID-19 pandemic. The output floor limits the extent to which banks' risk-weighted assets generated by internal models can be lower than calculated by the standardised approaches. The next step will be the implementation of these revised standards into national law which allow the national regula- tors to make some country-specific adjustments. The EU will also update the Capital Requirements Regulation (CRR) to reflect the amendments at Basel level. The revised Basel III standard will take effect from 1 January 2023 (following the above mentioned 1-year deferral in response to the COVID-19 crisis).

Moreover, the reforms introduced preferential risk weights for covered bonds and define the minimum standards that covered bonds must fulfil: According to the Basel document, "covered bonds are bonds issued by a bank or mortgage institution that are subject by law to special public supervision designed to protect bond holders. Proceeds deriving from the issue of these bonds must be invested in conformity with the law in assets which, during the whole period of the validity of the bonds, are capable of covering claims attached to the bonds and which, in the event of the failure of the issuer, would be used on a priority basis for the reimbursement of the principal and payment of the accrued interest."

In order to be eligible for the lower risk weights, cover assets are limited by the Basel Committee to:

> claims on, or guaranteed by, sovereigns, their central banks, public sector entities or multilateral development banks;

> claims secured by residential real estate with a LTV ratio of 80% or lower;

> claims secured by commercial real estate with a LTV ratio of 60% or lower; or

> claims on, or guaranteed by banks that qualify for a 30% or lower risk weight. However, such assets cannot exceed 15% of covered bond issuances.

That means covered bonds backed by ship or aircraft loans will not benefit from a preferential risk weight under the Basel rules. Moreover, the required minimum overcollateralisation (OC) is set at 10% on a nominal basis. Importantly, the 10% level does not have to be required by law. However, if the minimum OC is not required by law, the issuer has to publicly disclose on a regular basis that its cover pool meets the required 10% minimum OC.

Moreover, "substitution assets (cash or short-term liquid and secure assets held in substitution of the primary assets to top up the cover pool for management purposes) and derivatives entered into for the purposes of hedging the risks arising in the covered bond program" may form part of the cover pool.

Finally, the Basel Committee sets out minimum disclosure requirements. The bank investing into covered bonds must demonstrate to its national supervisors that:

(a) it receives portfolio information at least on: (i) the value of the cover pool and outstanding covered bonds; (ii) the geographical distribution and type of cover assets, loan size, interest rate and currency risks; (iii) the maturity structure of cover assets and covered bonds; and (iv) the percentage of loans more than 90 days past due;

(b) the issuer makes the information referred to in point (a) available to the bank at least semi-annually.

Risk weights

Should the covered bond fulfill the requirements set out above, the risk weight should be determined by the issue-specific rating or – if the covered bond itself is unrated – by the risk weight of the issuer as set out in figures 2 and 3.

FIGURE 2: RISK WEIGHTS FOR RATED AND UNRATED COVERED BOND EXPOSURES

Rated Covered Bonds:					
Issue-specific covered bond rating	**AAA to AA-**	**A+ to A-**	**BBB+ to BBB-**	**BB+ to B-**	**Below B-**
"Base" risk weight	10%	20%	20%	50%	100%

Unrated Covered Bonds:							
Risk weight of the issuing bank	**20%**	**30%**	**40%**	**50%**	**75%**	**100%**	**150%**
"Base" risk weight	10%	15%	20%	25%	35%	50%	100%

Source: BIS, HSBC

However, to reduce the dependence on external ratings, "banks must perform due diligence to ensure that the external ratings appropriately and conservatively reflect the creditworthiness of the covered bond and the issuing bank. If the due diligence analysis reflects higher risk characteristics than that implied by the external rating bucket of the exposure (ie AAA to AA-; A+ to A- etc), the bank must assign a risk weight at least one bucket higher than the "base" risk weight determined by the external rating. Due diligence analysis must never result in the application of a lower risk weight than that determined by the external rating". Therefore, in some cases a higher risk weight than shown in figure 1 might be applicable.

Market impact

As most benchmark programmes already fulfil most of the necessary requirements – only the OC is slightly lower in some cases – the effort of the covered bond issuers to fulfil these new Basel requirements should be manageable. Regarding the investor demand, the new rules – which are due to apply from January 2023 onwards – should help to further broaden the investor base for covered bonds on a global scale. Covered bond demand by European bank treasuries and the ECB's purchase programme currently play an important role but the preferential risk weights to covered bonds outside of the European Economic Area will likely support the covered bond market in the future.

III. CAPITAL MARKET UNION: EUROPEAN SECURED NOTES (ESN)

Back in February 2015, the European Commission published a Green Paper on "Building a Capital Markets Union". The aim of the Capital Markets Union (CMU) is to improve long-term financing of the European economy by overcoming the adverse effects of financial fragmentation in Europe and to achieve a better allocation of financial resources across Europe. The Green Paper focuses, in particular, on the SME sector in Europe and argues for a much broader approach on long-term financing going well beyond traditional funding provided by banks.

In response to the European Commission initiative, the European Covered Bond Council (ECBC) suggested in May 2015 the introduction of a new dual recourse financial instrument in the European Union to address a funding segment located between the traditional covered bond and high-quality securitisation: the so-called European Secured Notes (ESN). The ESN would benefit from the market best practices of both traditional covered bonds (for funding purposes) and securitisation (for funding and risk-sharing purposes). Such an instrument could be backed by SME loans or other types of assets, such as infrastructure loans, and could contribute to the CMU growth objective.

In June 2018, the European Banking Authority (EBA) published its recommendations on ESNs. The EBA emphasised the importance of separating ESNs from traditional covered bonds and estimates that the aggregated pool of collateral (SME and infrastructure exposures) that would be available for re-financing through ESNs could be as high as EUR4 tn. Moreover, the EBA estimates a potential market size between EUR400bn and EUR1.2 tn based on a coverage comparable to mortgage loans (Figure 3). Since 2003, between 15% and 25% of all residential mortgage loans in the EU have been refinanced via covered bonds. However, if ESNs did not benefit from the same regulatory treatment as covered bonds, the potential market size could be substantially smaller.

Figure 3: Estimates of the size of the ESN market in the near term (EURbn)

	Share of SME and infrastructure loans used to issue ESNs			
	100%	**10%**	**20%**	**30%**
SME loans	3,100	310	620	930
Infrastructure loans	800	80	170	250
Total ESNs market	3,900	390	790	1,180

Source: EBA, HSBC (EBA calculations)

The EBA estimates that the rise of asset encumbrance caused by the introduction of ESNs shouldn't be a concern for the EU banking system as a whole. It could, however, pose additional risks at a national level or at the level of individual issuers. The EBA therefore suggests the introduction of potential asset encumbrance limits at a national level or for specific institutions.

III.1 Regulatory treatment of SME ESNs

As SME ESNs would be structured as dual recourse instruments, the EBA considers – with some adjustments – all of its Best Practices Guidelines on covered bonds to be appropriate for SME ESNs. The EBA proposed stricter cover asset eligibility criteria compared to covered bonds – both at loan and pool levels – to account for the higher risk of SME exposures compared to traditional collateral for covered bonds. Moreover, the EBA recommends a mandatory overcollateralisation of at least 30%.

According to the EBA, a preferential risk weight under the CRR would not be appropriate based exclusively on the underlying assets. However, given the structure of the ESN, a different risk weight requirement compared with unsecured exposure could be considered, which should take into account:

> The dual-recourse character of the instrument;

> The overall consistency of the CRR capital framework between exposure classes;

> A clear distinction between SME ESNs and covered bonds that should be maintained to avoid potential negative side effects on the covered bond market.

The prudential treatment of SME ESNs under the LCR cannot be assessed currently as the instrument does not exist yet and its liquidity cannot be measured. However, given ESNs are issued by credit institutions and fundamental features of covered bonds are met, a preferential investment threshold under UCITS could be considered, according to the EBA. Along the same lines of argument, an exemption from posting collateral under EMIR could be considered. Last but not least, SME ESNs should be exempted from bail-in under the BRRD in line with other secured liabilities.

III.2 Regulatory treatment of infrastructure ESNs

In contrast to SME ESNs, a dual recourse structure would not be appropriate for infrastructure exposure, according to the EBA, "given the bespoke nature, the complex structure and the lack of granularity characterising infrastructure loans." More specifically, the infrastructure project asset class is more heterogeneous and covers a wide range of very diverse assets. Moreover, the credit risk of infrastructure loans is much higher during the construction phase than in the operational phase (Figure 4). The EBA therefore recommends restricting cover assets to project finance loans in the operational phase.

Figure 4: Distribution of defaults and ultimate recoveries by project phase

	Defaults	Average years to default	Recovery rates
Construction	28	2.7	66%
Operational	161	4.9	76%
Total	189	4.6	74%

Source: EBA, HSBC

As the EBA advised against dual-recourse for infrastructure ESNs, it did not assess the potential regulatory treatment. However, the EBA views the introduction of an EU infrastructure bond as an off-balance-sheet instrument for high-quality project finance loans as something worth considering.

The ESN project has gained in importance due to both the launch of the European Commission's new CMU Action Plan in September 2020 and the potential use of ESNs as a recovery tool. In accordance with the provisions of the Covered Bond Directive and as also indicated in the CMU Action Plan, the European Commission must prepare a report on the potential of ESNs in Europe by 8 July 2024 and may choose to propose a subsequent legislative initiative. Against this backdrop, the ECBC – via its ESN Task Force – has accelerated its work on the ESN concept through dialogue with ECBC member institutions as well as important external stakeholders such as the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB) and a wide array of other interested parties including investors, issuers, rating agencies and business associations. In April 2021, the ECBC prepared the ESN Blueprint highlighting areas where a common understanding has been achieved amongst ECBC members and stakeholders from across the EU based on market analysis and best practices. The Blueprint focuses on three main areas: (i) the business case, (ii) eligibility criteria and (iii) the analysis of structural features.

From a banking industry perspective, the introduction of ESNs as standardised dual-recourse funding tool to refinance SME loans would be an interesting funding alternative for banks. While it may be of limited added value in the current compressed yield environment, it can gain in importance if the market levels start to normalise and the risk premiums demanded by market participants increase. It could also play an important role in the recovery process in the aftermath of the COVID-19 pandemic. As highlighted by the EBA it is crucial to maintain a clear distinction between ESNs and covered bonds given the higher risk of the underlying SME collateral compared to mortgage and public sector assets. Crucial for the success of such a tool in terms of new issue volumes and achievable funding levels would also be a positive regulatory recognition of this financial instrument.

IV. NET-STABLE FUNDING RATIO (NSFR)

The Basel III framework and the Capital Requirement Regulation (CRR) introduced two liquidity standards: The Liquidity Coverage Requirement (LCR) and the Net-Stable Funding Ratio (NSFR). While the LCR rules have been phased-in in Europe since October 2015, the NSFR rules enter into force on 28 June 2021 following the adoption by the European Parliament in May 2019. At the Basel level, the NSFR already came into force for internationally active banks on 1 January 2018.

Principally, the NSFR is calculated as the ratio of Available Stable Funding (ASF) to Required Stable Funding (RSF), which has to be greater than 100%. ASF and RSF are calculated on the liabilities and assets, respectively, weighed by specific factors. These factors depend among others on the remaining maturity, the type of assets and the encumbrance status.

$$\text{NSFR} = \frac{\text{Available Stable Funding (ASF)}}{\text{Required Stable Funding (RSF)}} \geq 100\%$$

V. LEVERAGE RATIO

In order to "prevent institutions from excessively increasing leverage" (European Commission, November 2016), the Basel Committee and the EU have created an additional defence line: the leverage ratio. The leverage ratio complements the risk-weighted capital requirements "by providing a safeguard against unsustainable levels of leverage and by mitigating gaming and model risk across both internal models and standardised risk measurement approaches" (Basel Committee, December 2017). The BCBS requires banks to maintain a leverage ratio of 3%. Global Systemically Important Banks (G-SIBs) are subject to even higher ratios. The 3% leverage ratio became binding in the EU on 28 June 2021. Thus EU banks had been required to disclose the leverage ratio since the beginning of 2015. In light of the COVID-19 pandemic, the ECB allowed in September 2020 Eurozone banks under its direct supervision to exclude certain central bank exposures from the leverage ratio calculation. In June 2021, this relief measure was extended until end-March 2022.

VI. LIQUIDITY COVERAGE RATIO (LCR)

In October 2014, the European Commission published its delegated act on the liquidity coverage ratio (LCR) which requires banks to hold a certain amount of liquid assets to cover their net cash outflows over 30 days. The LCR has been phased-in since October 2015 and was fully implemented at the beginning of 2018 which is one year earlier than demanded by the Basel standard. This phase-in period granted credit institutions sufficient time to build up their liquidity buffers, whilst preventing a disruption of the flow of credit to the real economy during the transitional period.

In a stress scenario when a bank need its liquid assets, its LCR levels could (temporarily) fall below 100%. However, the bank would be required to immediately notify the competent authorities and submit a plan for the timely restoration of the LCR to above the 100% threshold.

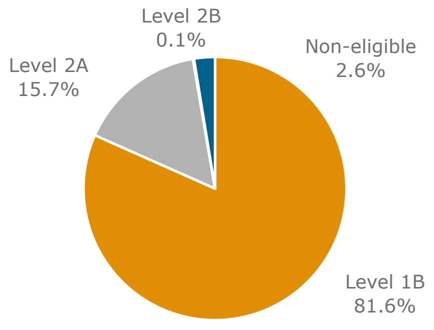
As the liquidity buffer is to reach a considerable level of a bank's balance sheet (10% or more of the total assets of an average EU bank according to European Banking Authority (EBA) estimates), the implementation of the LCR is likely to sustain the demand for eligible bonds.

Figure 5 provides a breakdown of the EUR benchmark covered market by LCR level. More than four-fifths of the covered bonds are Level 1, roughly 16% are Level 2A and only 0.1% are Level 2B as this category currently merely consist of Greek covered bonds. Less than 3% of the EUR benchmark covered bonds are not LCR eligible.

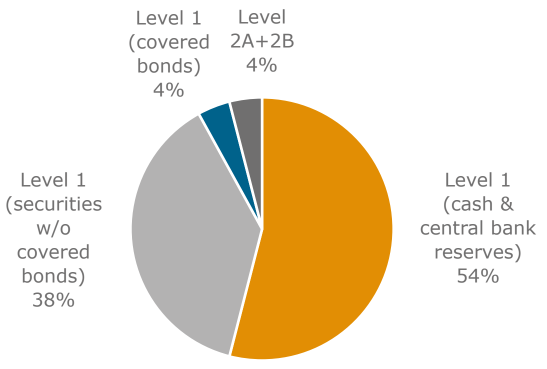
The breakdown of the actual liquidity buffers shows that the share of covered bonds in the LCR portfolios is relatively small as most banks tend to focus on cash, central bank reserves and government bonds to fulfil their LCR requirements. According to the LCR report by the European Banking Authority (EBA) from December 2020, the 159 EU banks (incl. subsidiaries) participating in the Quantitative Impact Study (QIS) held around 18% of their total assets at the end of June 2020 in form of liquid assets. Level 1 assets (excluding covered bonds) made up about 92% of the liquid buffers, including 54% cash & central bank reserves and 38% other eligible securities. In contrast, the share of Level 1 covered bonds is slightly above 4% while Level 2A and Level 2B assets (including but not limited to covered bonds) add up to about 4% (Figure 6).

> Figure 5: Classification of covered bonds

> Figure 6: Usage of Covered Bonds



Source: HSBC, Bloomberg (only EUR benchmark covered bonds)



Source: EBA, QIS data as of end-June 2020

Quick overview of the various LCR classifications

Level 1 assets ('Extremely High Quality Liquid Assets') include cash, deposits at the central bank, all types of bonds issued or guaranteed by the EU Member States' central government, covered bonds that meet certain conditions, as well as certain agency and supranational issues. Regarding the classification of EU sovereign bonds, no distinction was made between member states as that could have led to a fragmentation of the internal market and potential contagion risk.

Level 2A assets ('High Quality Liquid Assets') include exposures to regional governments, local authorities or public sector entities (PSEs) with a risk weight of 20% and covered bonds with a credit quality step 2 rating (at least A-) and non-EU covered bonds rated at credit quality step 1 (at least AA-). Corporate bonds with at least credit quality step 1, a minimum issue size of EUR250m and maximum maturity of 10 years at the time of issuance are also classified as Level 2A.

Level 2B assets ('High Quality Liquid Assets') incorporate high quality securitisations for RMBS, auto, SME and consumer loans and high quality covered bonds that do not meet the rating threshold of Level 1 and 2A. Shares meeting certain conditions and corporate bonds with at least credit quality step 3 (at least BBB-), a minimum issue size of EUR250m and maximum maturity of 10 years at the time of issuance are accepted as Level 2B.

Classification of covered bonds

Level 1 HQLAs include covered bonds that meet certain conditions, including being issued by an issuer in the European Economic Area (EEA), having a credit quality step 1 (at least AA-), a minimum size of EUR500m equivalent and a minimum overcollateralisation of 2%. The rating threshold will be based on a second-best rating approach in line with capital requirement rules (CRR) rather than on the ECB's best rating rule. Whilst other Level 1 assets are not subject to either liquidity buffer limits or to a haircut to their market value, Level 1 covered bonds will be subject to a 70% cap in the liquidity buffer and a 7% haircut.

Level 2A HQLAs include:

> EEA covered bonds with a credit quality step 2 rating (A- or better), a minimum size of EUR250m equivalent and minimum overcollateralisation of 7%;

> EEA covered bonds with a credit quality step 1 rating (AA- or better) and an issue size below the EUR500m threshold (but still meeting the minimum size of EUR250m equivalent) need a lower minimum overcollateralisation of 2%;

> Non-EEA covered bonds rated at credit quality step 1 (AA- or better) with a minimum overcollateralisation of 7%. There is no minimum size requirement. However, bonds with a size of EUR500m equivalent or more only need a minimum overcollateralisation of 2%. Moreover, the national covered bond law has to fulfil the CRR or UCITS requirements other than the issuer being based in EU.

Level 2A covered bonds can be used for up to a maximum of 40% in the liquidity buffer and are subject to a 15% haircut.

Level 2B HQLAs can be used for up to a maximum of 15% in the liquidity buffer and are subject to a minimum haircut varying between 25% and 50%. High quality EEA covered bonds that do not meet the rating threshold of Level 1 and 2A fall under this category. There are additional requirements for the cover assets which are limited to public sector and central bank exposures in EEA countries, residential mortgages (max 80% LTV) and guaranteed residential mortgages. The haircut for these covered bonds is relatively high at 30% and the cap is set at 15%.

Furthermore, in order to qualify, EEA covered bonds must be UCITS or CRR compliant. Non-EEA covered bonds must have a national covered bond law. In addition, all covered bonds must fulfil the transparency requirements of Article 129 (7) CRR.

Basel's LCR rules are less favourable

The BCBS LCR rules are less favourable than the EU regulation. Under the Basel rules, covered bonds are defined as bonds issued and owned by a bank or mortgage institution that are subject by law to special public supervision designed to protect bondholders. Issue proceeds must be invested in conformity with the law in assets which, during the entire period until the maturity of the bonds, are capable of covering the preferential claims of the covered bond investors.

On top of that, covered bonds have to (i) be rated AA- (second-highest rating), (ii) have a proven track record as a reliable source of liquidity reflected by a maximum price drop of 10% over 30-day period of stress, (iii) be traded in large, deep and active repo/cash markets with a low level of concentration, and (iv) cannot be issued by the submitting bank itself. Covered bonds meeting these criteria qualify as Level 2A assets rather than Level 1 as under the EU rules and are therefore subject to a haircut of 15% and a cap of 40%.

In July 2017, the BCBS stated that the LCR rules in the EU are not fully aligned with international standards. In particular, the inclusion of high-quality covered bonds as Level 1 assets was criticised. The EU responded to the BCBS comment by highlighting that "the limited broadening of HQLA definition reflects European or national specificities and remains largely consistent with the Basel III LCR Standards. In particular, evidence demonstrates the equivalent liquidity of the additional assets included and, therefore, the choice made is fully consistent with the spirit of the Basel Committee's agreement. [..] The inclusion, under strict conditions, of extremely high-quality covered bonds in Level 1 is motivated by the liquidity patterns of these instruments, which, over long periods of observation, including times of stress, have exhibited liquidity characteristics equivalent to other eligible Level 1 assets".[1]

VII. CAPITAL REQUIREMENT REGULATION (CRR)

The CRR came into force on 1 January 2014. It assigns relatively low risk weights to covered bonds meeting certain criteria. As part of the covered bond harmonisation process, the CRR was overhauled but these changes will not enter into force before 8 July 2022 (please see the separate section "Covered Bond Harmonisation" for more details). Under current rules, covered bonds have to fulfil the requirements of Article 52(4) of the EU Directive 2009/65 (Directive on Undertakings of Collective Investment in Transferable Securities – UCITS) in

1 Basel Committee on Banking Supervision: Assessment of Basel III LCR regulations – European Union, July 2017.

order to be eligible for the preferential risk weights. On top of that, they have to meet the additional eligibility criteria for cover assets of Article 129 CRR.

Article 52(4) UCITS requires that:

> covered bonds are issued by a EU credit institution;

> they are subject by law to special public supervision designed to protect bondholders;

> the issue proceeds are only invested in eligible assets in accordance with the law;

> the bonds are backed by eligible assets during the entire period until their maturity, and

> in the event of issuer default, investors have a preferential claim on the cover assets covering principal and accrued interest.

Article 129 CRR goes beyond the UCITS requirements and demands that the bonds are only collateralised by the following assets (please note that the rating requirements refer to the credit quality step definition by the EU and generally focus on the second-best rating in case of split ratings):

(a) exposures to or guaranteed by central governments, Eurosystem central banks, public sector entities, regional governments or local authorities in the EU;

(b) exposures to or guaranteed by third-country central governments and central banks, multilateral development banks, international organisations rated at least AA-, and exposures to or guaranteed by third-country public sector entities, regional governments and local authorities that are rated at least AA- and are risk weighted as exposures to credit institutions, central governments or central banks; lower rated exposures with a minimum rating of A- cannot exceed 20% of the nominal amount of out- standing covered bonds;

(c) exposures to credit institutions with a minimum rating of AA-. The total exposure shall not exceed 15% of the nominal amount of outstanding covered bonds. The supervisory authorities can allow, after consulting EBA, a lower minimum rating of A- for up to 10% of the total outstanding covered bonds, provided that the application of the higher rating requirement would potentially result in concentration problems. Exposures to EU credit institutions with a maturity not exceeding 100 days shall not be comprised by the AA- requirement but those institutions shall have a minimum rating of A-;

(d) loans secured by residential property up to an LTV of 80%; or by senior RMBS tranches issued by securitisation entities governed by the laws of a member state. The supervisory authority has to ensure that at least 90% of the underlying assets are composed of residential mortgages that have a maximum LTV of 80%. The senior tranches have to have a minimum rating of AA- and do not exceed 10% of the nominal amount of the outstanding issue;

(e) French residential loans with an LTV of up to 80% and a loan-to-income ratio not exceeding 33% which are fully guaranteed by an eligible protection provider rated at least A-. There shall be no mortgage liens on the residential property when the loan is granted, and for the loans granted from 1 January 2014 the borrower shall be contractually committed not to grant such liens without the consent of the credit institution that granted the loan. The protection provider shall be a supervised financial institution subject to prudential requirements comparable to those applied to credit institutions. Both the credit institution and the protection provider shall carry out a creditworthiness assessment of the borrower;

(f) loans secured by commercial immovable property up to an LTV of 60% or by senior CMBS tranches issued by securitisation entities governed by the laws of a member state. The supervisory authority has to ensure that at least 90% of the underlying assets are composed of commercial mortgages that have a maximum LTV of 60%. The senior tranches have to have a minimum rating of AA- and do not exceed 10% of the nominal amount of the outstanding issue. Commercial mortgage with an LTV of up to 70% can be included if the overcollateralisation is at least 10%;

(g) ship mortgage loans with an LTV of up to 60%.

Transparency requirement

Article 129(7) CRR defines certain transparency requirement for covered bonds. It states that covered bonds are eligible for preferential treatment if the covered bond investor can demonstrate to its regulatory authorities that portfolio information are provided by the issuer at least semi-annually:

> Value of the cover pool and outstanding covered bonds;

> Geographical distribution;

> Type of cover assets;

> Loan size;

> Interest rate and currency risks;

> Maturity profile of cover assets and covered bonds;

> Percentage of loans more than 90 days past due.

Standardised Approach

Covered bonds fulfilling the aforementioned criteria are eligible for a preferential risk weight under the CRR. In contrast to previous regulation, the risk weights under the Standardised Approach are based on the covered bond ratings rather than the issuer ratings. Figure 7 shows that covered bonds rated at least AA-/Aa3 qualify for a 10% risk weighting which increases to 20% for bonds being rated from A+/A1 to BBB-/Baa3. For non-investment grade covered bonds rated at least B-/B3 the risk weight is 50%.

FIGURE 7: RISK WEIGHTINGS OF RATED COVERED BONDS UNDER THE STANDARDISED APPROACH

Credit quality step (covered bonds)	1	2	3	4	5	6
Covered bond rating	**AAA to AA-**	**A+ to A-**	**BBB+ to BBB-**	**BB+ to BB-**	**B+ to B-**	**below B-**
Covered bond risk weight	10%	20%	20%	50%	50%	100%

Source: EU, HSBC (Mapping of credit quality steps to rating is based on the second-highest eligible rating in case of split-ratings)

In case of unrated covered bonds, the risk weighting is linked to the issuer rating. However, the risk weights of the covered bonds are significantly lower than those for senior unsecured exposures (see Figure 8 below).

FIGURE 8: RISK WEIGHTINGS OF UNRATED COVERED BONDS UNDER THE STANDARDISED APPROACH

Credit quality step (Issuer)	1	2	3	4	5	6
Issuer rating	**AAA to AA-**	**A+ to A-**	**BBB+ to BBB-**	**BB+ to BB-**	**B+ to B-**	**below B-**
Issuer risk weight	20%	50%	50%	100%	100%	150%
Covered bond risk weight	10%	20%	20%	50%	50%	100%

Source: EU, HSBC (Mapping of credit quality steps to rating is based on the second-highest eligible rating in case of split-ratings)

Non-CRR compliant covered bonds are generally treated as exposures to credit institutions according to Art. 120 CRR. The risk weighting of the bonds, however, will be based on the actual issue/programme rating rather than the issuer rating (Art 139 (1) CRR). This means that a AAA-rated non-CRR compliant covered bond issued by a single-A rated issuer would have a 20% risk weight (rather than a 50% risk weight).

The Internal Ratings-Based Approach (IRBA)

Under the CRR, banks can opt for using approaches based on internal ratings. Under these Internal Ratings-Based Approaches (IRBA), risk weight calculations are based upon a complex formula. This formula uses as inputs the probability of default within a one-year horizon (PD), the loss given default (LGD), the exposure at default (EAD) and the effective time to maturity (M) of the individual securities.

Under the Foundation IRB (FIRB), financial institutions have to estimate PD based upon their internal risk-scoring models; PD refers to the exposure to the corporate/institution, not the bond itself, and is floored at 0.03%. M should be set to 0.5 years in case of repo transactions and to 2.5 years when assessing all other exposures; M can upon approval from the regulator also be fixed at actual maturity but not shorter than one year and not longer than five. Covered bonds meeting the aforementioned eligibility criteria may be assigned an LGD value of 11.25%.

If a financial institution opts for the Advanced IRB (AIRB) instead, it will have to assess all risk components on an individual basis. Under both approaches, irrespective of the country or region within which the bank holding the covered bond is incorporated, the PD to be employed will always only reflect the PD of the issuer. The PD of the collateral pool is not relevant. In no case can the PD be less than 0.03%. Institutions that opt for the advanced approach may use an LGD lower than 11.25%. Those banks will also use the actual M, though the value will be capped for value below 1 and value above 5.

Figure 9 below shows the risk weighting for different PD assumptions and maturities. In all cases, the LGD is set at 11.25%. In case of the FIRB, the maturity is set at M = 2.5 years – this is highlighted in grey in the figure. The PD is based on Moody's default statistics (for the years 1983-2019), floored at 0.03%. A covered bond issued by a bank with an internal issuer rating equivalent to single-A (which translates into a 1-year PD of 0.06%) and a maturity of 5 years would have a risk weight of 5.81% under the FIRB and of 9.81% under the AIRB.

Figure 9: Internal risk weights of covered bonds under the FIRB and the AIRB

Issuer rating equivalent	PD used	Maturity in years					
		1	2	2.5	3	4	5
Aaa/AAA	0.03%	2.01%	3.22%	3.83%	4.43%	5.65%	6.86%
Aa/AA	0.03%	2.01%	3.22%	3.83%	4.43%	5.65%	6.86%
A/A	0.06%	3.41%	5.01%	5.81%	6.61%	8.21%	9.81%
Baa/BBB	0.17%	7.14%	9.47%	10.64%	11.80%	14.13%	16.46%
Ba/BB	0.85%	18.05%	21.37%	23.04%	24.70%	28.02%	31.34%
B/B	3.21%	29.79%	33.05%	34.69%	36.32%	39.59%	42.85%
below B	9.52%	45.63%	48.70%	50.24%	51.78%	54.85%	57.93%

Source: EU, Moody's, HSBC (FIRB: M= 2.5 years; PD is based on Moody's figures and is floored at 0.03%)

With regard to the relevant insurance regulation at European level, please refer to the following article.

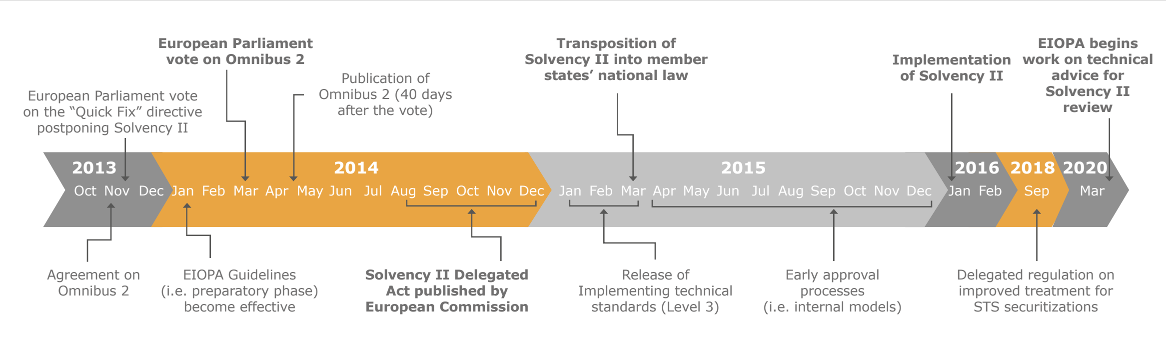
2.2.2 INSURANCE REGULATION – SOLVENCY II

By Florian Eichert, Crédit Agricole, Member of the ECBC Steering Committee

The Solvency II Directive (2009/138/EC) is what the Capital Requirements Directive (CRD) IV is for the banking world – a regulatory regime that introduces risk based capital charges. It is also an attempt to harmonise the EU insurance landscape. It was adopted by the European Parliament and the Council of the European Union in November 2009. Implementing the directive was, however, far from done at this point with multiple delays occurring over the following years. During this period, a number of amendments to the original Solvency II Directive had actually become necessary to be in line with EU's implementing measures according to the Lisbon Treaty of 2009 and EU's new supervisory structure by introducing the European Insurance and Occupational Pensions Authority (EIOPA). These amendments were implemented through the so-called Omnibus II Directive. The agreement on Omnibus II was passed by the European Parliament on 11 March 2014 after a text had been agreed between the European Commission (EC), Parliament and Council on 13 November 2013.

The EC finally adopted the Delegated Regulation (EU 2015/35) containing implementing rules for Solvency in October 2014. The first set of implementing rules was then adopted in March 2015, with the second set of guidelines following suit in the third quarter of 2015. Solvency II finally then came into effect on 1 January 2016.

Figure 1: Timeline of implementation



Source: European Commission, Crédit Agricole CIB

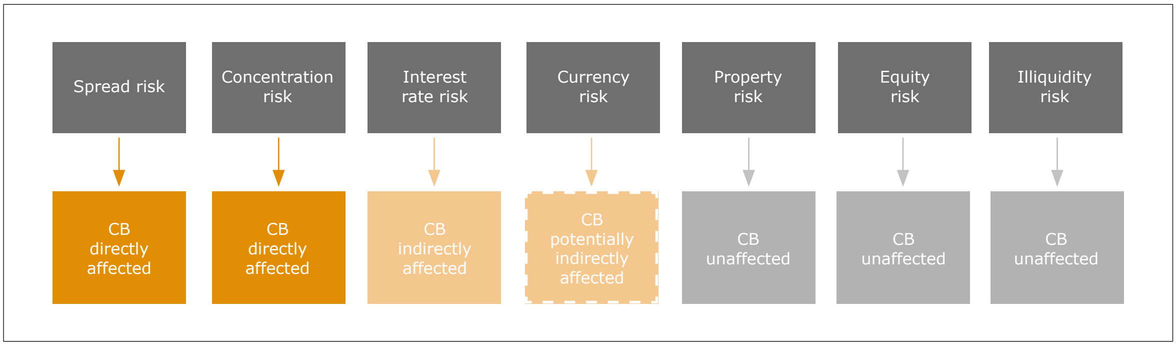
The journey doesn't end there however. There have already been adjustments to the treatment of securitisation (lower spread risk capital charges) for example. In addition to this, the EC's Capital Markets Union (CMU) action plan from September 2015 mentioned that while insurance investors are natural long-term investors, they have been retreating from investing in long-term projects. As a result, the EC made amendments to the treatment of infrastructure and European long term investment funds. The CMU plan also foresaw yet another change to the treatment of securitisation exposure. With the framework for simple, transparent and standardised securitisation products (STS) in place since December 2017, Solvency II capital charges were lowered for STS products in September 2018 via a delegated regulation. Currently, the European Commission (EC) is reviewing the Solvency II regime and EIOPA has been working on a technical advice to the EC on this since March 2020. It published an opinion on the 2020 review of Solvency II in December 2020 stating that "From a prudential perspective, EIOPA is of the view that overall the Solvency II framework is working well and no fundamental changes are needed at this point in time, but a number of amendments are required to ensure that the regulatory framework continues as a well-functioning risk-based regime." EIOPA proposals include adjustments to the extrapolation of long-dated interest rates, adjustments to the equity risk capital charge as well as to factor in the existence of negative rates in the interest rates sub module. For the spread risk sub module, which impacts covered bonds directly, EIOPA does not propose any material changes.

OVERVIEW OF SOLVENCY II – WHERE ARE COVERED BONDS IMPACTED?

Solvency II is a highly complex framework which addresses a vast number of different sources of risks that all interact with each other to come up with a final solvency capital requirement (SCR). Risks range from market risk to underwriting risk, longevity risk or default risk on loan exposures.

Covered bonds are mainly affected by the market risk section and specifically mentioned in the spread risk and concentration risk modules.

> Figure 2: Market risk modules in Solvency II and their relevance for covered bonds



Source: EIOPA, Crédit Agricole CIB

SPREAD RISK MODULE

The spread risk module is the biggest single investment specific driver of capital charges under Solvency II. Interest rate risk is an even bigger driver of capital charges overall but other than spread risk is driven by the overall asset and liability structure of an insurance company and not by the individual asset purchased.

EIOPA describes spread risks as the "results from the sensitivity of the value of assets, liabilities and financial instruments to changes in the level or in the volatility of credit spreads over the risk-free interest rate term structure." In other words, we are talking about the spread vulnerability in volatile scenarios. Spread risk applies to virtually all fixed income instruments apart from sovereign debt rated AA- and better.

Since insurance companies are longer term investors than banks, capital charges for investments are also significantly higher than they are for banks. In addition to this, they are not only driven by credit risk, as is the case for the standardised approach in banking regulation, but are also determined by a combination of rating and duration. The weaker the rating and the longer the investment, the higher the capital charge. The spread risk module capital charges are expressed as a charge per year of duration.

Covered bonds do receive preferential treatment under the spread risk module if they comply with the following criteria:

> They have a credit quality step 0 or 1 which means a minimum rating of AA-;

> They meet the requirements defined in Article 52(4) of the UCITS Directive 2009/65/EC.

For covered bonds that fulfil the UCITS Directive and are rated AAA, a spread risk factor of 0.7% applies per year of duration up to 5Y while AA- to AA+ rated ones have a factor of 0.9%. Covered bonds that do not meet these requirements are treated as senior unsecured exposure. Capital charges are 0.2% higher per duration year.

Determining the duration of a bond is straightforward when it comes to hard bullet covered bonds. Soft bullet structures (as well as to a much lesser extent) conditional pass through (CPT) covered bonds have however become more common often raising the question which maturity is the relevant one. As far as we are aware, Solvency II looks at the extended maturity when determining the spread risk capital charge in the standardised approach. In the IRB approaches investors can work with an expected final maturity date. For soft bullet covered bonds the extra 12 months are thus not major, especially under an IRB approach. For CPT deals that can in theory extend by up to 38 years the story looks slightly different though. Even in an IRB approach, spread risk capital charges under Solvency II will be higher for a comparable hard bullet covered bond with the same original maturity and one reason why some CPT issuers recently switched to issuing soft bullet covered bonds was to be able to extend further out the curve.

When looking at the numbers it is also important to mention that the percentages do not relate to 8% of the invested notional as is the case in the banking world but to the actual invested notional. A 10% risk-weight on covered bonds essentially means a 0.8% capital charge for a bank. Talking about 0.7% capital charge in Solvency II for an equally rated 1Y covered bond also means 0.7% capital relative to the invested notional. The longer the duration of the bond is, the higher the Solvency charge becomes in both absolute terms as well as relative to bank capital charges. While the AAA covered bond with a 1Y maturity is treated slightly better under Solvency II, (0.7% vs. 0.8%), the relationship reverses from year 2 onwards. For an AAA rated 10Y covered bond, insurance companies have to hold 6% of the invested notional in capital, which is 7.5 times as much as banks.

> Figure 3: Formulas for the Solvency II capital charge calculations for covered bonds and other asset classes

Credit quality	Up to 5 years	5 to 10 years	10 to 15 years	15 to 20 years	20 years +
AAA covered	0.7% * D	3.5% + 0.5% * (D -5)	6% + 0.5% * (D -10)	8.5% + 0.5% * (D -15)	11% + 0.5% * (D -20)
AA + to AA- covered	0.9% * D	4.5% + 0.5% * (D -5)	7% + 0.5% * (D -10)	9.5% + 0.5% * (D -15)	12% + 0.5% * (D -20)
A+ to A- covered	1.4% * D	7% + 0.7% * (D -5)	10.5% + 0.5% * (D -10)	13% + 0.5% * (D -15)	15.5% + 0.5% * (D -20)
BBB+ to BBB- covered	2.5% * D	12.5% + 1.5% * (D -5)	20% + 1% * (D -10)	25% + 1% * (D -15)	30% + 0.5% * (D -20)
BB+ to BB- covered	4.5% * D	22.5% + 2.5% * (D -5)	35% + 1.8% * (D -10)	44% + 0.5% * (D -15)	46.6% + 0.5% * (D -20)
Unrated covered	3.0% * D	15% + 1.7% * (D -5)	23.5% + 1.2% * (D -10)	29.5% + 1.2% * (D -15)	35.5% + 0.5% * (D -20)
EU member states' direct central government exposure / guaranteed by EU member central governments (irrespective of rating)	0.0%	0.0%	0.0%	0.0%	0.0%
AAA to AA- sovereign third country	0.0%	0.0%	0.0%	0.0%	0.0%
A+ to A- sovereign	1.1% * D	5.5% + 0.6% * (D -5)	8.4% + 0.5% * (D -10)	10.9% + 0.5% * (D -15)	13.4% + 0.5% * (D -20)
BBB+ to BBB- sovereign	1.4% * D	7% + 0.7% * (D -5)	10.5% + 0.5% * (D -10)	13% + 0.5% * (D -15)	15.5% + 0.5% * (D -20)
BB+ to BB- sovereign	2.5% * D	12.5% + 1.5% * (D -5)	20% + 1% * (D -10)	25% + 1% * (D -15)	30% + 0.5% * (D -20)
AAA corporate	0.9% * D	4.5% + 0.5% * (D -5)	7.0% + 0.5% * (D -10)	9.7% + 0.5% * (D -15)	12.0% + 0.5% * (D -20)
AA+ to AA- corporate	1.1% * D	5.5% + 0.6% * (D -5)	8.4% + 0.5% * (D -10)	10.9% + 0.5% * (D -15)	13.4% + 0.5% * (D -20)
A+ to A- corporate	1.4% * D	7% + 0.7% * (D -5)	10.5% + 0.5% * (D -10)	13% + 0.5% * (D -15)	15.5% + 0.5% * (D -20)
BBB+ to BBB- corporate	2.5% * D	12.5% + 1.5% * (D -5)	20% + 1% * (D -10)	25% + 1% * (D -15)	30% + 0.5% * (D -20)
BB+ to BB- corporate	4.5% * D	22.5% + 2.5% * (D -5)	35% + 1.8% * (D -10)	44% + 0.5% * (D -15)	46.6% + 0.5% * (D -20)
AAA STS securization	1.0% * D	5.0% + 0.6% * (D -5)	8.0% + 0.6% * (D -10)	11% + 0.6% * (D -15)	14.0% + 0.6% * (D -20)
AA + to AA- STS securization	1.2% * D	6.0% + 0.7% * (D -5)	9.5% + 0.5% * (D -10)	12.0% + 0.5% * (D -15)	14.5% + 0.5% * (D -20)
A+ to A- STS securization	1.6% * D	8% + 0.8% * (D -5)	12.0% + 0.6% * (D -10)	15% + 0.6% * (D -15)	18.0% + 0.6% * (D -20)
BBB+ to BBB- STS securization	2.8% * D	14.0% + 1.7% * (D -5)	22.5% + 1.1% * (D -10)	28% + 1.1% * (D -15)	33.5% + 0.6% * (D -20)
BB+ to BB- STS securization	5.6% * D	28.0% + 3.1% * (D -5)	43.5% + 2.2% * (D -10)	54.5% + 0.6% * (D -15)	57.5% + 0.6% * (D -20)

Source: EIOPA, Crédit Agricole CIB

> Figure 4: Solvency II capital charges for covered bonds and other asset classes

Credit quality	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
AAA covered	0.7%	1.4%	2.1%	2.8%	3.5%	4.0%	4.5%	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%
AA + to AA- covered	0.9%	1.8%	2.7%	3.6%	4.5%	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%
A+ to A- covered	1.4%	2.8%	4.2%	5.6%	7.0%	7.7%	8.4%	9.1%	9.8%	10.5%	11.0%	11.5%	12.0%	12.5%	13.0%
BBB+ to BBB- covered	2.5%	5.0%	7.5%	10.0%	12.5%	14.0%	15.5%	17.0%	18.5%	20.0%	21.0%	22.0%	23.0%	24.0%	25.0%
BB+ to BB- covered	4.5%	9.0%	13.5%	18.0%	22.5%	25.0%	27.5%	30.0%	32.5%	35.0%	36.8%	38.6%	40.4%	42.2%	44.0%
Unrated covered	3.0%	6.0%	9.0%	12.0%	15.0%	16.7%	18.4%	20.1%	21.8%	23.5%	24.7%	25.9%	27.1%	28.3%	29.5%
AAA to AA- EU sovereign	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
A+ to A- EU sovereign	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BBB+ to BBB- EU sovereign	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BB+ to BB- EU sovereign	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AAA to AA- sovereign	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
A+ to A- sovereign	1.1%	2.2%	3.3%	4.4%	5.5%	6.1%	6.7%	7.3%	7.9%	8.5%	8.9%	9.4%	9.9%	10.4%	10.9%
BBB+ to BBB- sovereign	1.4%	2.8%	4.2%	5.6%	7.0%	7.7%	8.4%	9.1%	9.8%	10.5%	11.0%	11.5%	12.0%	12.5%	13.0%
BB+ to BB- sovereign	2.5%	5.0%	7.5%	10.0%	12.5%	14.0%	15.5%	17.0%	18.5%	20.0%	20.5%	22.0%	23.0%	24.0%	25.0%
AAA corporate	0.9%	1.8%	2.7%	3.6%	4.5%	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%
AA+ to AA- corporate	1.1%	2.2%	3.3%	4.4%	5.5%	6.1%	6.7%	7.3%	7.9%	8.4%	8.9%	9.4%	9.9%	10.4%	10.9%
A+ to A- corporate	1.4%	2.8%	4.2%	5.6%	7.0%	7.7%	8.4%	9.1%	9.8%	10.5%	11.0%	11.5%	12.0%	12.5%	13.0%
BBB+ to BBB- corporate	2.5%	5.0%	7.5%	10.0%	12.5%	14.0%	15.5%	17.0%	18.5%	20.0%	21.0%	22.0%	23.0%	24.0%	25.0%
BB+ to BB- corporate	4.5%	9.0%	13.5%	18.0%	22.5%	25.0%	27.5%	30.0%	32.5%	35.0%	36.8%	38.6%	40.4%	42.2%	44.0%
AAA STS securization	1.0%	2.0%	3.0%	4.0%	5.0%	5.6%	6.2%	6.8%	7.4%	8.0%	8.6%	9.2%	9.8%	10.4%	11.0%
AA + to AA- STS securization	1.2%	2.4%	3.6%	4.8%	6.0%	6.7%	7.4%	8.1%	8.8%	9.5%	10.0%	10.5%	11.0%	11.5%	12.0%
A+ to A- STS securization	1.6%	3.2%	4.8%	6.4%	8.0%	8.8%	9.6%	10.4%	11.2%	12.0%	12.6%	13.2%	13.8%	14.4%	15.0%
BBB+ to BBB- STS securization	2.8%	5.6%	8.4%	11.2%	14.0%	15.7%	17.4%	19.1%	20.8%	22.5%	23.6%	24.7%	25.8%	26.9%	28.0%
BB+ to BB- STS securization	5.6%	11.2%	16.8%	22.4%	28.0%	31.1%	34.2%	37.3%	40.4%	43.5%	45.7%	47.9%	50.1%	52.3%	54.5%

Source: EIOPA, Crédit Agricole CIB

The capital charge differences between AAA and AA rated covered bonds are noticeable but not huge (1% difference for 10Y). The moment covered bonds drop into single A space and thus lose their preferential treatment, differences start to become very pronounced though (4.5% difference for 10Y) and with BBB (14.0% difference for 10Y) and BB covered bonds (29% difference for 10Y) they become massive.

When looking across asset classes, it becomes apparent that Solvency II favours sovereign debt over corporate and covered bonds. Nonetheless, differences between corporates and equally rated covered bonds are not massive (1.2% difference for 10Y AAA).

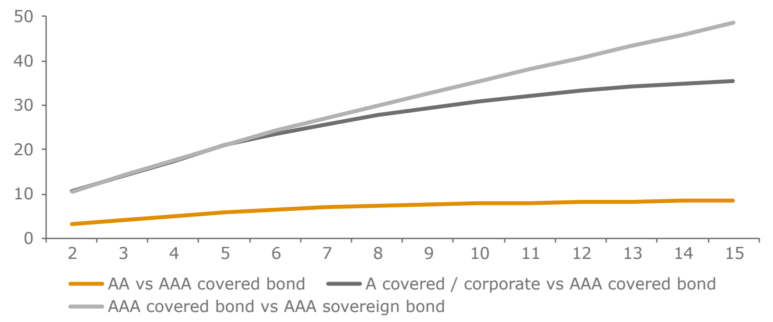
There have been improvements in how especially lower rated type 1 securitisation deals are treated. While keeping the 2.1% spread risk charge for AAA rated ABS, the figure was set at a flat 3% per year of duration for those ABS rated AA to BBB. The latter had still had a spread risk charge of 8.5% per year of duration before the adjustment. Despite this even the highest quality securitisation have around three times the capital requirement of AAA covered bonds in 5Y (10.5% vs. 3.5%) and three and a half times in 10Y (21% vs. 6%). For lower rated ABS, the difference to equally rated covered bonds in for example 10Y is 23% (30% vs. 7%).

Trying to translate the different capital requirements into spread numbers that one product has to yield in excess of another is not a straightforward exercise. After all, spread risk is merely one factor and there are many others driving the final SCR. It also depends on the return on equity an insurance investor needs to generate. Nonetheless, we have tried to estimate the additional yield required to cover the extra capital from this risk module.

> We have calculated the average capital charge for a buy and hold investor over the whole life of the investment;

> We have then assumed an ROEs of 10% to calculate the extra return needed to fulfil this return requirement.

> Figures 5: Spread in bp needed to compensate for additional capital between differently rated covered bonds, corporates and sovereign bonds (bp)



Source: EIOPA, Crédit Agricole CIB

CONCENTRATION RISK MODULE

The concentration risk is defined by the EIOPA as "the risk regarding the accumulation of exposures with the same counterparty" which means that large exposures on a single issuer should be limited. Other concentration types dealing with geographical area, industry sector or the like are not considered though.

Similar to the spread risk module, covered bonds receive a preferential treatment here in the sense that the concentration threshold is much higher at 15% than it would be for equally rated corporate debt for which exposure to a single counterparty is limited to 3%. In addition to this, covered bonds are considered as a distinct single name exposure, regardless of other exposures to the same counterparty. In other words, buying covered bonds does not impact the ability or limit the quantity of unsecured exposure towards the issuer an insurance company can buy.

> Figure 6: Concentration risk thresholds by bond type and rating

Type of bond	Rating	Concentration threshold
Corporate bonds, sub + hybrid debt, ABS, CDO	AAA – AA	3.0%
	A	3.0%
	BBB	1.5%
	BB or lower	1.5%
Covered Bonds	AAA – AA	15.0%
Exposure to EEA state, multilateral development banks, international organisations, ECB	–	none

Source: EIOPA, Crédit Agricole CIB

BOTTOM LINE

Solvency II is probably the regulatory regime in which ratings still play the biggest role and in which sovereign debt is given the biggest advantage over private-sector debt. It is true that in bank regulation EU member states do still have a 0% RW; but since Solvency II is calibrated for long-term investors and covers credit risk as well as market volatility risk, the absolute capital charges are a multiple of those for banks and relative differences are magnified.

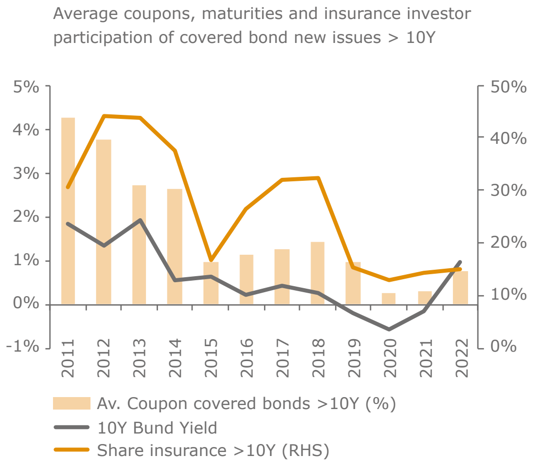
Apart from the comparison with sovereign debt, highly rated UCITS-compliant covered bonds do fare relatively well overall. They get preferential treatment in both the spread risk and concentration risk modules as long as they are rated at least AA−. Non-UCITS-compliant covered bonds are treated as senior unsecured exposure but as long as they are highly rated, capital charge differences to UCITS-compliant covered bonds are not major. Capital charges for covered bonds do, however, start to go up the moment ratings drop to below AA−. After all, even UCITS-compliant covered bonds are then treated as senior unsecured exposure. While the step to single-A ratings is still manageable, dropping to BBB and below means that capital charges become very onerous.

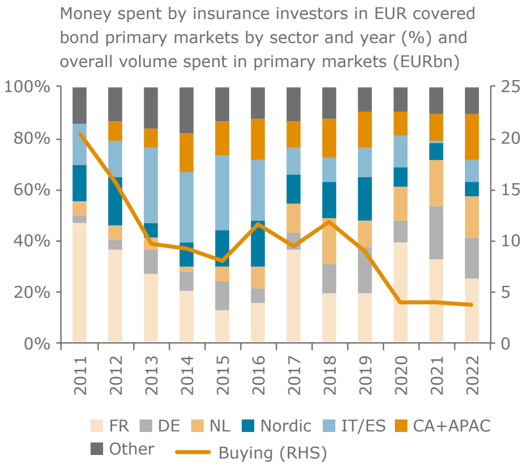
In addition to the spread risk capital treatment, overall capital charges under Solvency II are also determined by the size of the asset–liability mismatch. Long-dated covered bonds are an asset class that is able to close the gap to insurance companies' long-dated liabilities while giving the added security of the underlying framework, product support and collateral.

While there are a number of areas that are still being looked at within the Solvency II framework, the treatment of covered bonds is and has been very stable. However, the Covered Bond Directive (CBD) which will come into effect on 8 July 2022 and it will replace the reference to UCITS 52 (4) in many European regulatory documents such as the CRR. For Solvency II we are not aware of similar changes, which means the treatment for insurance companies will remain unchanged compared to what it was until now.

In any case, for insurance companies, the far bigger problem has been the very low absolute yields for much of 2021 as well as tight spreads and flat spreads curves in EUR markets. Before the CBPP 3 started in 2014, insurance companies' share in covered bond new issues with maturities of longer than 10Y was as high as 45% (2013). New issues above 10Y had an average maturity of 17.5 years in 2021. Despite this, average coupons dropped to 0.3%. As a consequence, the average insurance sector participation at the long-end was as low as 14%. This year has seen yields spike and coupons surge. On average long-end covered bond coupons are close to 1% after four months with deals in May reaching 2% again. Despite this, insurance sector buying has not yet picked up very meaningfully as the focus of many insurance companies until very recently had been on equities, infrastructure, real estate and direct lending to cope with the low yields. Since covered bonds offer diversification benefits and these days even pick-up above EGBs and SSAs that are often well sufficient to cover the additional capital charges, the sector's buying in covered bonds is eventually set to become more prominent for sure.

> Figure 7: Insurance participation in EUR benchmark covered bond new issues





Source: Bloomberg, Covered Bond Report, Crédit Agricole CIB

2.2.3 MREL AND TLAC AND PROTECTED COVERED BONDS

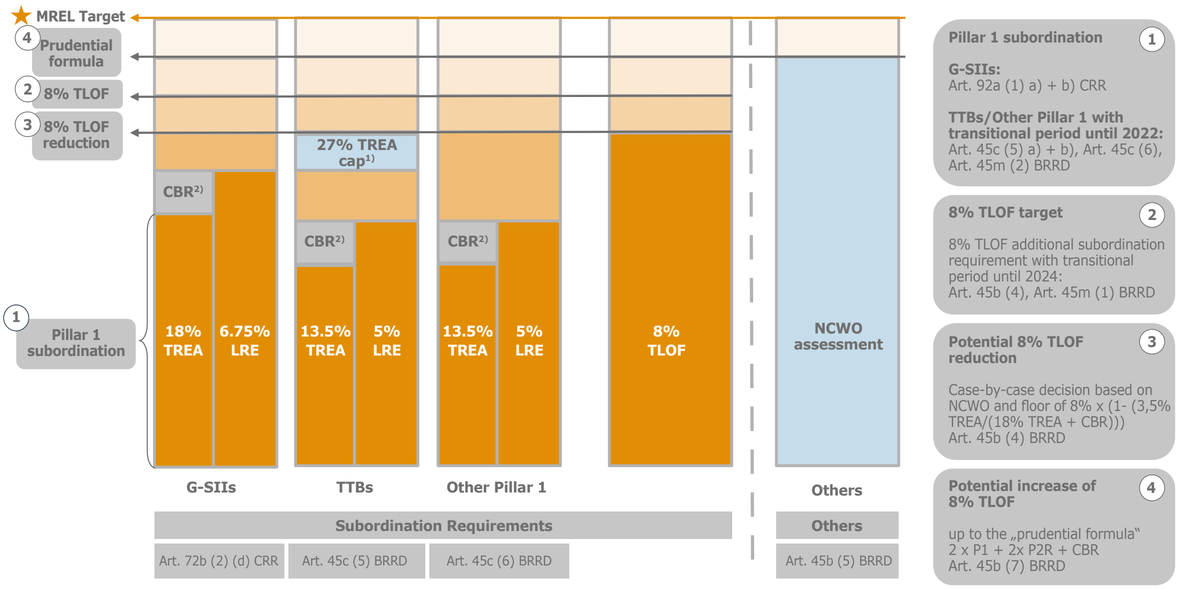
By Alexandra Schadow, Landesbank Baden-Württemberg

Banking package takes effect

If a financial institution finds itself in difficulty and the supervisory authority determines that it is "failing or likely to fail", the bank may be put into resolution if certain conditions are met. Four tools are available under resolution: sale, bridge institutions, asset separation, and bail-in. Under a bail-in, the resolution authority is given powers to write down liabilities or convert them into equity in order to absorb losses and carry out recapitalization measures. This approach presupposes that all institutions have sufficient "bail-in-able" capital. To this end, Article 45 of the first BRRD (Bank Recovery and Resolution Directive; Directive 2014/59/EU) defined a separate minimum requirement for own funds and eligible liabilities (MREL). The same idea underlies the total loss absorbing capacity (TLAC) requirement, which in 2015, through FSB (Financial Stability Board), applied only to global systemically important institutions (G-SII). In its reform package of 23 November 2016, the EU Commission presented proposals for numerous amendments to CRD (Capital Requirements Directive; Directive 2013/36/EU), CRR (Capital Requirements Regulation; Regulation 575/2013), BRRD, and SRMR (Single Resolution Mechanism Regulation; Regulation 806/2014), also called the "banking package". A key issue in this connection was the integration of TLAC requirements into the European legislative framework and their interaction with MREL. A central demand in this context was the introduction of a new asset class known as "senior non-preferred" and its position in the insolvency hierarchy. By means of an urgent procedure, Article 108 BRRD II was adopted on 12 December 2017 to create this new asset class throughout Europe and define the insolvency hierarchy. The directive (Directive 2017/2399/EU) is restricted to just two types of subordination – contractual and structural. The directive had to be transposed into national law by 29 December 2018.

After the whole banking package was adopted on 20 May 2019, publication in the European Official Journal followed on 7 June 2019. The amendments of BRRD, CRD, CRR, and SRMR came into force on 27 June 2019. While CRR II was directly applicable, SRMR II should only be applied from 28 December 2020. The BRRD II and CRD V directives had to be transposed into national law also by 28 December 2020. A significant idea regarding the combination of TLAC and MREL was the different treatment of various institutions. For this there are the categories G-SIIs, top-tier banks (TTBs) with total assets of more than EUR 100 bn, other Pillar 1 banks with a potentially systemic risk, and all other institutions. A harmonized minimum level applies to G-SIIs as in the case of TLAC. This is to become a Pillar 1 requirement and is found in the amended CRR. From January 2022 onwards, G-SIIs have to maintain TLAC corresponding to 18% of total risk exposure amount (TREA) and 6.75% of the leverage ratio exposure measure (LRE) as a minimum. However, EU rules with minimum subordination requirements go beyond this. G-SIIs must fulfil the maximum of the following different ratios: the higher of 18% TREA + combined buffer requirements (CBR); 6.75% of LRE; or 8% total liabilities and own funds (TLOF), with the possibility for supervisory authorities to permit a lower level, but greater than 8% TLOF x (1-(3.5% TREA/(18% TREA + CBR))). Moreover, institution-specific add-ons are possible. These are, however, included in BRRD and SRMR as Pillar 2 requirements. For top-tier banks, the Pillar 1 requirement will be the higher of 13.5% TREA + CBR; 5.0% of LRE; or 8% TLOF with the possibility of a lower level but limited to 8% TLOF x (1-(3,5% TREA/(18% TREA + CBR))). Furthermore, there will be a cap at 27% TREA. By contrast, other institutions are not subject to an exact ratio for MREL. This is only a Pillar 2 requirement, which is determined on a case-by-case basis for each bank and which is set out in detail in BRRD and SRMR. While the methods used to calculate the two requirements were harmonized – namely, the two points of reference total risk exposure amount and leverage ratio exposure measure – they still differ considerably in terms of subordination. In contrast to TLAC, liabilities still do not generally have to be subordinated to count towards MREL. A general subordination requirement will be explicitly introduced for G-SIIs. Especially for other banks, the authority may demand this on a case-by-case basis. However, it is worth mentioning at this point that all banks including G-SIIs can use up to 3.5% senior preferred for the fulfilment of MREL, with the approval of the resolution authority. However, this rule should be used only rarely in order not to run the risk of violating the "no-creditor-worse-off" principle. For all institutions, the deadline is January 1, 2024 to fully comply with the MREL targets. The complexity of the regulations for the various institutions has increased dramatically in the course of the legislative process. In addition, the resolution authorities are granted a high degree of further flexibility to impose additional requirements.

> Figure 1: MREL Overview for G-SIIs, TTBs, other Pillar 1 banks and other institutions (Banking package)



1) Art. 45b (4) Subparagraph 2
2) TREA: no counting of CET1 used for CBR
LRE: CBR can be used for MREL

Sources: banking package, SRB, LBBW Research

It is the task of SRB (Single Resolution Board), which is based on BRRD, SRMR, and the Delegated Act 2016/1450 of 23 May 2016, to set MREL requirements for each institution. The currently valid SRB policy under the banking package was published on May 26, 2021. The two components, namely loss absorption and recapitalization, are still the main factors in the measurement of the MREL requirements. Both MREL requirements loss absorption amount (LAA) and recapitalization amount (RCA) must be fulfilled in the measured variables of LRE and TREA. Within RCA expressed in TREA there may also be a component to maintain market confidence referred to as the "market confidence charge" (MCC). The main components are the minimum Supervisory Pillar 1 requirements (P1) and the Supervisory Pillar 2 requirement (P2R), which are based on the individual SREP process of a single institution. While LAA must be met by each bank, RCA can be set at zero. However, this applies only to banks that are subject to liquidation under regular insolvency proceedings. All components are added up and result in the overall requirement. As of March 2021, most institutions have received their MREL targets for 2022 and 2024. The binding intermediate target had to be achieved by January 1, 2022. This will be followed by a second intermediate target (informative) on January 1, 2023. The final MREL target must be achieved by January 1, 2024.

> Figure 2: Simplified approach for MREL requirements on the basis of SRB policy 2021

MREL* = Loss absorption amount (LAA) + Recapitalization amount (RCA) + Market confidence charge (MCC)

$MREL_{TREA}$ = LAA_{TREA} = (TREA x (P1 + P2R) + RCA_{TREA} = (TREA x (P1 + P2R) + MCC_{TREA} = CBR – (the greater of CCyB and 31.25 bps)**

$MREL_{LRE}$ = LAA_{LRE} = (LRE x leverage ratio) + RCA_{LRE} = (LRE x leverage ratio)

Legend:
*SRB default formula
**SRB policy May 2021; 31.25 bps will be lowered by 31.25 bps down to 0
TREA = Total risk exposure amount; Article 92 (3) CRR
LRE = Leverage ratio exposure measure; Article 429 and 429a CRR
P1 = Supervisory Pillar 1 requirement; Article 92 (1) CRR
P2R = Supervisory Pillar 2 requirement; Article 104a CRD
CBR = Combined buffer requirement; Article 128 CRD

Sources: banking package, SRB, LBBW Research

Covered bonds in light of TLAC and MREL

Covered bonds are still explicitly excluded from bail-in by the rules of Article 44 (2) b) BRRD. This includes covered bonds as defined in Art. 3 (1) of Directive (EU) 2019/2162 or, with regard to a bond that was issued before 8 July 2022, covered bonds that are UCITS-compliant (Directive 2009/65/EC Article 52 (4)). There is just one restriction that allows covered bonds to be bailed in: Namely, if the liabilities from the covered bond exceed the corresponding collateral in the cover pool and the resolution authority believes a bail-in for the "uncovered" part is appropriate. This would, however, correspond to a cover shortfall, which is not allowed by law. The covered bond exception in Article 44 (2) b) BRRD is unaffected by the amendments to BRRD. Covered bonds will continue to enjoy special protection even after the adoption of the new BRRD and the efforts of the harmonized covered bond directive and regulation.

Regarding TLAC and MREL, the EU banking package includes a new category of "eligible liabilities" in Chapter 5a of CRR. Under Article 72a (2) (e) CRR of this chapter, covered bonds are classified as being not eligible. This means that covered bonds, being exempted from bail-in, are not eligible for MREL. However, EU legislation (Article 3 Delegated Regulation 2016/1450) requires that the resolution authority must identify all liabilities that are excluded from bail-in. MREL must also be met with regard to all exclusions. The main objective is to build up a correspondingly sufficient MREL buffer so that bail-in exceptions do not have to be written down or converted.

In general, a standardized approach applies to the measurement of MREL. Nevertheless, the resolution authority may adjust the standardized approach to take account of the institution's business model, funding profile, and overall risk profile. This decision is based on the results of the SREP process. An upward or downward adjustment may be made. It must, however, reasonably reflect the institution's resolvability. With regard to business models, MREL already provides for mortgage credit institutions to be treated differently. However, there is one exception in BRRD for mortgage credit institutions financed by covered bonds. If they are not allowed to receive deposits, the resolution authority may exclude them from the MREL requirement. This, in turn, is only possible in a realizable winding-up under a national insolvency procedure or other types of measures in accordance with BRRD resolution tools and in line with the resolution objectives. This exception was also confirmed in the applied version of Article 45a (1) BRRD.

Overall, covered bonds retain their privileged status as a funding instrument. Covered bonds will remain part of the liability side of banks. The costs of refinancing covered bonds are still very attractive for issuers and, in our opinion, create a counterweight to the relatively expensive senior non-preferred bonds. Moreover, in the current crisis environment, covered bonds once again demonstrated their character as a safe haven instrument with comparatively low spread volatility. The very attractive conditions of TLTRO III in particular caused a sharp increase in retained covered bonds that can be submitted as collateral to the ECB. This volume has been missing on the public issue side. Nonetheless, with the end of the TLTRO III special interest period at the end of June 2022, primary market has already improved noticeably at the beginning of this year. In the light of the necessity to meet the MREL targets 2024 we expect persistent issuance activity on the senior side. At the end of Q4 2021 the average MREL target (2024) was 26.2 % TREA (incl. CBR). The overall MREL shortfall amounts to a total of EUR 32.6 bn (incl. CBR). In the end, it remains to be said that the higher the MREL cushion of a bank becomes, the better protected the covered bond is.

2.3 THE REPO TREATMENT OF COVERED BONDS BY CENTRAL BANKS

By Frank Will, HSBC & Chairman of the ECBC EU Legislation Working Group

I. CENTRAL BANK REPOS: THE SAFETY NET FOR THE BANKING SYSTEM

As part of their monetary policy, central banks across the globe provide liquidity to the banking sector. This is often done in form of repo transactions which require the eligible counterparties to provide collateral in order to receive liquidity from the central banks. The central banks typically have strict eligibility criteria for these collateral assets and demand different haircuts for certain assets, depending on the credit quality of the assets and their maturity.

The role of covered bonds in monetary operations varies by jurisdiction, not least since the nature of those operations is quite heterogeneous across jurisdictions. Broadly speaking, covered bonds receive a more favourable treatment amongst those countries in which they play a more pivotal role in the funding of the domestic banking sector. This applied primarily in terms of eligibility of covered bonds as collateral for repo operations, but also in terms of the haircuts. At many of the major central banks (at least some types of) covered bonds are eligible as collateral in the discount window for emergency lending. During the COVID-19 pandemic many central banks broadened their eligibility criteria, set up asset purchase programmes or term funding facilities to support their domestic banking sector. However, most of these measures have already ended or are running out.

> Figure 1: Comparing the eligibility of covered bonds for monetary policy operations

Central Bank	Operation	Covered Bonds eligible?	Eligible Covered Bonds	Currency	Minimum Rating	Rating Treatment	Minimum Size	Own-name Covered bonds?
ECB	Repo Operations (Main and Long term refinancing operations)	Yes	Legislative Covered bonds (EEA and non-EEA G10 countries)	EUR, USD, GBP, JPY[1]	Up to BBB-	Best Rating	EUR 1 bn for Jumbo Covered Bonds, otherwise none	Yes
Fed	SOMA Operations	No	None	USD	n/a	n/a	n/a	n/a
	Discount Window	Yes	German Pfandbriefe	AUD, CAD, CHF, DNK, EUR, GBP, JPY, SEK	AAA	Lowest Rating	n/a	No
BoE	Operating Standing Facilities, Short term OMOs	No	n/a	GBP, EUR, USD, AUD, CAD, CHF, SEK	n/a	n/a	n/a	n/a
	Level B Collateral (ILTR, DWF, CTRF and FLS)	Yes	UK, French, German regulated covered bonds		Broadly equivalent to AAA	Rating references are indicative. Bank of England forms its own independent view	GBP 1 bn or EUR 1 bn (depending on issuance currency)	No
	Level C Collateral (ILTR, DWF, CTRF and FLS)	Yes	UK, US[2] & EEA (based on the location of the underlying assets)		Broadly equivalent to A-/A3		None	Yes

1 Under the ECB's Temporary Framework, foreign currency-denominated debt instruments from EEA based issuers constitute eligible collateral for Eurosystem credit operations since 2012. In addition to the haircuts applicable to similar EUR-denominated securities, a further mark-down will be applied (16% for USD and GBP, 26% for JPY).

2 Only in case of SME loans, commercial real estate loans and certain Export Credit Agency guarantee loans.

Central Bank	Operation	Covered Bonds eligible?	Eligible Covered Bonds	Currency	Minimum Rating	Rating Treatment	Minimum Size	Own-name Covered bonds?
SNB	Repo operations, Standing Facilities	Yes From 2015 on, Covered Bonds must be eligible under the Swiss LCR framework	Any covered fulfilling the eligible security and rating criteria, but not issued by a Swiss bank	CHF	Security and issuer's country: AA-/Aa3	Second-highest Rating	CHF 100 m equivalent (issuance amount)	No
			Any covered fulfilling the eligible security and rating criteria, but not issued by a Swiss bank	EUR, USD, GBP, DKK, SEK, NOK	Security: AA-/Aa3 with various exceptions Issuer's country: AA-/Aa3		EUR 1 bn USD 1 bn GBP 750 m DKK 7.5 bn SEK 10 bn NOK 10 bn	
Norges Bank	Repo Operations	Yes	Any covered fulfilling the eligible security criteria	NOK, SEK, DKK, EUR, USD, GBP, JPY, AUD, NZD, CHF, CAD	Domestic currency: None but BBB- for favourable liquidity category (II not III)	Second-highest-Rating	None	Yes
					Foreign Bonds: A/A2			
Reserve Bank of Australia (RBA)	Repo Operations	Yes	Any covered bond fulfilling the eligible security criteria	AUD	AAA or BBB+ for domestic covered bonds >1Y	Lowest rating (of at least two rating agencies)	None	No
Reserve Bank of New Zealand (RBNZ)	Repo and/or Swap of NZ Government Bonds	No	None	n/a	n/a	n/a	n/a	n/a
	Overnight Repo Operations, Bond Lending Facilities	Yes	Any covered bond fulfilling the eligible criteria on the cover pool composition	NZD	AAA from at least two rating agencies. If more than two ratings, then at least two agencies must rate the issue AAA, and no rating is below AA+		None	No
Bank of Canada	Standing Liquidity Facility	Yes	Canadian covered bonds	CAD	At least two ratings, second highest must be at least A (low) by DBRS, A3 by Moody's, or A- by S&P or Fitch.		n/a	No
Danmark National-bank	Credit facilities	Yes	Danish covered bonds	DKK / EUR	n/a		EUR 1 bn or equivalent in DKK (higher haircut for smaller issue size)	n/a

Source: HSBC, Central Banks

II. EURO AREA: ELIGIBILITY CRITERIA FOR COLLATERAL IN EUROSYSTEM OPERATIONS

The ECB has been a key source of liquidity for banks in the Eurosystem during the credit crunch, the European debt crisis and the COVID-19 pandemic through its repo operations. Within the ECB's liquidity operations, covered bonds play a very important role. While in certain periods during the sovereign and banking crisis the benchmark covered bond market was shut for many issuers out of Europe's periphery, the ECB continued to provide liquidity to those banks which were able to post their own covered bonds as collateral. Many covered bond programmes have therefore been set up not just as an additional funding channel for the banks, but also in order to allow those banks to use the repo facilities at the ECB as means to access liquidity in a closed wholesale market. Since the onset of the COVID-19 pandemic, the TLTRO-III programme allowed Eurozone banks to lower their funding costs. Many of them used retained covered bonds as collateral for the TLTRO-III programme.

ECB repo operations

Article 18.1 of the Statute of the European System of Central Banks and of the European Central Bank states that the ECB and the national central banks may conduct credit operations with credit institutions and other market participants, as long as lending is "based on adequate collateral"[3]. According to the ECB, adequacy means firstly, that collateral must protect against losses in credit operations, and secondly, that there must be sufficient collateral potentially available to ensure that the Eurosystem can carry out its tasks.

Consequently, underlying assets have to fulfil certain criteria in order to be eligible for Eurosystem monetary policy operations. The Eurosystem has developed a single framework for eligible assets common to all Eurosystem credit operations (the "single list"). There is no collateral differentiation between monetary policy instruments or intraday credit, and a single auction rate is applicable to different types of collateral in tender operations. The scope of eligible collateral is broad and includes secured assets like covered bonds and ABS, the latter of which can be backed by receivables such as residential and commercial loans (secured and unsecured), auto loans, lease receivables etc., provided they satisfy certain eligibility criteria (set out below), as well as unsecured claims against governments, credit institutions or corporates.

The Eurosystem additionally applies risk control measures in the valuation of underlying assets. The value of the underlying asset is calculated as the market value of the asset less a certain percentage ("valuation haircut"). The haircut-adjusted market value of the underlying assets used in its liquidity-providing reverse transactions must be maintained over time. This implies that if the value, measured on a regular basis, of the underlying assets falls below a certain level, the national central bank will require the counterparty to supply additional assets or cash (margin call). Similarly, if the value of the underlying assets, following their revaluation, exceeds a certain level, the counterparty may retrieve the excess assets or cash. The current eligibility of assets in the ECB framework and recent changes to this are set out below:

> Figure 2: Eligibility of assets in the ECB framework

Criteria	Standard Collateral Rules
Type of Asset	> Debt instrument, including covered bonds with (a) a fixed, unconditional principal amount (except for ABS) or (b) an unconditional principal amount that is linked to only one euro area inflation index at a single point in time, containing no other complex structures > Coupon should be zero coupon, fixed-rate coupon, multi-step coupon or floating-rate coupon linked to an interest rate reference or yield of one euro area government bond with a maturity of one year or less or inflation indexed
Definition of Covered Bonds	> Legislative covered bonds include EEA covered bond (issued in accordance with Article 52(4) UCITS) and non-EEA G10 covered bonds (issued in accordance with their national covered bond law) > Covered bonds with external, non-intra group MBS as well as both internal and external public sector ABS in the cover pool are no longer eligible as collateral for repo transactions > Covered bonds which are neither legislative covered bonds nor multi cédulas, shall became ineligible from 1 January 2021
Rating	> The minimum rating threshold is BBB- (S&P) / Baa3 (Moody's) / BBB- (Fitch) / BBBL (DBRS) based on a "best rating approach", so only one rating at this level is required for eligibility > The use of third-party rating tools will be phased out
Place of Issue	> European Economic Area (EEA)

3 Protocol on the Statute of the European System of Central Banks and of the ECB, Article 18.1.

Criteria	Standard Collateral Rules
Settlement Procedures	> Transferable in book-entry form > Held and settled in the euro area
Acceptable Market	> Debt instrument must be admitted to trading on a regulated market or a non-regulated market as specified by the ECB
Type of Issuer/ Guarantor	> Central banks, public sector entities, agencies[4], credit institutions, financial corporations other than credit institutions, non-financial corporations, multilateral development banks or international organisations > The recognition of an entity as multilateral development bank or international organisation based on an ECB assessment is no longer possible
Place of Establishment of the Issuer/ Guarantor	> Issuer must be established in the EEA or in non-EEA G10 countries/guarantors must be established in the EEA
Currency of Denomination	> EUR, USD, GBP, JPY[5]

Source: HSBC, ECB

In December 2017 the ECB announced several fundamental changes to its eligibility criteria which entered into force on 16 April 2018.

> The ECB removed the favourable treatment of floating rate assets. Instead of applying a low uniform haircut to all variable assets, the new valuation haircuts are based on the residual maturity of the assets.

> The residual maturity for own-use covered bonds will be defined as the maximum legal maturity, taking into account any extension periods of soft bullets and conditional pass-through covered bonds.

> Unsecured bank bonds issued after 16 April 2018 that are subject to statutory, contractual or structural subordination as well as unsecured bank debt from non-EEA issuers are ineligible as repo collateral. Senior preferred unsecured bank bonds remain eligible as collateral.

> Commercial mortgage-backed securities (CMBSs) lost their collateral eligibility, owing to their relatively complex nature.

In April 2020, the ECB introduced further COVID-19 related measures to facilitate the availability of collateral (see below for a list of the main measures). In March 2022, the ECB announced the timeline to gradually phase out these measures.

> Acceptance of ACC (additional credit claims) backed by Covid-19 government guarantees as collateral. In March 2024 the ECB will in principle phase out these ACC rules, following a review of the ACC frameworks which will take into account the collateral needs in the outstanding TLTRO III operations until December 2024).

> 'Freezing' of the credit ratings of the collateral assets at the level as of 7 April 2020. Assets will remain eligible in the event of rating downgrades as long as their rating remains at or above credit quality step 5 (CQS 5; BB/Ba2/BB) or CQS 4 (BB+/Ba1/BBH) in the case of ABS. This measure ended on 8 July 2022.

> Proportionate reduction of haircuts by 20%. The reduction was lowered to 10% on 8 July 2022 and will end in June 2023.

> Own-use covered bonds shall be subject to an additional valuation haircut of 6.4% (credit quality steps 1 and 2), and 9.6% (credit quality step 3). The reduction was lowered to 10% on 8 July 2022, resulting in haircuts of 7.2% and 10.8% respectively.

4 "agencies" are issuers or guarantors of debt instruments that the ECB has classified as agencies.

5 Under the ECB's Temporary Framework, foreign currency-denominated debt instruments from EEA based issuers constitute eligible collateral for Eurosystem credit operations since 2012. In addition to the haircuts applicable to similar EUR-denominated securities, a further mark-down will be applied (16% for USD and GBP, 26% for JPY).

> Increase in the concentration limit for unsecured bank bonds from 2.5% to 10%. This measure ended on 8 July 2022.

> Acceptance of Greek sovereign bonds as collateral. This measure will remain in place for at least as long as reinvestments in Greek government bonds under the PEPP continue.

> FIGURE 3: ECB HAIRCUTS BY LIQUIDITY CATEGORY AND RESIDUAL MATURITY**

Credit Quality	**Residual maturity (years)**	**Category I** (Government Bonds)			**Category II** (Local & Regional Govt, Supras & Agencies, Jumbo Covered Bonds*)			**Category III** (Traditional and other non-Jumbo Covered Bonds*, Corporates Bonds)			**Category IV** (Unsecured Bank Bonds*)			**Category V** (Asset-backed securities*)
		fixed	**zero**	**floating**	**fixed**	**zero**	**floating**	**fixed**	**zero**	**floating**	**fixed**	**zero**	**floating**	
Step 1 and 2 (A- or higher)	0-1	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	6.8	6.8	6.8	3.6
	1-3	0.9	1.8	0.5	1.4	2.3	0.9	1.8	2.7	0.9	9.0	9.5	6.8	4.1
	3-5	1.4	2.3	0.5	2.3	3.2	0.9	2.7	4.1	0.9	11.7	12.2	6.8	4.5
	5-7	1.8	2.7	0.9	3.2	4.1	1.4	4.1	5.4	1.8	13.1	14.0	9.0	8.1
	7-10	2.7	3.6	1.4	4.1	5.9	2.3	5.4	7.2	2.7	14.9	16.2	11.7	11.7
	>10	4.5	6.3	1.8	7.2	9.5	3.2	8.1	11.7	4.1	18.0	23.0	13.1	18.0
Step 3 (BBB+ to BBB-)	0-1	5.4	5.4	5.4	6.3	6.3	6.3	7.2	7.2	7.2	11.7	11.7	11.7	
	1-3	6.3	7.2	5.4	8.6	12.2	6.3	10.8	13.5	7.2	20.3	22.5	11.7	
	3-5	8.1	9.0	5.4	12.2	16.7	6.3	14.9	19.8	7.2	25.2	29.3	11.7	
	5-7	9.0	10.4	6.3	12.6	18.0	8.6	16.7	23.4	10.8	27.5	31.5	20.3	
	7-10	10.4	11.7	8.1	14.4	22.1	12.2	17.1	25.2	14.9	27.9	33.3	25.2	
	>10	11.7	14.4	9.0	17.1	26.6	12.6	17.6	27.0	16.7	28.4	34.2	27.5	

Source: ECB, HSBC (*Assets that are theoretically valued will be subject to an additional 4.5% haircut; additional valuation markdowns for own-use covered bonds of 7.2% for Credit Quality Step 1&2 and of 10.8% for Credit Quality Step 3).

** These haircuts include the temporary 10% reduction in light of the Covid-19 crisis.

Following the UK's withdrawal from the EU, the following assets are no longer eligible:

> unsecured debt instruments issued by credit institutions or investment firms, or by their closely-linked entities, that are established in the UK

> ABS whose issuer or originator is established in the UK

> ABS in which the acquisition of the cash-flow generating assets by the SPV is governed by UK law

> ABS in which clawback rules are governed by UK law (Article 76 of the General framework)

> assets denominated in GBP, JPY or USD whose issuer is established in the UK

> assets with guarantees governed by UK law or where the guarantor is established in the UK, unless the guarantee is not needed to establish the credit quality requirements for the specific debt instrument

> credit claims for which the facility agent is a credit institution located in the UK

Based on the UK's status as a non-EEA G10 country, euro-denominated debt instruments issued by entities established in the UK, but which do not fall into the categories listed above, will continue to be accepted as eligible collateral.

Debt instruments listed on the London Stock Exchange must also be admitted to trading on at least one acceptable market as defined by Article 68(1) of the General framework in order to remain eligible for collateral purposes, provided all other eligibility criteria are met.

Classification of covered bonds within the Eurosystem operations

The ECB considers covered bonds to be a liquid asset class. Hence, covered bonds benefit from preferential liquidity class classification and favourable haircut valuations for repo transactions with the ECB when compared with other assets such as ABS. Moreover, unlike senior bank debt, the ECB will accept self-issued "covered bank bonds" as collateral (see below for more information on this). Thus, like certain forms of ABS, covered bonds allow issuers to make assets held on their balance sheets eligible for the ECB's liquidity operations. This is very much in line with previous ECB statements which note that "covered bonds possess a number of attractive features from the perspective of financial stability".

The Eurosystem does currently not provide an official definition of what classifies as "covered bond". In general, the Eurosystem accepts EEA legislative covered bonds (issued in accordance with Article 52(4) UCITS) and non-EEA G10 covered bonds (issued in accordance with their national covered bond law) as collateral as long as they otherwise fulfil the general eligibility criteria. Those bonds are grouped either into liquidity category II in case of Jumbo covered bonds, i.e. bonds with a minimum issue size of EUR 1 bn and at least three market makers, or into liquidity category III in case of traditional non-Jumbo covered bonds. Over the last few years, the market has moved away from the "Jumbo" definition and we would not be surprised if the ECB were to also update its internal criteria at one stage.

Covered bonds and "close link" exemption

Covered bonds also benefit from certain preferential treatments compared with other bank debt when it comes to self-issued bonds. The ECB states that "irrespective of the fact that a marketable or non-marketable asset fulfils all eligibility criteria, a counterparty may not submit as collateral any asset issued or guaranteed by itself or by any other entity with which it has close links"[6]. This means that banks cannot, for example, use their own senior unsecured debt directly as collateral with the ECB.

The main exemptions from the "close links" rule remain "EEA-legislative covered bonds". Self-issued covered bonds can be used by counterparties as collateral, i.e. an issuer can use its own covered bonds and there are no close link prohibitions. Since 1 February 2020, such covered bonds must have an issue rating.

Conclusion on covered bond treatment

The ECB, to a greater extent than any of its central bank peers, has both outlined and demonstrated its support for the covered bond market in the past. This was most obviously the case with its three covered bond purchase programmes since 2009. Perhaps even more important is the ECB's positive stance towards covered bonds, which the institution maintains for several reasons.

Firstly, the ECB has focussed on the importance of covered bonds as a means for banks to access long-term funding: "Issuing covered bonds enhances a bank's ability to match the duration of its liabilities to that of its mortgage loan portfolio, enabling a better management of its exposure to interest rate risk. Other secured funding products, such as repos, are unlikely to have the same asset-liability matching attributes offered by covered bonds. These factors are all the more pertinent today given the increasing role of short-term refinancing in banks' balance sheets. In certain instances, rolling over short-term funding might be less expensive or better in terms of reputation, but this could pose challenges to the management of assets and liabilities at some point. In addition, to improving banks' structural asset-liability mismatch, covered bonds offer a wider geographical diversification, as issuers tap into a larger European market."[7] Moreover, a further key advantage comes from the absence of effective risk transfer and the desirable incentives this creates for the originating banks. As former ECB president

6 "Close links" means the counterparty is linked to an issuer/debtor/guarantor of eligible assets by one of the following forms: (i) the counterparty owns directly, or indirectly, through one or more other undertakings, 20 % or more of the capital of the issuer/debtor/guarantor; or (ii) the issuer/debtor/guarantor owns directly, or indirectly through one or more other undertakings, 20 % or more of the capital of the counterparty; or (iii) a third party owns more than 20 % of the capital of the counterparty and more than 20 % of the capital of the issuer/debtor/guarantor, either directly or indirectly, through one or more undertakings [ECB, "The Implementation on Monetary Policy in the Euro Area", February 2011]

7 European Central Bank, "Covered Bonds in the EU Financial System", December 2008.

Trichet noted: "Importantly, covered bonds do not involve the transfer of the credit risk implied by underlying assets from the issuer to the investor. The credit risk stays with the originator, preserving the incentives for prudent credit risk evaluation and monitoring."[8] Such positive attitude is reflected in the ECB's current favourable treatment of covered bonds within its repo operations as they are allocated in a very favourable liquidity category (Jumbo covered bonds rank alongside the debt of the ESM, EIB, EU and the explicitly guaranteed German agency KfW).

III. THE UK: ELIGIBILITY CRITERIA FOR BANK OF ENGLAND OPERATIONS

Latest changes to the framework

In 2014, the Bank of England introduced the concept of collateral pooling to simplify the management of the collateral it received by the banks for its monetary operations. Instead of providing liquidity against collateral by way of repurchase transactions, participants can pool their collateral across certain facilities (e.g. Short-Term Open Market Operations (OMOs), Operational Standing Facilities (OSFs), Indexed Long Term Repo operations (ILTRs), Discount Window Facility (DWF) and Intra-Day Liquidity (IDL) for RTGS). According to the Bank of England, the pooling model to simplify the process for managing the collateral, enhance operational efficiency and reduce operational risks.

Before the introduction of the Single Collateral Pool (SCP) model, the Bank of England's SMF and intraday liquidity operations were repo transactions whereby individual securities were held as collateral against the central bank's exposures to that participant. The SCP model aggregates a participant's collateral position thereby significantly reducing the volume and frequency of transactions needed to provide collateral to the Bank of England.

The Bank of England has established three active collateral pools: the Main Collateral Pool, the DWF pool, and the Term Funding Scheme within the APF pool. In addition, there is a 'Pre-positioned pool for loan collateral' for loans meeting the collateral eligibility requirements but not yet being used to cover any transactions.

Covered bonds under the Sterling monetary framework

The Bank of England operates a rather stricter regime than the ECB in terms of eligible collateral within the Sterling Monetary Framework. The BoE defines three collateral sets, which are eligible to varying degrees for its monetary operations: (1) level A collateral set, (2) level B collateral set, (3) level C collateral securities as well as level C *loan* collateral.

Within the Sterling monetary framework operations, covered bonds are only included within the Level B and Level C collateral securities sets, both of which are eligible for the following facilities: (1) Indexed Long-Term Repo OMOs, (1) Discount Window Facility, (3) Contingent Term Repo Facility as well as (4) the various term funding schemes.

The eligibility criteria for covered bond inclusion can be found below:

> Figure 4: Bank of England's covered bond eligibility criteria

	Level B	Level C Collateral Securities
Eligible currencies	GBP, EUR, USD, AUD, CAD, CHF, and SEK	
Geography	UK, French and German regulated Covered Bonds	-
Rating Requirements	Broadly equivalent to AAA	Broadly equivalent to A3/A- or higher
Minimum Size	At least £1bn or EUR1bn (depending on issue currency)	n/a
Own Name Covered Bonds	No	Yes
Underlying assets	UK/EEA prime residential mortgages, social housing loans or public sector debt	UK/US*/EEA public sector debt, social housing loans, SME loans, commercial real estate loans, UK/EEA residential mortgages

Source: Bank of England, HSBC *backed by Export Credit Agency guarantee loans (May 2022)

8 Keynote address by Jean-Claude Trichet, Munich, 13 July 2009.

Rating references are only used to indicate the broad standards of credit quality that are expected by the Bank of England and are no longer prerequisites for eligibility. The BoE rather forms its own independent view of the risk in the collateral taken and only accepts collateral that it can value and where the risk can be effectively managed.

For the Level B collateral set, only a subset of the covered bond universe is eligible. The criteria are based on a combination of both credit quality (hence underlined by the AAA rating-equivalent requirement) and liquidity.

For example, covered bonds from Nordic issuers, one of the core covered bond markets with an acknowledged safe haven status, are not included in the Level B Collateral Set. In the past, Spanish covered bonds that fulfilled the rating requirement were included but have since been removed from the list of eligible assets. Meanwhile, under the current guidelines, even for some of the UK banks, their Euro covered bonds would mainly be eligible, given that many Sterling covered bonds fall below the minimum issue size threshold of GBP 1bn.

Covered bonds do not qualify for the Bank of England's Level A collateral set which is restricted to Gilts (including gilt strips), Sterling Treasury bills, Bank of England securities, HM Government non-sterling marketable debt and Sterling, euro, US dollar and Canadian dollar-denominated securities (including associated strips) issued by the governments and central banks of Canada, France, Germany, the Netherlands and the US.

In 2011, bonds issued in domestic currency or in sterling, euro or US dollars from Australia, Austria, Belgium, Denmark, Finland, Italy, Japan, Luxembourg, New Zealand, Norway, Portugal, Slovenia, Spain, Sweden, and Switzerland, as well as supranational debt, were moved from the "narrow" (now called Level A) to the "wider" (now called Level B) collateral set and are therefore not eligible for short term repo operations. Thus, even some AAA countries such as Norway or Denmark are no longer eligible for short-term repos under the Level A collateral definition. These amendments were the result of a previous internal review by the BoE, reflecting a stronger focus on liquidity and credit risk.

> Figure 5: Haircuts for various covered bond types*

	float.	<1 yr	1-3 yrs	3-5 yrs	5-10 yrs	10-20 yrs	20-30 yrs	>30 yrs
Covered bonds (backed by UK or EEA public sector debt, social housing loans or residential mortgages)	12	12	14	15	17	19	22	24
UK, EEA or US covered bonds (backed by SME loans or commercial mortgages)	25	25	27	28	30	32	35	37
UK, EEA or US covered bonds (backed by ECA guaranteed loans)	3	3	5	6	8	10	13	15

Source: HSBC *an additional haircut of 5% will applied for own-use covered bonds (May 2022)

As mentioned above, the Bank of England conducts a number of different monetary policy and liquidity insurance operations. Figure 8 shows the eligibility of different collateral sets for the various operations and facilities:

> Figure 6: Eligibility of different collateral sets for the various operations and facilities

Sterling Monetary Framework operations & lending facilities	Level A	Level B	Level C
Intraday Liquidity	Yes	No	No
Operational Standing Facilities	Yes	No	No
Indexed Long-term Repo Operations	Yes	Yes	Yes
Discount-Window Facility	Yes	Yes	Yes
Contingent Term Repo Facility	Yes	Yes	Yes
Liquidity Facility in Euros (LiFE)	Yes	Yes	Yes

Sterling Monetary Framework operations & lending facilities	Level A	Level B	Level C
US Dollar Repo	Yes	Yes	Yes
Funding For Lending Scheme	Yes	Yes	Yes
Term Funding Scheme	Yes	Yes	Yes
TFSME Lending Facility	Yes	Yes	Yes

Source: Bank of England, HSBC

Operational standing facilities

The Operational Standing Lending Facility provides a ceiling for the overnight interest rates through its overnight lending facility (against the Level A collateral set), which is usually set at 25bp above the Bank of England rate. The Operational Standing Deposit Facility is an unsecured overnight deposit with the central bank, which is currently set 10 bps below the Bank of England rate. This is designed to limit volatility in overnight interest rates by providing an arbitrage mechanism to prevent money market rates moving far from the bank rate and allowing participating banks to manage unexpected frictional payment shocks.

Indexed long-term repo operations

Indexed long-term repo operations are provided by the Bank of England to provide indexed liquidity insurance without distorting banks' incentives for prudent liquidity management and to minimise the risk being taken onto the BoE's balance sheet. These operations are indexed to the bank rate, allowing counterparties to use the facility without having to take a view on the future path of the Bank rate (and also reducing the BoE's exposure to market risk). In these operations banks can borrow against three collateral sets: Levels A, B and C. Levels B and C include covered bonds meeting the aforementioned criteria. Level C securities must be delivered to the Bank in advance of the operation, and all loan collateral must be pre-positioned.

The BoE typically offers funds in long-term repo operations once a month for period of six months.

The BoE does not provide a simple schedule of long-term operations, as is the case for the ECB. Instead it operates a unique auction design. Participants submit bids for a nominal amount of liquidity and a spread in basis points to the bank rate. Banks can submit separate bids against Level A collateral or against Level B and C collateral (where covered bonds are eligible). Multiple bids can be placed against any of the three collateral sets[9].

The auction then prices using a "uniform price" format, meaning all successful bidders (those bidding for liquidity at a higher price than the clearing spread) ultimately pay only the clearing spread.[10] The BoE specifies the clearing spreads for all the three collateral sets. Bids are ranked and accepted in descending order of the bid spread until the BoE's supply preferences have been met. Thus, when pledging covered bonds in the BoE's long-term indexed repo operations, the ultimate cost to a bank will depend on the spread set for the Levels B and collateral sets in the auction. Crucially, the auction is flexible as both the proportion of the total amount allocated to each collateral set as well as the total quantity of funds are based on the pattern of bids received. This determines the amount of liquidity, against which covered bonds can potentially be pledged. So, in this system the amount of liquidity on offer against the Level B and C collateral sets depends not only on demand for long-term repos on these assets but also on those in the Level A collateral set.

Discount window facility

The discount window is a bilateral facility used for emergency lending to an institution; providing liquidity insurance. It allows participants to borrow Gilts (or in certain cases even cash) against a wider range of potentially less liquid eligible collateral. It acts as a "liquidity upgrade of collateral", hence, the wider range of eligible

9 There is no restriction on the number of bids, the aggregate value of bids or the total value of bids received from a single participant.
10 The rationale here is to avoid participants basing their bids on assumptions about others' behaviour.

collateral. Fees are paid when the Gilts are returned to the BoE in return for the original assets. Drawings have a 30-day maturity and can be rolled for longer temporary liquidity needs.

Collateral, which can be pledged, encompasses all the collateral sets Level A, B and C. The fees charged for the discount window depend upon the type of collateral used and the proportion of eligible liabilities, which the lending would represent.

For lending provided in return for Gilts[11] the fees (in basis points) for the different categories of collateral are set out below:

> Figure 7: Overview of the fees for the different categories of collateral

Fees (basis points)			
Collateral % of Eligible Liabilities	**Level A**	**Level B**	**Level C**
0-5%	25	50	75
5-15%	Marginal cost rises linearly with quantity borrowed		
>15%	Prices agreed bilaterally with the Bank of England		

Source: Bank of England, HSBC

Contingent term repo facility (CTRF)

The CTRF is a contingency liquidity facility that the BoE can activate in response to actual or prospective exceptional market-wide stress to undertake operations against the full range of eligible collateral (Levels A, B, C). This includes own-name covered bonds. Collateral is expected to be pre-positioned prior to an operation. The BoE activated the CTRF in March 2020 in the light of the Covid-19 pandemic. The size of the operation was unlimited at a fixed rate of Bank Rate plus 15bps. The final operation took place in June 2020.

> Figure 8: Summary of the BoE's monetary operations

	Operational Standing Facilities	**Indexed Long-term Repo**	**Discount Window Facility (DWF)**
What is the primary purpose of the operation?	Monetary policy implementation; Bilateral liquidity insurance to deal with frictional payment shocks	Liquidity insurance	Bilateral liquidity insurance
What is being borrowed?	Deposit facility: n/a Lending facility: sterling cash	Sterling cash	Gilts (in certain circumstances also cash)
Eligible Collateral	Deposit facility: n/a Lending facility: Level A	Level A, B and C	Level A, B and C
Fee	Deposit facility: 25 bp above bank rate Lending facility: 10 bp below bank rate	Auction determined uniform spread indexed to Bank Rate	Fee dependant on size of drawing and collateral delivered
Maturity	Overnight	6 months	30 days
Frequency	Available daily	Typically monthly	Available daily

Source: Bank of England, HSBC (as of April 2021)

Additional disclosure requirements for residential mortgage covered bonds

The Bank of England requires additional disclosure and transparency for RMBS and covered bonds backed by residential mortgages. The BoE requirements include anonymised loan level information for securities from

11 In the event that cash is lent instead, then the fee is the indexed bank rate in addition to the fees shown in the Figure 7; though such fees can vary at the bank's discretion.

these two asset classes. This must be provided for investors, potential investors and “certain other market professionals acting on their behalf.” The information must be provided on at least a quarterly basis and within one month of an interest payment date. Since December 2012, any covered bonds backed by mortgages which do not fulfil the criteria became ineligible for use in any of the Bank of England’s monetary policy operations.

Loan-level reporting also includes “the requirement for credit bureau score data” to be made available. This needs to be provided within a three-month period of the transaction’s origination and must be updated on a quarterly basis to enhance comparability between the various providers.

IV. THE US: ELIGIBILITY CRITERIA FOR FEDERAL RESERVE OPERATIONS

The monetary policy operations of the Federal Reserve System work rather differently to those at the ECB or the Bank of England. The Federal Reserve Bank of New York implements monetary policy on behalf of the Federal Reserve System, as mandated by the Federal Open Market Committee (FOMC). Monetary policy is implemented through sales and purchases on the System Open Market Account (SOMA) at the Federal Reserve Bank of New York. This account is used both to maintain the overnight target rate for the federal funds rate (i.e. the US policy rate), as well as to undertake large scale asset purchase programmes decided upon by the FOMC. In particular, the three rounds of asset purchases (quantitative easing), the first consisting of Treasury securities, GSE debt and GSE-guaranteed MBS, the second solely of Treasuries and the third of agency MBSs, as well as the reinvestment of the coupons and principal payments received from the first round of QE, have all gone through this account. Currently, covered bonds are not eligible for any SOMA operations, which are restricted to US Treasury Bills, Notes and Bonds (including TIPS), Federal Agency securities[12] and MBS guaranteed by Fannie Mae, Freddie Mac and Ginnie Mae; all of which must be denominated in USD. None of the additional operations put in place during the first stage of the financial crisis are currently still in place, meaning the only significant other monetary operation is the discount window.

Covered bonds and the discount window

FFollowing the redemption of the last US covered bond in November 2016, only **AAA-rated German Jumbo Pfandbriefe** are eligible for the discount window. For the AAA requirement, the lowest rating of S&P, Moody’s and Fitch is relevant.

“In general, the Federal Reserve seeks to value securities collateral at a fair market value estimate. Margins are applied to the Federal Reserve’s fair market value estimates and are designed to account for the volatility of the value of the pledged security over an estimated liquidation period. Securities are valued using prices supplied by external vendors. Securities for which a price is unavailable from the Federal Reserve’s external vendors will receive zero collateral value.”[13]

The haircuts applied to the various assets eligible for use in the discount window are outlined below. Notably the foreign currencies eligible for the discount window are AUD, CAD, CHF, DKK, EUR, GBP, JPY and SEK.

The haircuts applied to covered bonds in the discount window operations are not very high and only marginally higher than those for Treasuries. For example, for tenors of 5-10 years, USD-denominated Pfandbriefe are subject to a haircut of only 4%, the same as supranational paper or GSE bonds. Nonetheless, the eligibility criteria for foreign-issued covered bonds are very strict, including solely German Pfandbriefe. All other covered bonds effectively appear to be treated in the same manner as unsecured bank debt, i.e. they are excluded from the discount window. Even other well-developed legislation-based covered bond types, such as Obligations Foncières or any of the various Nordic covered bonds, have not been included.

12 Fannie Mae, Freddie Mac and Federal Home Loan Bank.
13 Federal Reserve Collateral Guidelines as 26 March 2018.

> Figure 9: Overview of the margins for securities in the discount window

Asset Class	Asset Type	Margins for securities (by Maturity in yrs)				
		0-1	>1-3	>3-5	>5-10	>10
US Treasuries	Bills/Notes/Bonds/Floating Rate Notes/Inflation Indexed	1	1	2	3	5
	STRIPs	5				8
GSEs	Bills/Notes/Bonds	2	2	3	4	6
	Zero Coupon	3	3	4	5	9
Foreign Government Agencies	AAA-BBB rated USD denominated	2	2	3	4	6
	AAA rated foreign denominated	6	6	6	7	10
Foreign Government, Foreign Government Guaranteed and Brady Bonds	AAA-A rated USD denominated	2	2	3	4	6
	BBB rated USD denominated	3	3	4	5	7
	AAA-BBB foreign denominated	6	6	7	7	9
Supranationals	Bills/Notes/Bonds USD denominated	3	3	3	4	6
	AAA rated foreign denominated	6	6	7	7	10
	Zero Coupon					
Corporate Bonds (Non-Financial)	AAA-A rated USD denominated	2	3	4	6	8
	BBB rated USD denominated	3	4	6	8	10
	AAA rated foreign denominated	8	8	8	10	15
German Jumbo Pfandbriefe	**AAA rated USD denominated**	**2**	**2**	**3**	**4**	**6**
	AAA rated foreign denominated	**6**	**6**	**6**	**7**	**9**
Asset Backed Securities	AAA-A rated	2	2	4	8	11
	BBB rated	3	4	5	9	12
	CDOs- AAA rated	13	13	15	23	36
	CLO- AAA rated	9	9	13	27	30
Agency Backed Mortgages	Pass-throughs	2	2	3	4	6
	CMOs					
	CMBs					

Source: Fed (applicable as of 14 March 2022), HSBC

There is also a separate schedule for the percentage margin applied to loans, of which some are also eligible for the discount window facility. A further stipulation from the Fed is that obligations of the pledging depository institution (or of an affiliate) are not eligible collateral, ruling out own-name covered bonds.

V. SWITZERLAND: ELIGIBILITY CRITERIA FOR SWISS NATIONAL BANK (SNB) OPERATIONS

SNB monetary policy operations

In 2019, the Swiss National Bank (SNB) introduce the SNB policy rate which it uses in taking and communicating its monetary policy decisions. The SNB policy rate replaced the target range for the 3-month Libor used previously. Repos are its preferred open market operation used to achieve this target. These are conducted in parts by auctions, which are typically held every day, either in the form of a volume tender (fixed rate tender, which is the norm) or by variable rate tender. The SNB can also conduct bilateral repo operations to affect money market operations during the course of the day. All these repo transactions must be 100% collateralised. The terms are set on a daily basis and the maturity of the operations may vary from one day to several months. Hence, the SNB does not have distinct long-term repo operations in the same manner as the ECB or the BoE. Furthermore, the SNB can issue its own debt certificates (SNB Bills) as a means of absorbing liquidity through its money market operations when targeting the policy rate (or range). Such debt certificates can also be posted back to the SNB in the context of its repo operations (but cannot be used by banks to satisfy their minimum reserve requirements).

Under the SNB's typical volume tender, each counterparty offers for the amount of liquidity it is willing to provide for a given repo rate. If the total volume of offers exceeds the SNB's predetermined allotment volume, the SNB reduces the amounts offered proportionally. Each one of the counterparties receives the interest rate they bid. SNB Bill auctions are, as a rule, conducted in the form of a variable rate tender. Counterparties submit their offers comprising the amount of liquidity they are willing to provide and price at which they would do so. Counterparties can submit multiple bids, including at different interest rates. The SNB obtains liquidity from the participants that have made offers at or below the highest interest rate accepted by the SNB, paying the participants the interest rate stated in their offers.

In addition, the SNB provides standing facilities (a liquidity shortage facility and an intraday facility). For such facilities the SNB does not actively intervene in the market but rather "merely specifies the conditions at which counterparties can obtain liquidity[14]." Repo transactions within the context of standing facilities must cover at least 110% of the funds obtained. The remaining monetary policy operations used by the SNB are an intraday facility for banks, foreign exchange swaps with various central banks, as well as foreign exchange purchases (a means of intervening into foreign exchange markets affecting CHF). The SNB can also create, purchase or sell derivatives on receivables, securities, precious metals and currency pairs.

Covered bonds and other collateral eligible for SNB repo operations

For monetary policy operations the SNB has a standard collateral set which does not distinguish between collateral eligible for different operations. This is in line with the ECB but in contrast to the BoE policy. The SNB accepts a slightly wider set of collateral for its operations. In this sense, the SNB operates much more like the ECB than the Fed or BoE, with the latter restricting eligible assets of short-term monetary policy operations to only the highest-quality liquid government securities, with the exclusion of covered bonds.

Following the adoption of the Swiss Liquidity Ordinance which translates the LCR framework into Swiss law, the SNB has also redefined its collateral policy aligning it to the new liquidity provisions from 2015 onwards. The changes should ensure that all collateral eligible for SNB repos also fulfils the criteria for high-quality liquid assets (HQLA).

Only collateral included in the list of eligible collateral for SNB repos may be pledged in the repo transactions. In order to be eligible, the collateral assets must fulfil the following criteria:

> be issued by central banks, public sector entities, international or supranational institutions and private sector entities

> securities issued by financial institutions are generally not eligible. However, covered bonds issued by financial institutions are eligible, provided the issuer is not a domestic financial institution or its foreign subsidiary. Moreover, securities issued by Pfandbriefbank schweizerischer Hypothekarinstitute AG and Pfandbriefzentrale der schweizerischen Kantonalbanken AG are also eligible.

> the securities have to be denominated in CHF, EUR, USD, GBP, DKK, SEK or NOK.

> the issuer must be domiciled in Switzerland, in the European Economic Area (EEA), or in the UK, if the security is denominated in a foreign currency. Securities issued by international or supranational organisations may be admitted as eligible collateral even if the issuer is domiciled in a third country.

> have a fixed principal amount with an unconditional redemption,

> have a fixed rate, floating rate or zero coupon,

> have a minimum volume of CHF 100 mln for securities denominated in Swiss Francs or CHF 1 bn equivalent for securities denominated in foreign currencies,

14 Guidelines of Swiss National Bank (SNB) on Monetary Policy Instruments.

> be traded on a recognised exchange or a representative market in Switzerland, a EEA member state or in the UK with price data published on a regular basis; and

> fulfil the country and issuer rating requirements (second-highest rating of the three rating agencies S&P, Moody's and Fitch is at least AA-/Aa3. If only one credit rating is available, this shall be used).

> On 13 June 2019 the SNB announced that covered bonds with extendable maturities (i.e. soft-bullets) are eligible assets up to the original maturity date.

As such, covered bonds are eligible, as long as they are not issued by a domestic Swiss bank (or a subsidiary abroad) with the exception of the Swiss Pfandbrief institutions. The criteria for the various classes of eligible assets are further split between foreign and Swiss Franc denominated criteria:

> FIGURE 10: ELIGIBILITY CRITERIA FOR SWISS FRANC AND FOREIGN CURRENCY SECURITIES

	Currency of Issue	Min. Rating of Creditor's Country of Domicile	Min. Rating of Security	Minimum issue size	Additional Criteria
Swiss Franc Securities	CHF	AA-/Aa3*	AA-/Aa3**	100 CHF m	Securities of foreign issuers must be listed on SIX Swiss Exchange
Foreign Currency Securities	EUR, USD, GBP, DKK, SEK, NOK	AA-/Aa3* (and must be domiciled in Switzerland, the UK or an EEA member state)	AA-/Aa3**	1.0 bn EUR; 1.0 bn USD; 750 m GBP; 7.5 bn DKK; 10.0 bn SEK; 10.0 bn NOK	–

* Securities of supranational organisations may be eligible irrespective of rating of country of domicile.

** Based on the second-highest rating; if only one credit rating is available, this shall be used. For securities issued by public sector entities and the Swiss Pfandbrief institutions which do not have a securities rating, the issuer rating may be used instead. Swiss public authorities, Swiss Pfandbrief institutions, the central issuing office of Swiss municipalities and Swiss issuers with explicit guarantee from Swiss Confederation are excluded from this requirement.

Source: SNB, HSBC

All securities contained in the list of collateral eligible for SNB repos form part of the SNB GC Basket and fulfil the criteria for high-quality liquid assets (HQLA) as defined in the Liquidity Ordinance. Based on their characteristics, the securities in this collective basket are assigned to additional baskets. The L1 Basket contains Swiss franc and foreign currency securities issued by, as a rule, central banks, public sector entities and multilateral development banks. The L2A Basket contains all other securities from the SNB GC Basket. In addition, Swiss franc securities are pooled in an L1 CHF Basket and an L2A CHF Basket. As is the case with all central banks, the SNB can decide on a case-by-case basis which securities are eligible for its repo operations. Its rules explicitly state that it "may reject the inclusion of securities or withdraw securities that were previously included in the list, without providing any justification."

Own-name covered bonds

The SNB publicly states that it does not accept counterparties' own securities or "those issued by persons or companies which, directly or indirectly, hold at least 20% of the capital or the voting rights in a counterparty or, conversely, in which the counterparty holds such rights". Nonetheless it explicitly states that "this 20% rule does not apply to participations in Swiss Pfandbrief institutions". Although it is not explicitly stated in official documents, SNB officials confirmed to us that own-name covered bonds cannot be included within the boundaries set by the definition of eligible collateral.

VI. NORWAY: ELIGIBILITY CRITERIA FOR NORGES BANK OPERATIONS

Norges Bank monetary policy operations

The policy rate of Norges Bank is the sight deposit rate: the rate of interest banks receives on their overnight deposits (up to a quota) at Norges Bank. In October 2011, quotas were introduced defining the size of deposits banks could hold with Norges Bank on sight deposit rate terms. Banks' reserves with Norges Bank in excess of the quota were remunerated at a rate equal to the sight deposit rate minus 100bp, giving banks a strong incentive to holding surplus reserves at the low reserve rate. Unlike other central banks, the key policy rate is not a target for overnight interest rates realised in money markets. Instead, the sight deposit rate forms a floor for very short-term money rates, whilst the overnight lending rate charged to banks for overnight loans (for "D-Loans", see below) is the other though less important interest rate, which forms a ceiling for very short-term money rates. This is typically set 100bp above the key policy rate. Norges Bank uses F-deposits (fixed-rate deposits) to remove unwanted liquidity from the system.

In terms of providing liquidity, Norges Bank provides intraday and overnight loans ("D-Loans"), which must be 100% collateralised. The bank also provides longer term liquidity through "F-loans" (fixed-rate loans), repurchase agreements and currency swaps. F-loans are ordinary fixed-rate loans with a given maturity provided against acceptable collateral "in the form of approved securities." The interest payable on such loans is deterined by a multi-price ('American') auction. Just as in the case of the SNB, Norges Bank determines the total amount to be allotted in such an operation. Bids for the loans are ranked in decreasing order and allotments are made until the total amount is distributed, with all counterparties paying their respective bid price. Such loans also must be 100% collateralised.

Norges Bank has primarily granted "F-loans" to financial institutions rather than longer-term repo operations, following previously unsuccessful attempts to encourage the use of repo facilities. F-loans are provided for a number of different maturities, much like the longer-term ECB-refinancing operations. Longer maturity F-loans were provided during the credit crunch.

The collateral set eligible for short-term "D-loans" at Norges Bank is identical to that for the longer-term "F-loans" as Norges Bank only uses a single collateral set for all its operations. Its collateral rules group different securities into various liquidity categories, much like the ECB (see below for further details).

Covered bonds and other collateral eligible for Norges Bank repo operations

In order to be eligible as collateral, securities must be listed on Norges Bank's website and have to fulfil the following eligibility criteria:

Type and Jurisdiction

- Bonds, notes and short-term paper issued from Norwegian and foreign issuers
- Securities issued outside the EEA may be accepted provided that Norges Bank has legal confirmation that there are no problems associated with the realising of the collateral
- Norwegian bond and money market funds (confined to investing in bonds, notes and short-term paper that are eligible under the current rules) are eligible as collateral provided that they are managed by a management company registered in Norway whose unit holdings are registered with the Norwegian Central Securities Depository (VPS) and that Norges Bank has access to price information from Oslo Børs Informasjon
- Securities must be registered either in the VPS or at Euroclear Bank or Clearstream Banking

Credit rating

> Securities issued by foreign issuers and bonds, notes and short-term paper issued by Norwegian private entities are subject to credit rating requirements.

> Covered bonds issued under Norwegian law are exempt from the rating requirement if they are backed by domestic mortgage loans. For securities issued by Norwegian entities a credit rating of the issuer is sufficient.

> Norges Bank accepts credit ratings from S&P, Fitch and Moody's whereby the second-best credit rating will apply if a security or issuer has more than one rating. The lowest acceptable credit rating for bonds with foreign issuers is A/A2, while the lowest acceptable credit rating for bonds issued by Norwegian issuers is BBB-/Baa3[15].

Listing

Securities issued by private entities are subject to listing requirements.

> Securities issued by private entities must be listed on a stock exchange or other market places approved by Norges Bank.

> The listing requirement does not apply to notes and short-term paper.

Requirements relating to minimum volume outstanding

Securities issued by private entities are subject to requirements relating to minimum volume outstanding. In light of the Covid-19 crisis, the following temporary measures apply:

> Securities in NOK must have a minimum outstanding volume of NOK 300 m, whilst securities in a foreign currency must have a minimum volume equivalent to EUR 100 m.

> For securities other than Norwegian government securities, a borrower may not pledge more than 20% of the issue's (ISIN) volume outstanding (this was temporarily increased to 100% in light of the COVID-19 pandemic)

Currency restrictions

> Securities shall be denominated in NOK, SEK, DKK, EUR, USD, GBP, JPY, AUD, NZD, CAD or CHF. For securities denominated in a currency other than NOK an additional haircut of 6-8% (depending on the currency) is applied.

Multilateral development banks, government-guaranteed and regional debt securities

Norges Bank may, subject to an assessment, exempt securities with irrevocable and unconditional government guarantees from the listing and minimum outstanding volume requirements.

ABS and other restrictions

> Asset Backed Securities (ABS) must have a AAA credit rating from S&P, Fitch or Moody's at the time of collateralisation and must be assessed by Norges Bank as what are termed "true sale" ABSs and must not be secured on commercial property loans.

> Only the most senior tranche will be accepted as collateral and the borrower cannot pledge more than 20% of the volume outstanding of any deal.

15 The lowest acceptable credit rating for notes and short-term paper issued by foreign entities is A-1 from S&P or the equivalent rating from Fitch or Moody's, while the lowest acceptable credit rating for notes and short-term paper from Norwegian issuers is A-3 from S&P or the equivalent rating from Fitch or Moody's.

> Unsecured securities issued by banks and other financial institutions, or unsecured bonds issued by companies where banks or other financial institutions indirectly or directly own more than a third are not eligible. Securities that are directly or indirectly linked to credit derivatives are not eligible as collateral. Nor will instruments such as convertible bonds, inflation-linked bonds, inverse floating rate bonds, FRN Caps or subordinated loans be eligible.

> Exemption due to Covid-19 crisis: Securities in NOK guaranteed by local government authorities are exempt from the credit rating requirements.

Own-name covered bonds

A bank may pledge covered bonds and ABS as collateral even if the securities are issued by the bank itself or by an entity that is part of the same corporate group as the bank. Own-name covered bonds are subject to an additional haircut of 5%.

Haircuts

The haircuts applied to the market value of a security are set out by category below:

> FIGURE 11: NORGES BANK HAIRCUTS BY CATEGORY AND RESIDUAL MATURITY (% OF MARKET VALUE)

Liquidity Category	**Liquidity Category I**		**Liquidity Category II**		**Liquidity Category III**		**Liquidity Category IV**	
Eligible Collateral	> AAA rated Government Bonds > Money market and bond funds confined to investments in the above securities		> Government bonds rated AA+ to A > *Covered bonds (AAA to AA-)* > Norwegian local government paper (AAA to BBB-) > Foreign local government paper (AAA to A) > Government-guaranteed paper > AAA rated corporates		> *Covered bonds rated A+ to A* > Norwegian local government paper (no rating requirement) > Corporate bonds rated AA+ to A > Units in eligible money market and bond funds		> *Covered bonds* (A- to BBB-) > Norwegian corporate bonds rated A- to BBB-	
Maturity	Fixed	Floating	Fixed	Floating	Fixed	Floating	Fixed	Floating
0-1 year	1	1	3	3	4	4	8	8
1-3 years	3	1	5	4	6	5	11	10
3-7 years	5	1	7	5	10	7	17	14
7-15 years	7	1	10	6	13	9	22	17
15+ years	10	1	15	7	20	12	30	25

Source: HSBC, Norges Bank

Notes: Securities in foreign currencies are subject to a further 6-8% haircut depending on the currencies, own-name covered bonds to a further 5% haircut. If Norges Bank does not have sufficient price information on securities, the value will be determined on the basis of the nominal value, less an additional haircut depending on the bond's rating.

Access to Norges Bank lending facilities by covered bond mortgage companies

In a statement published in May 2013, Norges Bank argues that "covered bond mortgage companies should not be given general access to the central bank lending facility" since "the granting of liquidity loans is expressly restricted to commercial banks and savings banks." It has to be noted however that "Norges Bank's ability to extend liquidity support to financial institutions in extraordinary cases is not limited by whether the institution has ordinary access to the lending facilities."

VII. AUSTRALIA: ELIGIBILITY CRITERIA FOR RESERVE BANK OF AUSTRALIA (RBA) OPERATIONS

The Reserve Bank of Australia (RBA) expresses its desired stance on monetary policy through an operating target for the cash rate, the money market rate on overnight interbank funds. The RBA targets this through its short-term open-market operations ("domestic market operations"). The same collateral set is also applicable to the longer-term operations provided.

When the RBA buys securities under repurchase agreement, it does so in two broad classes of securities: government-related securities and private securities. Since the mid-1990s, the RBA has gradually widened the range of highly-rated securities that it is prepared to accept in response to the decline in available government debt and taking into account the changing structure of financial markets.

Covered bonds and RBA eligible securities for reverse repos

In order to be considered as eligible by the RBA, all securities, including covered bonds, must fulfil the following criteria:

> **Currency**: The security is denominated in Australian dollars and traded in Austraclear. The RBA will not accept securities that trade as Euro-entitlements.

> **Rating**: The lowest credit rating assigned to a security or its issuer by Moody's, S&P and Fitch will be used to assess eligibility and eventual haircut. For covered bonds only, security ratings are considered as long as at least two ratings are available. Otherwise the issuer ratings will be considered.

> **Structured bonds**: "Highly structured" securities are not eligible.

> **Own name bonds**: "Unless otherwise advised" securities issued by the bank itself or related entities are not eligible. A related party is deemed to be an institution that has a significant relationship to the credit quality of the security, including members of the same group and where one entity owns more than 15% of another. The list of eligible securities denotes the related parties for specific securities or programmes. This 'related party exemption' also applies to covered bonds and, as such, "own name covered bonds" are not eligible for RBA repo operations.

The current set of eligible securities and the respective minimum rating requirements are given below:

> FIGURE 12: ELIGIBLE SECURITIES AND MINIMUM RATING REQUIREMENTS

	Minimum Rating
General Collateral	
Australian Government Securities	no minimum rating required
Semi-governments Securities	no minimum rating required
Issues by Supranationals and Foreign Governments	AAA*
Securities with an Australian Government Guarantee	no minimum rating required
Securities with a Foreign Sovereign Government Guarantee	AAA*
Private Securities	
Securities (including Covered Bonds) issued by authorised deposit-taking institutions (ADIs)	
Residual maturity of 1Y or less	Any public rating
Residual maturity > 1Y	BBB-
Asset Backed Securities	A-1 or AAA
Other securities	A-1 or AAA

* Minimum rating requirement waived for securities issued and/or guaranteed by the New Zealand government

Source: RBA, HSBC, (as of June 2022)

These include covered bonds denominated in AUD which have to be issued in the Kangaroo market (i.e. onshore) to be eligible for Repo transactions with the RBA. The RBA is willing to accept "other AAA assets" which include covered bonds, as well as senior unsecured bank debt as long as it is rated AAA and denominated in AUD. The RBA accepts both legislative and structured covered bonds. As is the case with all central banks, the RBA retains the right to reject any particular security or securities from any issuer and specifically states that it will not accept "highly structured" securities. This does not apply to covered bonds, but to CDOs or similar structures.

Figure 13 below shows the margin ratios used by the RBA to discount the market value of securities purchased under reverse repos. They are applied according to the following formula:

purchase price = market value / (1 + margin / 100)

> Figure 13: Margin ratios of securities purchased under reverse repos

	Minimum Rating	Margins			
		0-1 years	1-5 years	5-10 years	>10 years
Government-related Securities					
Australian Government Securities	n/a	1	2	2	2
Semi-Government Securities	n/a	1	2	2	2
Securities Issued by Supranationals & Foreign Governments	AAA	2	3	4	4
Securities with an Australian Government Guarantee	n/a	2	3	4	4
Securities with a Foreign Government Guarantee	AAA	2	3	4	4
Private Securities					
ADI-issued Securities including Australian Covered Bonds	AAA	6	7	8	10
	AA–	10	12	14	16
	A–	12	14	16	18
	BBB-	18	22	26	30
	Public credit rating	24	n/a	n/a	n/a
Asset-backed Securities					
> Standard	A-1 or AAA	10-15	10-15	10-15	10-15
> Other	A-1 or AAA	15-40	15-40	15-40	15-40
Other Private Securities	A-1 or AAA	6	7	8	10

Source: RBA, HSBC (as of May 2020)

An additional 3% haircut may apply to asset-backed securities if no market price is available.

VIII. NEW ZEALAND: ELIGIBILITY CRITERIA FOR RESERVE BANK OF NEW ZEALAND (RBNZ) OPERATIONS

RBNZ monetary policy operations

Since March 1999 the RBNZ has implemented monetary policy by setting the Official Cash Rate (OCR), which is reviewed eight times a year. The monetary operations of New Zealand are composed of (a) Liquidity Operations, (b) Standing Facilities and (c) Other Domestic Operations. The Open Market Operations (OMO) of the Reserve Bank of New Zealand (RBNZ), including *overnight repo transactions* and issuance of RBNZ bills (to remove unwanted liquidity) fall within the "Liquidity Operations", as do FX Swaps and Basis Swaps operations. The Standing facilities are made up of the Overnight Reverse Repo Facility and a Bond Lending Facility. Finally, "Other Domestic Operations" consist of the repurchase or swapping of New Zealand government securities.

The following securities are eligible for the RBNZ's overnight repo transactions within the Liquidity Operations and the Bond Lending Facilities (part of the Standing facilities):

> New Zealand Government Treasury bills;

> New Zealand Government bonds;

> New Zealand Government inflation-indexed bonds; and

> Other (non-New Zealand Government) Securities as approved by the RBNZ.

Covered bonds fall within this final definition, as long as they comply with the eligibility criteria. These are set out in the section below. Covered bonds are not eligible for other RBNZ monetary operations. The eligibility of securities for the 'Overnight Reverse Repo' under the RBNZ Standing Facilities is restricted solely to New Zealand Government bonds, Treasury bills and RBNZ bills. For the "Other Domestic Operations", the RBNZ from time to time offers to either repurchase and/or swap New Zealand Government securities. Purchases may be for the RBNZ's own account or on behalf of the Crown.

Covered bond eligibility for RBNZ operations

As explained above, covered bonds are eligible for the RBNZ's overnight repo transactions within the Liquidity Operations and the Bond Lending Facilities, as long as they fit the following criteria:

Rating

> Issues are rated AAA by at least two acceptable rating agencies. In case of more than two issue ratings, at least two agencies must rate the issue AAA, and no rating should be lower than AA+.

> The issuer has a credit rating from at least two acceptable rating agencies.

Cover pool

> The cover pool must be comprised of New Zealand originated first registered mortgages on New Zealand residential properties.

> The mortgage collateral is owned by a special purpose vehicle (SPV) that is bankruptcy remote from the originator.

> The loan-to-value ratio for each individual mortgage does not exceed 80%.

> Mortgages with loan to value ratios that exceed the 80% level will be removed from the cover pool and replaced with qualifying mortgages.

> Only loans that are performing have been included in the pool (non-performing loans are defined as those that are 90 days or more past due).

> "Asset monitors" independent from the trustee and the originator verify calculations relating to asset coverage tests and any other key ratios and provide these, and any other relevant reports, to the RBNZ on a regular basis.

Price sources

> Covered bond pricing is available on at least 80% of days via the NZFMA's NZ Credit Market Daily Pricing Service. Pricing is available at all month-ends.

Currency

> Issues are denominated in New Zealand dollars (NZD) only.

Settlement

> Covered bonds are lodged and settled in NZClear. Eligibility criteria for lodgement into NZClear include having a suitable registrar and paying agent.

Own-name bonds

> Covered bonds are repo-eligible on a two-name basis only, thus removing the possibility of issuers posting 'own-name' covered bonds to the RBNZ.

Of course, as is the case for all central banks, the RBNZ reserves the right to refuse an asset for any reason and is not required to disclose such reasons. In particular, "it should be noted that if the credit rating of the issue falls below the Reserve Bank's threshold, then the issue will cease to be eligible in the Reserve Banks' operations."

Thus, the RBNZ applies relatively strict criteria in setting eligibility for covered bonds, in particular, the requirement that the cover pool can only comprise New Zealand originated for registered mortgages on New Zealand residential properties currently restricts the use of the repo facility to covered bonds issued by domestic banks (or New Zealand subsidiaries of foreign banks using domestic loans). Nonetheless, if a foreign issuer were to have eligible loans in the pool (and fulfil all the other criteria), their covered bonds could also be eligible. Covered bonds are also subject to the strict requirement of being NZD-denominated, consistently with the rules for all other securities; even bonds issued or guaranteed by foreign governments must be NZD-denominated. Therefore, US Treasuries or Bunds in their domestic currencies would technically not be eligible for the RBNZ's operations.

The full haircuts matrix can be found below. It shows that NZD Covered bonds receive relatively benign haircuts, in line with two-name basis NZD-denominated RMBS, but significantly better than single-name RMBS. Ultimately, the eligibility criteria for repo are strict but eligible covered bonds receive a highly favourable treatment.

> Figure 14: Haircut matrix

Eligible Security	**Minimum Rating**	**Haircut**		
		0 ≤ 1 yr	**1 – 5 yrs**	**≥ 5 yrs**
NZ Government & RBNZ				
Treasury Bills	AA+	1%	2%	3%
Bonds				
Inflation-linked Bonds				
RBNZ Bills	n/a	1%	2%	n/a
Acceptable Kauri issues (NZD)				
Liquidity Category 1 Country*	AAA	3%	4%	5%
	AA- to AA+	6%	7%	8%
Liquidity Category 2 Country**	AAA	4%	5%	6%
	AA- to AA+	7%	8%	9%
Bank Securities (NZD)				
Bank bonds – NZ Registered Banks only	AAA	5%	6%	8%
	AA- to AA+	8%	9%	10%
	A- to A+	10%	12%	15%
	BBB- to BBB+	15%	17%	20%
NZ Registered Bank RCD's	A-1 and above	10%	n/a	n/a
	A-2	20%	n/a	n/a
Local Authorities (NZD)				
Bonds	AAA	3%	4%	5%
	AA- to AA+	6%	7%	8%
	A- to A+	10%	12%	15%
	BBB- to BBB+	15%	17%	20%
CP	A-1 and above	6%	n/a	n/a
	A-2	15%	n/a	n/a

Eligible Security	Minimum Rating	Haircut		
		0 ≤ 1 yr	1 – 5 yrs	≥ 5 yrs
State-Owned Enterprises (NZD)				
Bonds	AAA	5%	6%	8%
	AA- to AA+	8%	9%	10%
	A- to A+	10%	12%	15%
	BBB- to BBB+	15%	17%	20%
CP	A-1 and above	10%	n/a	n/a
	A-2	20%	n/a	n/a
Corporate Securities (NZD)				
Bonds	AAA	5%	6%	8%
	AA- to AA+	8%	9%	10%
	A- to A+	10%	12%	15%
	BBB- to BBB+	15%	17%	20%
CP	A-1 and above	10%	n/a	n/a
	A-2	20%	n/a	n/a
Securities issued/guaranteed by Foreign governments				
NZD Denominated	AA+	6%	7%	8%
	A-1+			

Source: RBNZ, HSBC

* Liquidity Category 1: Austria, Australia, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, Luxembourg, Netherlands, Norway, Singapore, Sweden, Switzerland, United Kingdom and United States;

** Liquidity Category 2: Czechia, Hong Kong, Ireland, Malta, Spain, South Korea.

> Figure 15: Haircut matrix

Eligible Security	Minimum Rating	Haircut	
		< 3 years	≥ 3 years
Asset Backed Securities (NZD)**			
Bonds	AAA	10%	15%
CP	A-1+	10%	n/a
RMBS (NZD; on a single name basis)*			
Bonds	AAA/A-1+	19%	19%
CP			
RMBS (NZD; on a two name basis)			
Bonds	AAA/A-1+	5%	8%
CP			
Covered Bonds (NZD)			
Bonds	AAA	5%	8%

Source: RBNZ, HSBC

* The RBNZ assumes that these are not traded in the secondary market and no market price is available;

** The Reserve Bank will not accept securities from an institution which is obliged to provide more than 50% of the liquidity provision.

IX. CANADA: ELIGIBILITY CRITERIA FOR BANK OF CANADA MARKET OPERATIONS

The Bank of Canada uses a number of permanent facilities to conduct market operations:

> **OR/ORR**: The Bank conducts Overnight Repo (OR) and Overnight Reverse Repo (ORR) transactions to implement its monetary policy framework in the Large Value Transfer System (LVTS) environment. ORs and ORRs are used to reinforce the target overnight rate at the mid-point of the operating band.

> **Overnight Standing Repo Facility**: The Bank makes this standing facility available to Primary Dealers on an overnight basis at the upper limit of the operating band (Bank Rate).

> **Term Repo for Balance Sheet Management Purposes**: The Bank may acquire assets temporarily in the secondary market to manage short-term changes in the Bank's balance sheet, which is typically due to seasonal fluctuations in the demand for bank notes.

> **Securities Repo Operations (SROs)**: The SROs will provide a temporary source of Canadian government bonds and treasury bills to primary dealers to support liquidity in the securities financing market, making a portion of its holdings of these securities available on an overnight basis through repurchase operations.

> **Standing Liquidity Facility**: On 19 March 2020, the Bank of Canada launched its 'Standing Term Liquidity' Facility. The Bank of Canada provides Large Value Transfer System (LVTS) advances, which are collateralised overnight loans to direct participants in the LVTS. The same assets eligible for the Bank's Standing Liquidity Facility (SLF) are also eligible to obtain intraday liquidity for participants in the LVTS. On 30 March 2020, the Bank of Canada launched its 'Standing Term Liquidity Facility´. This programme is an addition to the standing liquidity facility and functions very similarly to the latter. However, it is characterized by a greater range of eligible collateral which includes own-use covered bonds.

> **Bank of Canada Margin Call Practice for Domestic Market Operations**: For transactions outstanding against securities purchased or sold under a term purchase and resale agreement, the Bank values the securities daily, and compares that value to the contract valuation in order to ensure the Bank is adequately protected. The Bank may initiate a margin call, requesting the counterparty to deliver additional securities to cover any shortfall.

The Bank of Canada provides access to liquidity through its Standing Liquidity Facility (SLF), to institutions participating directly in the Large Value Transfer System (LVTS). Under the provisions of the Bank of Canada Act, the Bank's LVTS advances (the overdraft loans) are required to be made on a secured basis. The collateral used to secure these loans must be acceptable to the Bank of Canada, and an appropriate margin is applied. Notwithstanding the eligibility criteria listed below, the Bank of Canada retains the right of refusal for any asset or programme.

In December 2012, the Bank of Canada added Canadian covered bonds as eligible assets to the list of collateral that can be pledged under its Standing Liquidity Facility. The covered bonds have to fulfil the following criteria and conditions, which apply equally to the Standing Term Liquidity Facility:

> Only covered bonds from programmes that are registered with the Covered Bond Registrar (CMHC) and are compliant with the federal legislative framework for covered bonds are eligible, i.e. Canadian Registered Covered Bonds.

> The Covered Bonds must be rated equivalently to a rating of AAA.

> Eligibility is restricted to covered bonds denominated in Canadian Dollars. This requirement is not limited to covered bonds but is applicable to all asset classes with the exception of US Treasuries denominated in US dollars.

> Covered bonds are typically subject to a 5% issuer concentration limit.

> The combined amount of covered bonds, term ABS and ABBCP originated or sponsored by a single institution pledged by an LVTS participant cannot be more than 5% of the total collateral value of that participant.

> No more than 20% of an institution's pledged collateral may be comprised of municipal government or private sector securities including covered bonds. Securities issued by other LVTS participants (also including covered bonds) are subject to a 10% limit.

> Banks cannot submit their own covered bonds as collateral.

> Soft-bullet covered bonds are eligible as collateral.

> Figure 16: Haircuts for various asset classes and maturity brackets

Collateral type	up to 3 months	>3-12 months	>1-3 years	>3-5 years	>5-10 years	>10-20 years	>20-35 years	>35 years
Securities issued by the Government of Canada*	0.25%	0.5%	1.0%	1.5%	2.0%	3.5%	6.0%	6.5%
Government of Canada – stripped coupons and residuals	0.25%	0.5%	1.5%	2%	2.5%	4.5%	7.0%	9.5%
Securities guaranteed by the Government of Canada (excl. NHA mortgage-backed securities)*	1.25%	1.5%	2.0%	2.5%	3.0%	4.5%	8.0%	8.5%
NHA mortgage-backed securities	2.25%	2.5%	3.0%	3.5%	4.0%	5.5%	9.0%	9.5%
Government of Canada guaranteed – stripped coupons and residuals	1.25%	1.5%	2.5%	3.0%	3.5%	5.0%	8.5%	10.0%
Securities issued by a provincial government*	1.5%	1.75%	2.5%	3.0%	3.5%	5.0%	8.5%	9.0%
Provincial government – stripped coupons and residuals	1.5%	1.75%	3.0%	3.5%	4.0%	5.5%	9.0%	16.0%
Securities guaranteed by a provincial government*	1.75%	2.0%	3.0%	3.5%	4.0%	5.5%	9.0%	9.5%
Provincial government guaranteed – stripped coupons and residuals	1.75%	2.0%	3.5%	4.0%	4.5%	6.0%	9.5%	17.5%
Securities issued by a municipal government	2.0%	2.25%	3.5%	4.0%	4.5%	6.0%	10.5%	11.0%
Bankers' acceptances, promissory notes, commercial paper, including those of foreign	2.25%	2.5%	–	–	–	–	-	–
Term Asset-backed securities	3.75%	7.5%	8.0%	9.0%	12.0%	16.0%	16.5%	17.0%
Asset-backed CP	3.75%	7.5%	–	–	–	–	-	–
Covered bonds	**2.25%**	**2.5%**	**4.0%**	**5.5%**	**6.0%**	**9.0%**	**15.0%**	**15.5%**
Corporate and foreign-issuer bonds	2.25%	2.5%	4.0%	5.5%	6.0%	9.0%	15.0%	15.5%
Securities issued by the US Treasury*	1.0%	1.25%	1.75%	2.25%	3.5%	6.0%	9.0%	–

Source: Bank of Canada, HSBC (July 2021)

* An additional 4% will be added to the margin requirements for securities issued by the US Treasury to account for foreign exchange risk.

X. DENMARK: ELIGIBILITY CRITERIA FOR DANMARKS NATIONALBANK

Eligible counterparties can pledge securities as collateral which comprises of securities issued or guaranteed by the Kingdom of Denmark, bonds issued by KommuneKredit as well as the Danish covered bonds. Moreover, bonds issued by Føroya Landstýri (the government of the Faroe Islands) also qualify. The securities must be registered with VP Securities and traded at NASDAQ OMX Copenhagen. The securities must be denominated in DKK or EUR, in the latter case an additional exchange-rate haircut of 3% is deducted. At the request of the account holders and subject to specific assessment, Danmarks Nationalbank may also include other assets in the collateral basis for credit facilities in DKK.

The collateral value of the securities is calculated on the basis of their official price on NASDAQ OMX Copenhagen on the preceding day, including accrued interest, less a securities-specific valuation haircut. If an asset has not been traded on the previous banking days, a theoretical price set by Danmarks Nationalbank is used for the calculation of its collateral value.

The haircut applied by Danmarks Nationalbank for eligible securities depends on the liquidity category and the remaining maturity:

> **Category 1**: Securities issued by the Kingdom of Denmark

> **Category 2**: Mortgage bonds (ROs), covered bonds (SDOs) and covered mortgage bonds (SDROs) with a circulating volume of more than 1 bn euro or the equivalent value in Danish kroner. The bonds must also be comprised by a price-quoting system approved by Danmarks Nationalbank for this purpose and have at least three price quotes

> **Category 3**: Other ROs, SDOs and SDROs, as well as bonds guaranteed by the Kingdom of Denmark and bonds issued by KommuneKredit

> **Category 4**: Bonds issued by the government of the Faroe Islands.

> Figure 17: Haircuts for eligible securities with fixed or variable coupon rate*

Remaining maturity	Category 1	Category 2	Category 3	Category 4
0-1 year	0.5%	1.0%	1.5%	4.0%
1-3 years	1.0%	1.5%	2.0%	6.0%
3-5 years	1.5%	2.5%	3.5%	8.0%
5-7 years	2.0%	3.5%	4.5%	10.0%
7-10 years	3.0%	4.5%	6.0%	12.0%
> 10 years	5.0%	8.0%	9.0%	14.0%

Source: Danmarks Nationalbank, HSBC (February 2022)

* When a theoretical price is used, an additional haircut of 5% is deducted for all types of securities, except for securities issued by the Kingdom of Denmark. An exchange-rate haircut of 3% is deducted when securities in euro are pledged as collateral for credit facilities in DKK.

XI. SWEDEN: ELIGIBILITY CRITERIA FOR THE RIKSBANK

The Central Bank of Sweden, the Riksbank is accepting covered bonds as collateral for Open Market Operations. This includes loans on an intraday and overnight basis as well as Repos with longer maturities.

Eligibility of assets

In order for an asset to be accepted as collateral, the outstanding volume for each issue must be at least SEK 100 mn (or the equivalent in another currency). Also, the securities must be denominated in one of the following currencies: USD, GBP, DKK, EUR, JPY, NOK or of course the Swedish Krona (SEK). The issuer must be domiciled in either the USA, Australia Belgium, Denmark, Finland, France, Greece, Ireland, Italy, Japan, Canada, Luxembourg, Netherlands, Norway, New Zealand, Portugal, Switzerland, Spain, United Kingdom, Sweden, Germany or Austria.

The asset also ought to meet the following criteria concerning its credit rating:

> It must have at least a credit rating of AA-

> The credit rating must be confirmed by the credit rating agencies that the Riksbank acknowledges: Standard & Poor's, Moody's, Investor Services and Fitch Rating

> It may not be rated by a possible guarantor

> For securities which are not issued by credit institutions, confirmation of only the issuer's credit rating is acceptable

> The most current credit rating has to be used

> In case of credit assessments by more than one rating agency, the asset must meet the rating requirements in at least two credit ratings

> The Riksbank can always chose to assess the credit quality in a way different from the rating agencies to decide whether an asset may be utilized as collateral

Covered Bonds

Covered Securities, such as Covered Bonds, must meet the requirements in Article 52.4 of Directive 2009/65/EC of the European Parliament and of the Council of July 13, 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investments in transferable securities (UCITS). This means that, covered assets outside of the EEA cannot be regarded as such and can therefore not be seen as collateral.

In light of the Covid-19 crisis, the permitted share of covered bonds in a counterparty's collateral volume for credit with the Riksbank was increased from 80% to 100%. Furthermore, the permitted limit for an individual covered bond issuer, or group of individual issuers, was raised from 50% to 100%, and the Riksbank accepts own-use covered bonds. All these measures are temporary.

Valuation of the collateral

When it comes to the asset valuation for both the Intraday Credits as well as the Repo-operations, the Riksbank differentiates between three major categories of assets, called 'liquidity classes'.

> Figure 18: Liquidity classes as defined by the Riksbankir

Liquidity class	Category 1	Category 2	Category 3
Types of assets	- securities issued by governments - securities issued by central banks - other receivables at central banks	- securities issued by international organizations - securities issued by governments - securities issued or guaranteed by municipalities, country councils or equivalent foreign local authorities - covered securities* - securities issued by so-called agencies**	Other eligible securities

Source: Riksbank, HSBC

* Such as covered bonds

** The following are considered to be agencies: Agence francaise de developpement (France), BNG Bank (Netherlands), Bpifrance Financement (France), CADES (France), CDC (France), Erste Abwicklungsanstalt (Germany), European Financial Stability Facility (EFSF) (Luxembourg), Federal Home Loan Mortgage Corporation (USA), Federal National Mortgage Association (USA), FMS Wertmanagement (Germany), Fondo de Reestructuración Ordenada Bancaria (FROB) (Spain), Instituto de Crédito Oficial (Spain), KfW (Germany), L-Bank Baden-Württemberg (Germany), Landwirtschaftliche Rentenbank (Germany), Nedwatershaps Bank (Netherlands), NRW.Bank (Germany), Union Nationale Interprofessionelle pour l'Emploi dans l'industrie et le Commerce (France)

On the basis on the classification outlined in Figure 20, the following haircuts (Figure 21) are applied. It is noteworthy, however, that extra haircuts will be applied if the asset is valued theoretically. This is not the case if it has been issued by the Riksbank. Also, for assets denominated in a currency other than the Swedish Krona, a further hair-cut is applied to reflect the foreign exchange risk (4% for EUR, DKK and NOK; 5% for GBP; 6% for USD and 9% for JPY).

> FIGURE 19: HAIRCUTS APPLIED TO SECURITIES BY THE RIKSBANK*

Remaining maturity	Category 1			Category 2			Category 3		
	Fixed rate	Variable rate	Zero coupon	Fixed rate	Variable rate	Zero coupon	Fixed rate	Variable rate	Zero coupon
0-3 year	3.0%	1.0%	3.0%	3.0%	3.0%	5.0%	8.5%	6.0%	9.0%
3-5 years	4.0%	2.0%	7.0%	5.0%	4.0%	10.0%	11.0%	8.5%	14.0%
5-7 years	5.0%	5.0%	9.0%	7.0%	6.0%	15.0%	15.0%	12.0%	27.0%
7-10 years	6.0%	6.0%	12.0%	10.0%	10.0%	20.0%	20.0%	17.0%	35.0%
Greater than 10	7.0%	7.0%	20.0%	15.0%	14.0%	25.0%	35.0%	30.0%	40.0%

Source: Riskbank

* A haircut of 0.5% will be applied to account balances with central banks. Haircuts are not applied to account balances with the Riksbank and to securities issued by the Riksbank.

XII. COVERED BONDS AND REPOS: CONCLUSION

The comparison of the various treatments of covered bonds by some of the major central banks underlines the special status of covered bonds. In our opinion, this is driven by the macro-economic benefits of covered bonds through the provision of cheap residential (and commercial) mortgages and by giving banks a stable and relatively low-cost additional funding channel. However, there is no uniform approach and stances towards covered bonds by the various central banks differ considerably. Broadly speaking, covered bonds receive more favourable treatment in those countries where they play a more pivotal role in the funding of the domestic banking sector. This applies primarily in terms of eligibility of covered bonds as collateral for repo operations, but also in terms of haircuts.

2.4 COVERED BONDS VS. OTHER ASSET CLASSES

By Florian Eichert, Crédit Agricole CIB,
Frank Will, HSBC & Chairman of the ECBC EU Legislation Working Group

I. INTRODUCTION

In the past, a traditional spread ranking always had sovereign bonds trade the tightest followed by sub-sovereigns and agencies, and then covered bonds followed by senior unsecured debt. However, with the financial crisis, the subsequent sovereign debt crisis as well as quantitative easing (QE) by the Eurosystem, this ranking as well as the spread differences between these products have been profoundly shaken up.

Instead of trading with a significant pick-up, covered bonds in especially lower rated countries evolved to be the tightest product, in the case of Italy at some point trading as much as 200bp inside BTPs. Senior unsecured debt on the other hand widened to levels vs. covered bonds well in excess of their pre-crisis levels only to come back to trade exceptionally close to covered bonds as investors viewed the emergence of non-preferred senior debt as additional protection while at the same time materially reducing preferred senior issuance volumes. Most recently, the beginning of the exit of global central banks from their expansionary monetary policy combined with a surge in inflation have led to a surge in swap spreads as well as covered bond issuance volumes jump-starting after abysmally inactive 2020 and 2021. This in turn has pushed covered bonds to historically wide levels vs sovereign bonds while turmoil in credit markets led to underperformance of senior debt vs covered bonds. In short, quite a rollercoaster ride.

In this article we don’t want to focus too much on the most recent developments. We will instead take a look at how spreads have evolved across these products over longer periods of time, assess what the rationale is for the differences and show how investors decide between them.

II. SPREAD OVERVIEW COVERED BONDS VS. SOVEREIGN DEBT AND SENIOR UNSECURED

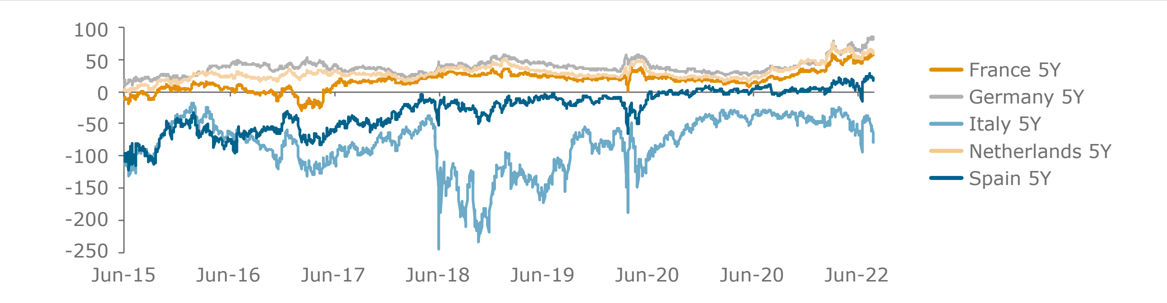
Since 2014, spreads between covered bonds and sovereign / SSA debt in EUR markets have been driven to a large extent by the monetary policy stance of the European Central Bank (ECB). When the first round of QE started in October 2014 the ECB only included covered bonds and ABS in the scope of eligible purchases. This led to a substantial tightening of spreads between covered bonds and public sector debt. When the Eurosystem then announced the expansion of QE to public sector debt, the differences widened again.

With the emergence of deeply negative EUR rates in 2019, covered bonds then struggled to follow sovereign debt (EGB) down into the rabbit hole and their spreads to core EGBs especially at the short end moved materially wider initially. However, as investors adjusted to the new situation, their reluctance to buy also covered bonds below 0% faded and spreads to the EGBs and SSAs normalized again.

The beginning of the COVID-19 crisis early 2020 then yet again changed the dynamics. On the one hand monetary policy became even more accommodative and the newly introduced PEPP focused primarily on public sector purchases. At the same time, however, primary market dynamics changed with sovereign and SSA funding needs shooting up while covered bond issuance dropped on the back of rising deposits and long-term central bank liquidity.

Last but not least, the beginning of the exit from the exceptionally accommodative monetary policy has pushed up volatility in rates and swap markets and with stress in Bund and repo markets as well as heavy hedging flows in swap markets, swap spreads have become exceptionally wide. At the same time, issuance volumes in covered bond markets have surged. While EGBs were able to rally against swaps, covered bonds did not, which in turn pushed spreads vs EGBs to the widest in ten years.

> FIGURE 1: AVERAGE ASSET SWAP SPREADS 10Y SPANISH COVERED AND SOVEREIGN BONDS BP



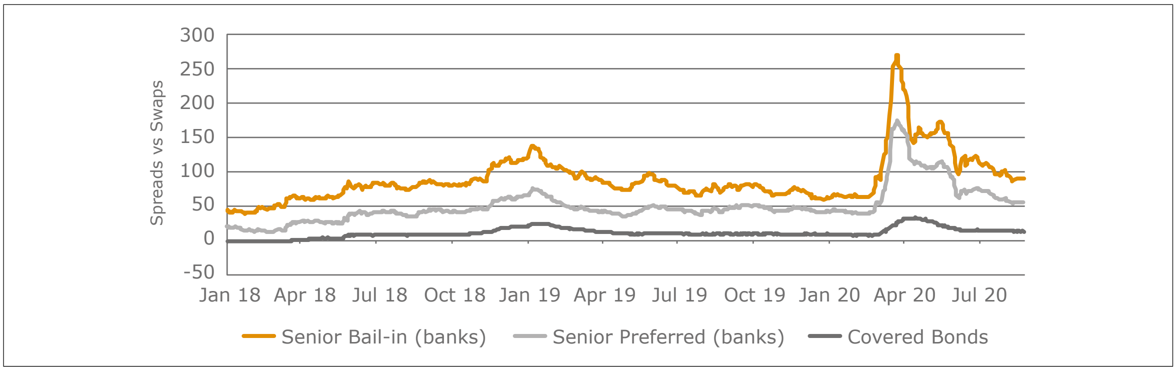
Sources: Bloomberg, Crédit Agricole CIB

Bank treasuries generally have a broad range of funding channels available including deposits, covered bonds, securitisation and unsecured funding. All of these various funding tools have their pros and cons from an issuer perspective. Senior unsecured funding is probably the most flexible form as it does not restrict the composition of the asset side. Covered bonds on the other hand require the issuers to maintain a cover pool of high quality assets backing the bonds. Moreover, regulatory rules and rating agencies often require that the mismatch between the cover assets and outstanding covered bonds is limited and that the covered bond issuer holds a certain amount of overcollateralisation (OC). In particular the rating agencies often demand high OC level going well beyond the legal requirements.

From an investor perspective, the secured character of covered bonds combined with their favourable regulatory treatment (low risk weights, exemption from bail-in under BRRD, LCR-eligibility, etc.) make them an attractive investment usually reflected in significantly lower spread levels than senior unsecured debt.

In a risk-on environment, the spread differentials between senior unsecured bank debt and covered bonds tend to be relatively low. In a compressed yield environment, investors in search of yield are inclined to accept the higher risk of unsecured paper in return for a relatively small risk premium. This is particularly true for shorter-dated senior unsecured paper and for bonds issued by strong institutions, where the downside risks are often regarded as being smaller. However, if the market is in risk-off mode the yield differentials between both asset classes tend to be higher as well as more volatile. Figure 3 show the divergent spread impact of the COVID-19 crisis on the spreads of covered bonds on the one hand and on those on senior non-preferred and senior preferred on the other hand.

> FIGURE 2: COVERED BONDS VS SENIOR PREFERED AND SENIOR NON-PREFERRED BANK BONDS



Source: IHS Markit, HSBC

From an issuers perspective the choice between the various funding instruments has become more complex and is no longer simply a function of lower funding costs. In the world of TLAC (Total Loss-Absorbing Capacity) and MREL (Minimum Requirement for Own Funds and Eligible Liabilities), bank treasuries have to ensure a minimum level of bail-in-able debt, which could be achieved by issuing senior unsecured debt. Many EU banks issue senior non-preferred debt to fulfil the requirements for bail-in-able debt. Moreover, covered bonds limit the issuer's flexibility regarding the underlying cover assets and cause higher administrative costs (e.g. hedging, additional ratings, cover pool administrator) compared to senior unsecured bonds. If the spread between both asset classes is lower than the difference in administrative costs and the costs for the reduced flexibility, then it is often more attractive to issue senior unsecured debt. This holds even more true if an issuer needs to raise the amount of bail-in-able liabilities.

The observed generally low spread differentials between covered bonds and senior unsecured bonds are in stark contrast to the regulatory developments over the last few years. Covered bonds are exempted from bail- in under the Bank Recovery and Resolution Directive (BRRD) which is also reflected in the more covered bond-friendly rating methodologies of the major rating agencies (see separate section below). However, we believe these factors continue to have only a limited impact on spreads, as technicals (supply volumes, absolute yield levels and central bank policies) will remain the dominant spread drivers. Moreover, even with BRRD and Single Resolution Mechanism (SRM) in place, many senior unsecured investors still view it as unlikely that there will be a senior bail-in of large, systemically important institutions, especially since many issuers are in the process of building up a buffer of senior non-preferred bonds, making a bail-in of senior preferred bonds less likely. The senior unsecured ratings of many covered bond issuers have already been upgraded due to the build-up of bail-in-able securities.

III. WHICH FUNDAMENTAL FACTORS DRIVE COVERED BONDS VS. SENIOR UNSECURED?

Comparing covered bonds and senior unsecured bank debt is ultimately a choice of where to invest within a bank's capital structure. Both asset classes are senior bank liabilities. Senior unsecured debt is structurally subordinate to covered bonds due to covered bond holders' preferential claim on the cover pool, on which senior unsecured creditors have a claim on only after covered bond holders and other preferred creditors have been fully repaid.

The relative value between both asset classes is driven by various aspects:

> **Probability of default**: Covered bonds are structured to survive an issuer event of default and not to accelerate automatically. As a result, the *conditional* probability of default (PD) of a covered bond (i.e. probability of payment interruptions on the covered bonds post issuer default) should typically be lower than the senior unsecured PD, which represents the cap for the covered bond PD. The strength of the covered bond framework plays a major role here. This includes provisions for an effective segregation of cover assets and privileged derivatives in an insolvency scenario as well as (structural) features to mitigate liquidity risks such as liquidity buffers or different repayment structures. The introduction of senior non-preferred debt in many European countries has created an additional buffer for senior preferred debt, reducing the PD of such instruments.

> **Recovery rate**: Different recovery rates are a major determinant between covered bonds and senior unsecured paper. In a default scenario, covered bond holders benefit from the double recourse to both the cover pool and to the issuing bank, ranking pari-passu with senior unsecured investors should the cover pool be insufficient for a full recovery. Senior secured issuance structurally subordinates senior unsecured creditors, reducing their recovery expectations. Both the overcollateralisation (OC) level and the quality of the collateral are decisive factors for the expected recovery of a covered bond relative to senior unsecured bonds. As normally only high quality assets are included in the cover pool and the sometimes very high level of OC reduce both the quantity and the quality of the assets (directly) available to senior unsecured bondholders.

- **Bail-in risk**: Systemic support has been the main determinant for the very low default rates on senior unsecured bonds despite a number of bank failures that occurred during the financial crisis. However, bail-in risk has become a new factor to the relative value equation. While covered bonds have been generally exempted from bail-in under the European bank resolution framework (with the exception of any undercollateralised part), senior unsecured creditors can be subject to bail-in under the Bank Recovery and Resolution Directive (BRRD) before resolution funds are tapped or taxpayer money is injected. However, as mentioned above, senior non-preferred bonds are subordinated to the traditional senior unsecured debt. This new asset class reduces the bail-in risk for senior preferred unsecured investors.
- **Regulatory treatment**: Covered bonds are treated favourably to senior unsecured paper in a number of regulatory frameworks, such as the Capital Requirements Regulation (CRR) where lower risk-weights are assigned to covered bonds, the liquidity coverage framework where senior unsecured paper are not eligible while most covered bonds qualify as either Level 1B, 2A or 2B, and Solvency II where covered bonds benefit from lower risk factors or the UCITS Directive allowing for higher investment limits in covered bonds. Unfavourable regulatory treatment can either exclude certain investor groups or lead to higher spreads being demanded as compensation for additional cost of holding senior debt compared to covered bonds.
- **Central bank repo eligibility and haircuts**: For bank investors, central bank repo eligibility is an important factor when structuring their liquidity portfolios. If eligible, central banks apply higher haircuts to senior unsecured bank paper than covered bonds. Higher haircuts increase banks' funding costs as the haircut part of the bond posted as collateral needs to be funded using alternative sources.
- **Rating stability and differential**: Rating agencies used to link their rating on covered bonds to the issuer/senior unsecured rating. The senior unsecured rating was the floor for the covered bond rating, with the uplift depending on asset-liability mismatches, recovery rates, and legal and structural aspects. In light of the new BRRD, all major rating agencies developed new frameworks at least partly decoupling covered bond ratings from the issuer rating. In essence, senior unsecured ratings benefit less from government support, while the gap between covered bonds and the issuer rating is wider. While even in the past covered bond ratings tended to be less volatile than senior unsecured bonds, this is the case even more under the revised criteria.

> Figure 3: Pros & cons of covered bonds vs. senior unsecured from an investor's point of view

Advantages of Covered Bonds	Advantages of Senior Unsecured Debt
> Double recourse to issuer and cover pool > Higher rating than unsecured debt > Lower risk weighting for CRR-eligible Covered Bonds bought by EEA banks > Favourable treatment under Solvency II > Generally better liquidity through larger issue size > Favourable repo treatment at ECB and other central banks > Most covered bonds are eligible as liquid assets under the CRR > No risk of bailing-in of the secured claim	> Higher yield levels (although 'spread give up' is at low levels at least at the short end of the curve) > Improved investor protection through higher capital requirements and implementation of senior non-preferred buffer > Often high turnover despite smaller deal sizes (due to lower portion of buy-and-hold investors)

Source: HSBC

1. Differences in regulatory treatment

Liquidity Coverage Ratio (LCR)

The liquidity coverage ratio which was first introduced by the Basel Committee on Banking Supervision in December 2009 requires banks to hold a stock of unencumbered high quality liquid assets to meet 30 days cash outflows under an acute stress scenario. Meanwhile, the net stable funding ratio (NSFR) measures the amount of longer-term, stable sources of funding employed by a bank relative to the liquidity profiles of the assets and the potential for contingent calls on funding liquidity arising from off-balance sheet commitments and obligations.

While highly-rated covered bonds form part of the set of liquid assets, senior unsecured bank bonds do not qualify. Next to cash, deposits at central banks, all types of bonds issued or guaranteed by EU Member States' central government, certain agency and supranational issues, Level 1 HQLAs (High Quality Liquid Assets) include covered bonds that meet certain conditions: They must be issued by an institution out of the European Economic Area, be credit quality step 1 (i.e. a rating of AA- or better), have a minimum size of EUR 500m as well as a minimum overcollateralisation of 2%. Whilst other Level 1 assets are not subject to liquidity buffer limits or haircuts to their market value, Level 1 covered bonds will be subject to a 70% cap in the liquidity buffer and to a 7% haircut.

Level 2A assets include regional governments, local authorities or public-sector entities with a risk weight of 20% and covered bonds with a credit quality step 2 rating and non-EU covered bonds rated at credit quality step 1. Also, corporate bonds with at least credit quality step 1, a minimum issue size of EUR 250mn and maximum maturity of 10 years at the time of issuance are classified as Level 2A.

Level 2B incorporates high quality securitisations for RMBS, auto, SME and consumer loans and high quality covered bonds that do not meet the rating threshold of Level 1 and 2A. Shares meeting certain conditions and corporate bonds with at least credit quality step 3, a minimum issue size of EUR 250mn and maximum maturity of 10 years at the time of issuance are accepted as Level 2B.

The classification of covered bonds as Level 1 and Level 2 means that many European bank treasuries use covered bonds in addition to sovereign, agency and supranational debt in order to optimise their liquid asset portfolio under both liquidity and risk-return considerations. The spread impact on covered bonds, however, has been limited as spreads in this sector are already heavily compressed due to the CBPP3.

Risk-weights

In times of rising minimum requirements for regulatory capital, risk-weights applied for the calculation of a bank's stock of risk-weighted assets have gained further importance. Regulatory capital is a bank's most expensive source of funding and bank investors are optimising their portfolios taking into account the capital consumption of their positions.

Bank investors based in the European Economic Area (EEA) can apply preferential risk-weights for covered bonds, fulfilling the criteria laid down in Article 129 CRR compared to senior unsecured bank bonds. A lower risk-weight means that banks have to hold less regulatory capital against a given position which benefits the average funding cost and thus the spread which is required. Covered bonds not fulfilling those criteria receive the same treatment as senior unsecured bonds. *Please refer to Article 2.2 of the Generic Section, for details on the determination of risk-weights for covered bonds.*

Bail-in

In the EU, the Bank Recovery and Resolution Directive (BRRD) was adopted in 2014 together with the Single Resolution Mechanism (SRM). The BRRD defines the triggers for a resolution of a failing bank in the EU and provides the necessary tools while the SRM centralises the decision-making process for the large and cross-border banks in the Euro Area. At the heart of the BRRD lies the bail-in tool. The bail-in tool, which aims to ensure that shareholders, sub-debt and senior unsecured investors will bear the losses of a struggling bank rather than the taxpayers, has become available to most EU governments as of the beginning of 2016. The possibilities for governments to support banks will be narrowed considerably and senior unsecured is at risk of burden-sharing after equity, sub debt and senior non-preferred.

Covered bonds have been excluded from the list of bail-in-able liabilities. Where appropriate, resolution authorities could exercise bail-in powers to a part of a secured liability that exceeds the value of the assets, i.e. any under-collateralised part or senior unsecured residual claim.

BRRD/SRM implementation: Most countries follow in France's footsteps

The BRRD/SRM is implemented at national level since the insolvency laws vary from country-to-country, making a one-size-fits-all solution for all European banks complicated. France was one of the first countries to implement the new European bail-in directive by modifying the hierarchy of claims in case of a resolution and introducing a new category of senior debt that counts toward Total Loss Absorbing Capital (TLAC)/MREL. This new category of senior debt is referred to as senior non-preferred (SNP) and is subordinated to other senior obligations but ranking senior to the traditional subordinated debt. The French banks continue to be able to issue traditional senior debt. Many other European countries such as Spain, Italy, Austria, Denmark or and Sweden have followed into France's footsteps and also introduced MREL/TLAC-eligible senior non-preferred bonds as new asset class, ranking below senior-unsecured bonds.

Germany initially opted for a different approach but has amended its approach in the meantime. Since 21 July 2018 German banks are able to decide whether to opt for senior preferred or senior non-preferred debt. Plain vanilla senior unsecured bonds issued before that date are subordinated to the new senior preferred debt (but rank pari passu to senior non-preferred debt) and structured senior unsecured instruments. According to Article 64 of the ECB guidelines, in order to be eligible as repo collateral, marketable debt instruments cannot be subordinated to other debt instruments of the same issuer. Thus outstanding German plain-vanilla senior unsecured bank bonds, which had been issued before 21 July 2018, lost their ECB repo eligibility at the end of 2018.

In order to build up a sufficient capital buffer, banks have actively issues non-preferred bonds. That reduced the remaining wholesale funding needs and thereby negatively affects supply in (preferred) senior unsecured and to a certain extent even in covered bonds. Moreover, the introduction of the new asset class already had a positive impact on senior unsecured ratings as the senior non-preferred buffer offers additional protection from bail-in for senior unsecured investors. That could – at least in theory – reduce the spread between senior unsecured bonds and covered bonds.

UK: ring fencing of covered bonds

Since 1 January 2019, UK banks with a three-year average in retail deposits of over GBP 25bn must legally separate their core retail banking services from their investment and non-EEA banking activities. The goal of this structural reform was to support financial stability by making banking groups simpler and easier to 'resolve', ensuring that "if either the ring-fenced or the non-ring-fenced part of the bank fails, it will be easier to manage the failure in an orderly way without the need for a government bail-out". Building societies are exempted from ring-fencing.

The ring-fenced part primarily includes the domestic UK retail business, while the non-ring-fenced part mainly comprises the corporate and investment banking business of the banks. The residential mortgage business remains part of the ring-fenced bank and the covered bonds are issued out of the ring-fenced entity. Rating agencies reacted and the issuer ratings of several ring fenced entities were upgraded, while the non-ring-fenced entities were downgraded.

Moreover, Moody's stated in a sector comment that the inclusion of UK covered bonds within the ring-fenced banks (RFBs) "is credit positive for covered bonds as the RFB structure decreases the likelihood of bank failure and, as a consequence, the likelihood that banks will cease making payments under the covered bonds". In its report, Moody's emphasised the importance of the credit strengths of the issuers as one of the key driv- ers of the covered bond ratings and indicated that "the credit profiles of RFBs will be in line with or stronger than those of the existing banks, reflecting the less complex and less diversified business models of the RFBs relative to existing banks".

2. Ratings

Amended rating methodologies

In light of the bank resolution regimes, the major rating agencies have introduced amended methodologies for covered bonds. As a result, the average gap between issuer and covered bond ratings has widened. On the one hand, covered bonds are explicitly exempted from bail-in and the changes of the rating methodologies by the agencies reflect the preferential treatment of covered bonds under the new resolution regimes. On the other hand, issuer downgrades in some cases partly offset this positive effect. Nevertheless, the overall net effect of the introduction of the bail-in rules has been positive for the covered bond ratings.

From an analytical perspective, it is crucial that the starting point of the covered bond ratings is not the senior unsecured rating as the bailing-in of senior unsecured debt no longer automatically triggers an issuer default. The resolution measures principally aim at maintaining a going-concern entity. The fact that covered bonds are exempted from bail-in measures means that a different starting point for the covered bond rating has to be used. The recent changes of the rating methodologies address, at least partly, this new situation.

Structural subordination

Differences in recovery expectations are another main determinant of the relative value between covered bonds and senior unsecured. Against this backdrop, rising concerns from senior unsecured investors about structural subordination have been a factor supporting the covered bond market. The increased use of covered bond funding by banks over the last several years means that more assets were ring-fenced. As assets in the cover pool are not available to cover the claims of senior unsecured investors in case of issuer insolvency[1], market participants have started to worry about the growth in covered bond issuance and the subsequent reduction of assets available to unsecured investors in an insolvency scenario. This problem has been exacerbated by rating agencies' demands for higher overcollateralisation levels, which in most cases significantly exceed the legal overcollateralisation requirements and further reduce the amount of assets available for investors outside the cover pool.

While we understand the concerns in the market, we think asset encumbrance discussions often tend to overstate the problem arising from structural subordination through covered bonds while ignoring other sources of encumbrance (including contingent encumbrance when a bank's financial situation deteriorates) such as central bank repos/liquidity assistance as well as ignoring offsetting factors. The use of covered bonds usually results in lower funding costs for the banks and significantly broadens the investor base allowing issuers to tap rates investors such as central banks. In addition, it is a more stable funding base. Even if the unsecured market is closed for an issuer, the bank may still be able to access the wholesale markets by using covered bonds or, in a worst case scenario, it can retain the bonds to repo them with central banks such as the ECB. Moreover, the potential issuance volume of covered bonds is not unlimited. The availability of eligible assets is a restricting factor for covered bond issuance, putting a cap on the actual issuance potential. Also, the aforementioned requirements from rating agencies of high overcollateralisation levels further reduce the available headroom for covered bond issuance.

1 If all the covered bonds of an insolvent issuer have been repaid and the claims of all covered bond investors have been satisfied, the remaining assets in the respective cover pool would generally be made available on a pro-rata basis to the senior unsecured investors. Moreover, in some jurisdictions, such as Germany, in case of issuer insolvency senior unsecured investors would have access to assets in the cover pool that are obviously not necessary to cover the outstanding covered bonds and related liabilities. Given the dynamic character of the market, a very high hurdle must be overcome in order for this process to trigger, and we would expect that only in very few, selected cases the insolvency administrator of the cover pool would agree to such a transfer.

IV. WHICH FUNDAMENTAL FACTORS DRIVE COVERED BONDS VS. SOVEREIGN AND SUPRA/AGENCY DEBT…?

Despite the fact that covered bonds in a number of countries have at times traded well inside their sovereigns, sovereign risk does fundamentally impact covered bonds. In fact, it impacts them in all aspects – quality of the issuer, cover pool quality, liquidity and refinancing risk as well as ratings.

> Issuers especially those with a strong domestic presence are directly impacted by a weakening sovereign. Their business prospects deteriorate as a weaker sovereign and a weaker economic situation go hand in hand. In addition to this, many bank treasuries hold substantial volumes of their own sovereign debt making them directly susceptible to widening sovereign spreads.

> Cover pool assets are impacted as weaker economic growth usually means higher unemployment and thus higher NPL ratios.

> With very few exceptions, covered bonds are not pass-through securities. Hence bullet bonds refinance granular loan portfolios and there are mismatches that need to be refinanced. Should a sovereign run into trouble, issuers will find it harder and harder to refinance liquidity mismatches either via further issuance, third party liquidity lines or portfolio sales. Covered bond programs backed by pools that might not even have any problems credit quality wise could thus be impacted negatively.

> For rating agencies sovereigns play a major role in rating covered bonds. They link issuer ratings to that of the sovereign unless an issuer has a substantial presence in other countries as well. They factor in sovereign bond spreads into their cash flow cover pool models thus driving up OC requirements in times of sovereign stress. And last but not least, Fitch, Moody's and S&P all operate with sovereign ceilings for structured finance instruments including covered bonds.

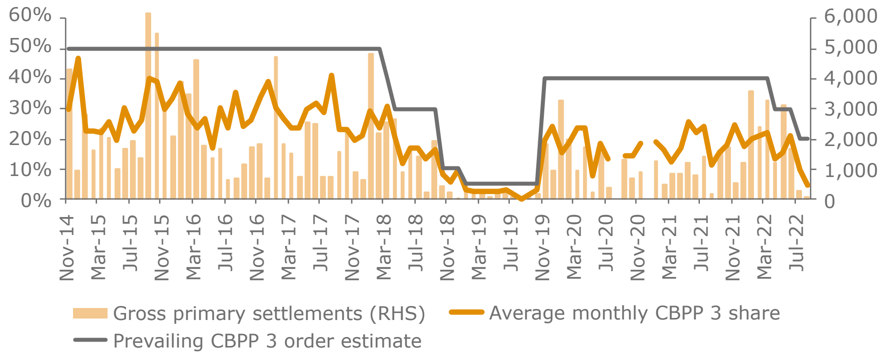
Bottom line is that sovereign risk plays too big of a role for covered bonds to ignore it. Nonetheless, there are reasons why at times covered bonds can very well trade inside their respective sovereign bond curves that go beyond merely differences in regulatory treatment.

Quantitative easing and bond purchases

Overall, the Eurosystem has acquired just below 55% of the eligible benchmark universe at the end H1 2022. The only other market for which we have comparable numbers is debt issued by supranational. For sovereigns or agencies shares are noticeably lower.

Unlike is the case for public sector purchases, the Eurosystem aims for a market neutral covered bond portfolio. However, the actual spread impact has also depended on just how much it could rely on primary markets and how much effort (or not) it had to put into chasing bonds in already illiquid secondary markets. The ECB's spread impact has thus been felt most intensely in the larger peripheral markets, where the ECB was forced to buy sizeable volumes but could not rely on primary markets to do so.

> FIGURE 4: GROSS PRIMARY MARKET SETTLEMENTS PER MONTH (EURM) CBPP 3 AS WELL AS ESTIMATED ORDER SIZE (% OF ISSUE SIZE)



Source: Bloomberg, Crédit Agricole CIB

Rating stability

Despite rating agencies factoring in sovereign ratings into covered bond ratings, they do allow for some uplift above the sovereign. The maximum depends on the rating agency and collateral type but it can reach up to 6 notches with Moody's or Fitch for example. Covered bond ratings can thus withstand pressure on sovereign ratings to a certain extent. Only once the maximum uplift above the sovereign is used up do they start to move lower as well.

Italian covered bond ratings for example have been much more stable historically than the Italian sovereign itself. In turn, in Portugal, investors who were prohibited from holding non-investment grade debt had Portuguese covered bonds as an alternative. Spreads of Portuguese covered bonds thus traded as much as 200bp inside the Portuguese sovereign. As Portugal was upgraded into investment grade again in 2018, Portuguese covered spreads moved back into positive territory vs the sovereign.

> FIGURE 5: COVERED BOND VS. SOVEREIGN BOND RATINGS

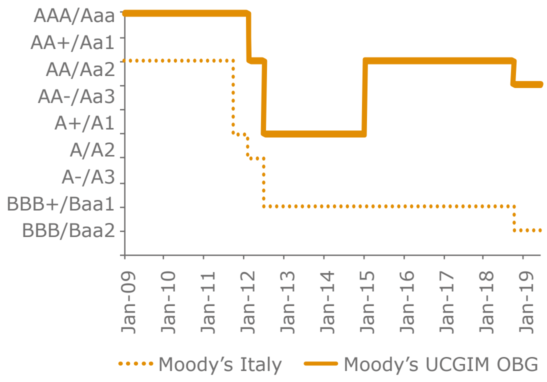
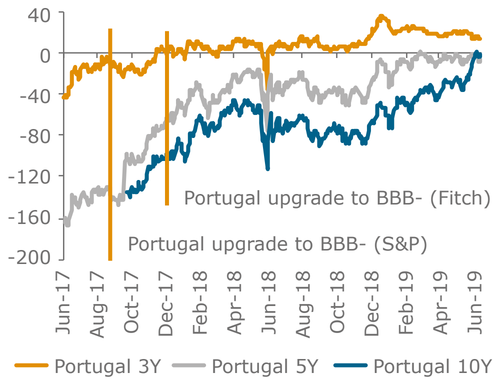


FIGURE 6: PORTUGUESE COVERED BOND VS SOVEREIGN SPREAD (BP)



Sources: Bloomberg, CréditAgricole CIB

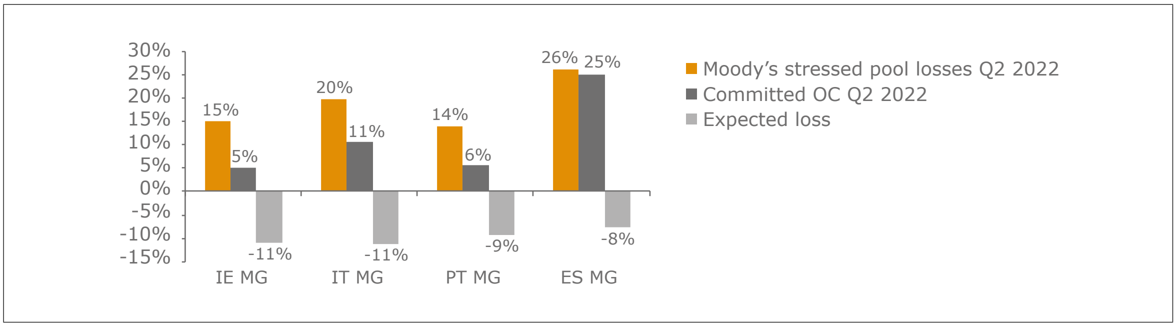
Tail risk – expected recoveries

Especially for buy-and-hold investors, an argument to defend negative covered-sovereign bond spreads is the expectation that tail risks for covered bond investments are smaller than they are for sovereign debt. Especially during the sovereign crisis, long-term investors began to feel more comfortable with the collateralised claim of covered bonds than sovereign debt.

However, the validity of this statement does depend on the cover pool, the covered bond framework and the issuer itself. High quality mortgage backed covered bonds from a country with a strong framework that are issued by a systemically important bank will stand a much better chance than lower quality public sector backed covered bonds issued by a small issuer. It is also important to stress that the weaker a sovereign is the more relevant these tail-risk considerations become. For stronger sovereigns, better liquidity and regulatory treatment of their bonds are the main drivers for the spread to covered bonds.

It is hard to estimate cover pool recoveries based on issuer reporting. However, rating agencies such as Moody's publish the results of their own cash flow modelling of cover pool assets and liabilities. Moody's stressed pool losses are the loss the agency expects should a cover pool be wound down. One can use this number and apply it to a pool which is left with legal minimum OC to come up with an estimated recovery rate. For Italian mortgage cover pools for example the estimated loss is just below 10% if the bond was purchased at par (average committed OC of 11% and stressed pool losses of 20%).

> Figure 7: Committed OC, Moody's stressed pool losses, and required sovereign haircut to be better off with covered bonds



Sources: Moody's, Crédit Agricole CIB

This estimated pool recovery figure can be used to either estimate cash prices below which a purchase should result in a positive return even if the bank and the covered bonds were to default. It can, however, also be used as a proxy for the required haircut on a sovereign bond that would make the covered bond the better option. In the Italian case, should a sovereign haircut on Italy be in excess of 10%, the expected recovery on the OBG would be higher, if not, sovereign debt would be the better option.

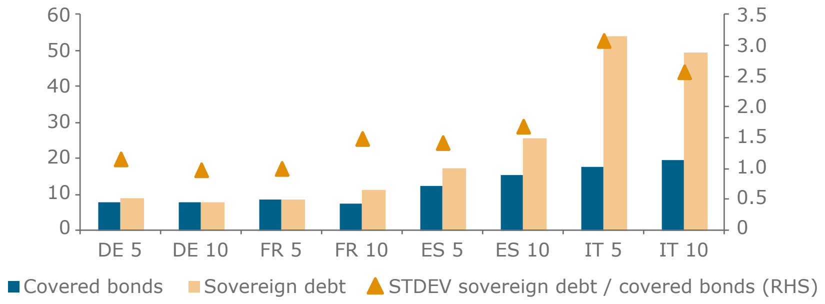
What this calculation does not take into account though is the probability that some banks can very well survive a sovereign debt restructuring and that, irrespective of potential pool recoveries, covered bonds could be the better choice. Countries need to maintain a basic level of banking services after all during and after a sovereign debt restructuring. National Bank of Greece is the best example for this.

Of course, recoveries based investing took place above all at the height of the sovereign crisis when peripheral covered bonds were trading well below par. At the current prices, the investors who focused on this have long moved on from covered bond markets. However, for long term investors that want to assess tail risks, the recovery assessment vs. sovereign debt can still make sense.

Spread stability

A main argument pro covered bonds over the years is their spread stability relative to virtually all other products. While even German Bunds experienced intra-day volatility of 20bp and more as recently as this year, covered bonds have remained extremely stable with volatility only a fraction of the corresponding EGBs especially in countries such as Italy, Spain but also France.

> FIGURE 8: 2015-2020 STANDARD DEVIATION ASW SPREADS COVERED BOND VS. SOVEREIGN BOND (BP)



Source: Bloomberg, Crédit Agricole CIB

Spread volatility is less of a problem for long term buy and hold investors but certainly causes problems for asset managers valuing their funds' assets. It also causes problems for banks VAR calculations. While European banks do not (yet) have to hold capital for European sovereign debt, they do have to hold capital to cover the volatility of their trading assets. And the more volatile an asset is the more capital banks have to hold. Spread stability of covered bonds thus reduces the capital consumption difference to sovereign debt.

One of the reasons for this lagging of covered bonds is certainly the different investor base and less active trading, which were factors even long before QE. Buy and hold investors traditionally play a more important role in covered bond markets while trading accounts are more active in EGB markets. However, the Eurosystem purchases have of course made this theme more extreme by further reducing the covered bond free-float. It has at times needed new issuance to lead to a repricing of covered bond spreads. The end of net settlements for the APP and PEPP as well as surge in issuance volumes this year are starting to improve the liquidity also in covered bond markets. However, this is above all valid for this year's vintage as the older stock is still and will continue to be owned by the Eurosystem leaving a meagre tradeable free-float.

Regulatory treatment

Differences in regulatory treatment between covered bonds and other asset classes are described at length in the respective chapters, there is no need to repeat this here. When it comes to the difference to 0% risk weighted sovereign and SSA exposure, a bank treasurer owning 10% risk weighted (RW) covered bonds needs to factor in an extra 10% capital charge as well as higher LCR haircuts. For a target ROE of 10% we are thus talking about roughly 8bp of extra capital cost while the higher LCR haircut requires more covered bond holdings to achieve the same LCR result and thus some extra funding and again some extra capital. Taken together, the combined effect for banks are typically between around 10-15bp for level 1, 10% RW covered bonds or around 20-30bp for level 2A, 20% RW ones. For covered bonds that are not repo eligible with central banks such as the ECB, banks typically factor in an extra element of liquidity cost vs sovereign / SSA debt.

Solvency II does have an even more pronounced capital related effect on covered bond spreads vs EGBs / SSAs for insurance companies. However, given their much lower level of activity in covered bond markets in recent years, issuers have been able to price long-end new issues almost flat to shorter dated debt relying on bank treasuries and asset management accounts instead.

V. HOW DO INVESTORS MANEUVER BETWEEN THE PRODUCTS?

Covered-senior

We believe that one of the reasons for dislocations in spreads between unsecured and secured bank debt has been the limited overlap of senior unsecured and covered bond investors. Many investors still cannot directly play opportunities that arise between both asset classes. The main reasons for the limited overlap are in our view: (1) central banks and sovereign wealth funds are large buyers of covered bonds but not of senior unsecured debt, (2) banks are one of the biggest investor groups in covered bonds and regulatory provisions favour covered bonds, (3) asset managers and pension funds often have higher limits for covered bonds than for senior unsecured bank debt, and (4) both asset classes are usually bought for different dedicated portfolios. In addition, covered bonds are sometimes used to enhance the yield of sovereign bond portfolios without diluting the average rating, or added to genuine credit portfolios to improve the portfolio rating quality.

Anecdotal evidence from analysing order books over time, however, suggests that the overlap in the investor base has increased in recent years due to a higher participation of credit investors in new covered bond issues. We expect this trend to continue over the coming years and credit investors to account for a growing portion of covered bond order books going forward, not least because of the bail-in risk for European senior unsecured debt and the relative value opportunities this will create between these two asset classes.

Furthermore, in the current low-yield environment, spreads between covered bonds and senior unsecured paper are, to a large extent, driven by technicals such as the ECB purchase programme which maintain spreads often at a level below fundamental values.

Covered-sovereign / SSA

There is a material overlap in the investor bases between covered bonds and EGB / SSA debt. After all, for bank treasuries, they are all LCR eligible assets and thus compete with each other with the difference in regulatory (higher capital charges and LCR haircuts), central bank treatment (higher repo haircuts and different purchase programme dynamics) and liquidity being main drivers.

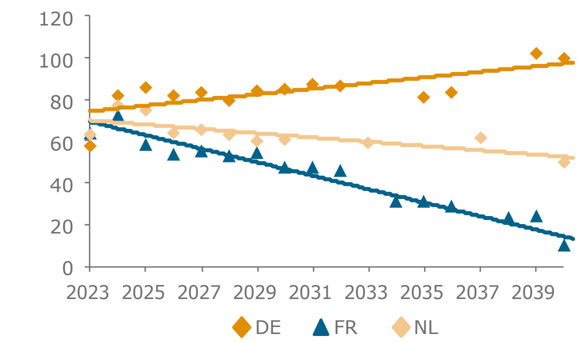
We mentioned the different regulatory cost above. While they have ceased to be a driver between EGB and covered bonds with swap spreads having driven covered bonds to levels well in excess of these minimum costs, the approach still is valuable vs SSAs. At covered-SSA spreads well above this, banks tend to go for covered bonds, at spreads inside this, they would typically prefer the more liquid SSAs such as the EU, KFW or EIB with the better regulatory treatment.

Given the need to rely on secondary markets for liquidity, there has been less overlap between covered bonds and sovereign / SSA markets in recent years for asset managers (AM). Unlike banks they cannot rely on central bank repo operations but need to outright sell after all. However, the higher rates and wider spreads vs EGBs and SSAs have led to more aggregate portfolios also looking at covered bonds. There are also externally managed LCR funds in countries such as Germany for which covered bonds are eligible investments in the same way they are for banks directly.

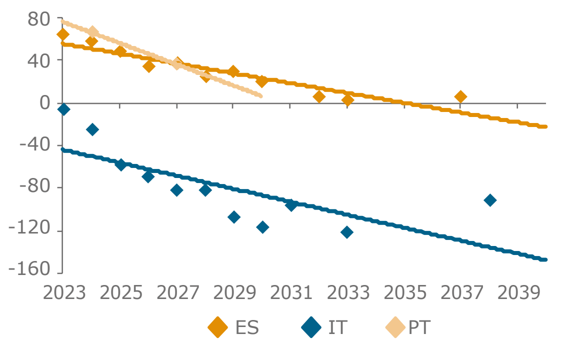
When comparing covered bonds to EGBs using a very simplified approach, on the one end there is the higher liquidity of sovereign debt and lower capital charges compared to covered bonds while on the other end, spread stability and potentially higher ratings and recoveries can speak in favour of covered bonds. The liquidity and capital charge arguments pro EGBs are valid across the curve. However, while spread stability as well as recoveries are no major topics at the very short end, they become more relevant the longer the bond’s tenor. As a result, covered bond – EGB spread curves typically slope downwards with countries such as Germany or the

Netherlands being exceptions. After all, the 10Y Bund is being used as a very liquid flight to quality instrument leading to rather wide spreads of Pfandbriefe at the long end too.

> Figure 9: Covered govie spread curves per country (bp)



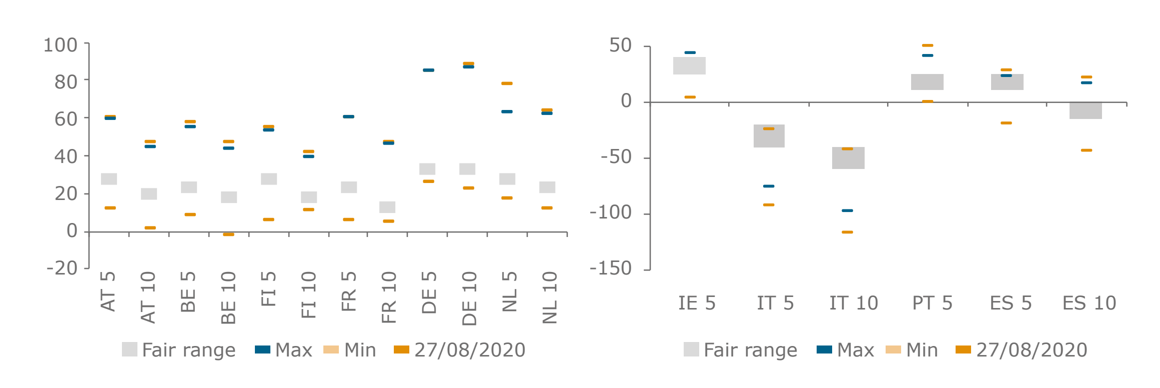
> Figure 10: Covered govie spread curves per country (bp)



Sources: Bloomberg, Crédit Agricole CIB

Below we show our estimate fair value ranges between covered bond and sovereign debt by country.

> Figure 11: 5y /10y EUR covered bonds vs. local sovereign debt (bp)



Sources: Bloomberg, Crédit Agricole CIB

VI. WRAP UP

While there is a material overlap in the investor base between covered bonds and sovereign / SSA debt, this overlap is less pronounced for senior preferred debt. After all, covered bonds are LCR eligible assets that sit in the same bank portfolios as sovereign / SSA debt while for asset managers they can serve as higher yielding but still highly rated and stable alternatives in aggregate portfolios. While QE, low yields, tight spreads and little issuance had driven credit investors to focus further down the capital structure than pay much attention to covered bonds, this has begun to shift somewhat in 2022, though, with even high yield portfolios buying some short-dated covered bonds to park cash.

QE as well as the unfolding exit have clearly impacted the relationship between covered bonds and the other asset classes. Little issuance and on-going Eurosystem buying compressed covered bond spreads and added an extra element of spread stability. QE also allowed for issuance volumes from the likes of the EU to balloon without these higher volumes having a major impact on SSA spreads that would have previously been the case. With monetary policy shifting again, markets are these days trying to find a new equilibrium too, something that is made exceptionally difficult because of swap markets and ultra-wide swap spreads.

Despite these distortions, the fundamental drivers of the relationship between covered bonds and EGBs / SSAs as well as senior debt, have not gone away. They may be less visible these days, especially with swap spreads as high as they are but they will not lose their long-term relevance.

In the same way, covered bonds will remain an important product for a wide range of investors. In fact, at present, they sit rather comfortably between the other asset classes with the pick-up over EGBs offering a strong incentive while the stability argument shines especially strongly in a market that is trying to find a new equilibrium in a post-QE world. We wrote in last year's ECBC factbook that covered bonds are too strategic a product for investors to abandon permanently. And while we did see investors move into either credit or EGBs / SSAs over the past few years, many of them have indeed come back this year at the higher yields and wider spreads.

CHAPTER 3 - THE ISSUER'S PERSPECTIVE

3.1 ARMENIA

By Eleonora Mkrtchyan, Central Bank of Armenia and Edmond Vardumyan, National Mortgage Company RCO

I. FRAMEWORK

Covered bonds are issued in Armenia according to the Law on Covered Mortgage Bonds adopted in 2008 and majorly reformed in 2018 with expert support from KfW, modernizing the framework in line with international best practices.

A major change that the reform introduced was the regulation of centralized covered bond issuance. The reforms also updated and redefined the list of assets that are eligible for the pool. The law clearly defines the assets that can be used as substitute assets and what the maximum percentage of such assets in the whole pool may be.

The reform aimed at clarifying the asset valuation and revaluation processes as well. Importantly, it introduced rules for the case of a significant collateral value decline. Earlier, a reform on mortgage consumer protection had introduced early repayment rules for mortgage loans that permit yield maintenance indemnities and thus improved the matching of cover assets and liabilities. The reform also established a public cover asset register and refined the functions of the cover pool controller.

Most importantly, the reform ensured the ring-fencing of assets in case of insolvency of issuer (in centralized scenario, that of participants as well) by changing the Law on Bankruptcy of Banks, Credit Organizations, Investment Companies, Investment Fund Managers and Insurance Companies.

II. STRUCTURE OF THE ISSUER

According to the law, the issuer can be either a bank or a credit organization. Those types of organizations are subject to license requirement and supervision, with capital requirement, liquidity requirement etc. in place. Those institutions are regulated and supervised by the Central Bank of Armenia.

There are two scenarios of covered bond issues: a standard one and a centralized one.

In the standard one the issuer of the covered bonds, an individual bank or credit organization, uses its own assets to create a cover pool and issue the bonds.

In centralized issuance scenario the issuer may use other banks' or credit organizations' (called "participants") mortgage assets as collateral in order to create a cover pool and issue the covered bonds. The cover pool of a centralized issuer consists of refinancing loans to the participants. The mortgage loans posted by the participants to back the refinancing loans must fulfil all the requirements just as if the participants were individual covered bond issuers. The law provides for segregation of assets in case of participant's insolvency and thus the respective pool of mortgage loans backing the refinancing loans are moved from participant's balance sheet to that of central issuer (or to other issuer, including participant as the case may be) without entering the insolvency process.

III. COVER ASSETS

Main assets

The assets that are eligible for covered assets pool are mortgages that comply with the following:

1) the real estate subject to mortgage is located on the territory of the Republic of Armenia, or the security of the mortgage is a right for construction of real estate on the territory of the Republic of Armenia;
2) the mortgage represents a first priority claim on the underlying asset;
3) the amount of the loan at the time of inclusion into the pool does not exceed 70% of the estimated market value of the collateral (real estate);

4) The mortgage contract includes early repayment clause in accordance with new Law on Housing Mortgage Credit.

Substitute assets

Where cover assets are to be removed from the asset pool prior to full fulfilment of obligations on mortgage bonds on grounds listed below, the issuer will have the right to include substitute assets in the pool. However those assets should not at any time exceed 10% of all the assets. The law clearly defines what those substitute assets can be: cash, bonds issued by or guaranteed for timely payment by the Republic of Armenia, and other assets defined by normative acts of the Central Bank of Armenia.

Limitations

In any case the law provides for some limitations for derivative instruments which may be used in the asset pool.

Only the following derivatives may be used:

1) the derivative serves to reduce asset-liability management risks between cover assets and covered bonds issued;
2) the derivative does not require the cover pool estate to post maintenance margin and observe margin calls;
3) upon insolvency of the issuer the derivative excludes netting for the benefit of the derivative counterparty with other claims against the issuer or other derivatives in the cover;
4) upon insolvency of the issuer the derivative is not terminated.

Removing assets from the asset pool

The asset is removed from the asset pool when the asset is terminated (including early repayment of loan, amortization etc.), the asset has been categorized as non-standard, doubtful or loss according to Armenian legislation, or the asset does not meet the eligibility requirements of the law on covered bonds. The assets must be substituted by other eligible assets (main or substitute). The assets may be removed from the registry without the obligation to substitute them by other assets only when the removal does not amount to breach of adequacy of cover requirement and the remaining cover assets comply with the requirement of the law on covered bonds.

IV. VALUATION AND LTV CRITERIA

Valuation and revaluation

The valuation of real estate is to be performed by a person who:

> is licenced for real estate valuation in accordance with Armenian legislation

> has at least 2 years of experience

> has not been involved in the process of loan provision

> has a professional liability risk insurance for at least the amount equal to five thousand times the minimum wage

The Central Bank may by its normative acts introduce additional rules and methods for valuation of real estate for the purposes of including them into the cover assets pool. In case the valuation may be performed in more than one way and those provide for different results, the minimum among the results will be taken into account.

The real estate is to be revaluated at least once in three years, and if the real estate has a commercial purpose – once a year.

Besides, the real estate has to be revaluated, by a licensed real estate appraiser or according to real estate price index calculated in the manner prescribed by the Central Bank of Armenia, if the real estate prices have substantially fallen (i.e. more than 10%) in the market.

Loan to Value

The amount of the loan at the time of inclusion into the pool should not exceed 70% of the estimated market value of the collateral (real estate).

If the amount of a mortgage loan registered in the cover pool exceeds 85 percent of current mortgage lending value of collateral (real estate), the issuer may either post additional assets for the excess of 85 percent as additional collateral or reduce the loan amount funded by the cover to 85 percent. In case of posting additional assets, the cash flows derived from these assets do not accrue to the bondholders except for the case of the insolvency of the issuer.

V. ASSET – LIABILITY MANAGEMENT

Covered bonds will be backed by dynamic mortgage pools and hence covered bond programs will be subject to asset-liability mismatches. A number of asset-liability management rules have been introduced to mitigate the associated risks and improve risk transparency.

The amount of outstanding liabilities on mortgage bonds must be backed by adequate cover:

1) the total nominal value of assets within cover pool must be at least equal to the total nominal value of mortgage bonds;
2) the receivable amounts on cover assets must be at least equal to the payable amounts against mortgage bonds;
3) the net present value of cover assets must at any moment exceed at least by 1 percent the net present value of all liabilities on mortgage bonds.

The Central Bank has determined stress testing methodology for the issuers. For the stress test the yield curve is shifted upwards and downwards based on the volatility of interest rates for selected maturities, but not less than 2%. Stress test horizon is 25 days and the confidence level is defined to be 99%.

The bonds issued should be denominated in the currency in which the cover assets are denominated. The assets comprising a single asset pool should be denominated in the same currency.

The issuer of covered bonds is required to maintain a schedule of cash flows, both actual and expected, on the assets included in the cover pool, which, inter alia, includes information on early repayments and overdue payments. The cash flow information shown in the schedule must allow identifying assets, including mortgages, substitute assets and derivatives from which those cash flows have been received.

The schedule must also include projections regarding future unanticipated payments, namely for early repayments of loans, or early performance of obligations arising out of bonds or derivative instruments.

The outstanding liabilities on covered bonds must be at any moment backed by adequate cover on a present value basis after stress-testing, and the expected duration gap, i.e. expected aggregate duration of assets minus expected aggregate duration of liabilities, must not be lower than 3 months to avoid negative maturity transformation risk.

VI. TRANSPARENCY

The registry

The Central Bank maintains the registry of the cover assets of the covered bond program. The registry maintains information on all the assets comprised in the cover pool, namely:

- for land and building or for the permission for construction – Cadastre number, the duration for the permission for construction, its number and date, land/building address, limitation on use of land, if any;
- for mortgage loans – loan agreement number and date, loan register code, loan ID, purpose of the loan, loan amount, loan currency, repayment schedule and maturity date, annual interest rate, secured asset (real estate) value, borrower identification;
- for covered refinancing loans – information as referred to in point above, in addition segregation rights for the benefit of central issuer in case of centralized issue;
- for derivatives – type of derivatives, nominal amount for each type of contract, intrinsic value of each type of derivatives, market value/net present value of derivatives, as well as information on the transaction counterparty;
- other information defined by the Central Bank normative legal acts.

All parties concerned may have an access to information, contained in the cover register, on collateralization of assets.

Access to other information contained in the cover register is restricted to the Central Bank, to the Cover Pool controller, the issuer and the Mortgage Administrator.

Information constituting banking secrecy, contained in the cover register, can only be disclosed in the manner prescribed by law.

The control of the registry is performed by the controller of the pool. The controller must give his approval in order for the asset to be registered in the pool. Registration of asset without such approval is void.

Information by the issuer

The issuer must prepare, file to the Central Bank and place on its website monthly statements on issuance of mortgage bonds.

Monthly statements must include information on loans comprising the asset pool and information on the real estate, which is the secured asset for those loans.

In the centralized issuance mode, the monthly statements must in addition provide information on the refinancing loans.

Monthly statements must contain the following aggregate information::

1) information about real estate collateral:
   - Property type
   - Property values
   - Purpose of use
   - Property location
2) Information about assets:
   - Cover assets breakdown by nominal amount, loan amount to property value ratio, maturity, expected duration, seasoning, coupon, interest rate reference rate for floating rate loans, region, purpose of loan, and type of collateral
   - Number and amount of cover assets fully and partially repaid during the reporting period
   - Number and amount of substituted assets during the reporting period
   - Reason of substitution by number and amount of assets during the reporting period
   - Loans with higher than 85 percent loan amount in the cover to property value ratio at the end of the reporting period, which were not substituted. Size of the corresponding cash collateral account

- > Number and amount of assets added to cover pool during the reporting period
- > Net present value of assets at the end of the reporting period
- > Change in net present value of assets from the last reporting period

3) Information about Derivatives:

- > Types of derivatives contracts
- > Nominal amount of each type of contract at the end of the reporting period
- > Intrinsic value of each type of derivatives at the end of the reporting period
- > Change in intrinsic value of derivative portfolio from the last reporting period
- > Change in net present value of derivatives from the last reporting period

4) Information about Liabilities

- > Covered bond breakdown by maturity or first call date for bonds with embedded options, type of covered mortgage bond issued (fixed or floating), coupon, and duration
- > Net present value of covered bonds

5) Information about assets & liabilities management

- > Nominal coverage test, yield coverage test, duration gap, net present value ratio of assets and liabilities

6) Other information defined by the Central Bank's normative legal acts

The participants must also provide loan-by-loan information on historic and scheduled cash flows as well as other information to the centralized issuer enabling it to fulfil its duties defined by law.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

1. Controller

The law provides for the notion of controller of the asset pool and his functions.

Functions

The controller of the asset pool is the person whose activity is aimed at protecting the bondholders' rights. He imposes control over the cover register and the adequacy of cover assets to liabilities on mortgage bonds, ensuring the bonds are at all times covered adequately, assets are able to be identified and segregated.

The controller checks the compliance with eligibility requirements of the asset before including it into asset pool. He analyses the real estate valuation reports and may demand that only a part of value of the real estate be included in the asset pool.

As soon as a derivative instrument is registered in the registry, the controller informs all the counterparties of the issuer that have signed a derivative instrument with him.

The controller is also responsible for informing the Central Bank about breaches made by the issuer.

The controller inter alia follows the real estate market prices and when notices a substantial (i.e. more than 10%) fall, requires the issuer to revaluate the real estate comprised in asset pool.

The law obliges the controller to act in the best interests of the bondholders.

Access to information

The law provides for the necessary access to information by controller. For instance, the issuer is obliged to monthly provide the schedule of cash flows to the controller. The issuer is also obliged to form an expectation of the aggregate duration of assets and liabilities and report the expected aggregate duration gap to the

Cover Pool controller. Concerning the requirement for expected aggregate duration of assets exceeding that of liabilities by 3 months, the issuer is obliged to report on it to the controller at least weekly.

The controller may at any time check all the documents concerning the covered bonds and asset pool maintained by the issuer.

Upon the request by the controller the issuer is obliged to provide information on the payments made on loans, as well as any change concerning the assets that might be of interest for the bond-holders.

Controller requirements and appointment

The controller is appointed by the issuer. Every issuer must have a controller. The controller may control multiple asset pools of the same issuer.

The law provides for clear eligibility criteria for the controller, to insure the person is bona fide and that there is no conflict of interest.

The Central Bank is to establish the cover pool controller's evaluation procedure and professional adequacy criteria.

Supervision of controller

The controller is supervised by the Central Bank of the Republic of Armenia.

2. Central Bank supervision

The Central Bank of Armenia is the mega-regulator of the financial sector in the Republic of Armenia, which means CBA is the authority for regulation and supervision of the whole financial sector, including banks and credit organizations.

The law on covered bonds includes special provisions empowering the Central Bank to supervise banks and credit organizations in the context of covered bond issuance.

Besides the issuers, the Central Bank supervises the controllers as well.

The Central Bank may impose sanctions on issuers and/or its management if:

1) The information contained in the registry is incorrect or inconsistent;
2) The adequacy of cover assets or their eligibility requirements were violated;
3) norms, deadlines and public disclosure procedures on reports were violated, and/or the reports contained untrue or inconsistent information;
4) Issuer did not disclose information subject to disclosure by law on covered bonds;
5) Issuer failed to fulfil an assignment provided by the Central Bank in a manner established the law on covered bonds;
6) provisions of the law on covered bonds, other normative legal acts on its basis and internal statutory acts of Issuer were violated.

Upon discovering such violations, the Central Bank of Armenia may impose warning and order (to cease the violation, to recover etc.), fine (may not exceed 1% of the nominal capital of the issuer), revocation of Administrator's license.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

The law provides that the issuer may not dispose of the cover assets, except in cases of substituting assets in cases provided by the law. The controller controls that each of the assets may be identified at all times and ensure it can be segregated in case of insolvency of issuer (or a participant, in case of centralized issue).

In case of insolvency or ceasing of license of the issuer, the Central bank appoints a duly qualified mortgage administrator to manage the covered assets.

The mortgage administrator has a fiduciary duty towards the bondholders and is obliged to act in their best interests.

From the moment of ceasing of the license or insolvency decision, the administrator must ensure that all the payment received in connection with covered assets are segregated from issuer's other assets and are paid to a special account opened for these purposes.

The administrator may cease the payments to bondholders or participants for up to three months. In the interests of bondholders, the Central Bank may extend this period for another three months.

In the centralized issuer case, at the time of registration of the refinancing loan by the central issuer in the registry, the first-preference right to the segregated assets in case of participant's insolvency is registered as well. As soon as the participant is insolvent, those assets are segregated and may either be registered on central issuer's name or, by central issuer's consent to another issuer.

The bondholders retain the claim towards the refinancing loans and have the first-preference rights for:

> refinancing loans included in the cover pool and any cash flow deriving from those loans;
> and the mortgage loans which are in the balance sheet of the participant organization and their underlying secured assets (real estate).

The assets included in the centralized issuer's cover pool and their cash flows may be disposed of solely to satisfy the claims of the bondholders and no other creditor of the centralized issuer will have any claims over the assets included in the cover pool and their cash flows until all the claims by bondholders are satisfied. After satisfaction of all the claims by the bondholders, the remaining assets, if any, are returned to the insolvency estate of the insolvent organization for other creditors' claims.

The bondholders are paid on pari passu basis. If the assets comprised in the asset pool are not sufficient to satisfy the claims of bondholders, the latter become unsecured creditors for the purposes of insolvency proceedings for the remaining, unsatisfied part of their claims.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Armenia is not member of the European Union and is developing its own risk-weighting regime for covered bonds.

There is currently no special regulation for the risk-weighting for covered bonds. The risk weight for covered bonds corresponds to the standard rules. The assets get 100% risk-weight in case the assets are denominated in AMD and 150% risk-weight if they are denominated in foreign currency.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Armenian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.2 AUSTRALIA

By Chris Dalton and Robert Gallimore, Australian Securitisation Forum

I. FRAMEWORK

The legal framework is principally contractual, with a statutory overlay enshrined in the Australian Banking Act (Cth) 1959 (Banking Act). The Banking Act contains certain minimum requirements for a covered bond programme (which are discussed in greater detail below) including requirements as to the assets eligible for inclusion in the cover pool, the appointment of a cover pool monitor, the requisite qualifications for a cover pool monitor, minimum overcollateralisation requirements and a cap on issuance. The Banking Act also empowers the Australian bank regulator, the Australian Prudential Regulation Authority (APRA), with certain powers including the power to determine Prudential Standards in relation to covered bonds.

II. STRUCTURE OF THE ISSUER

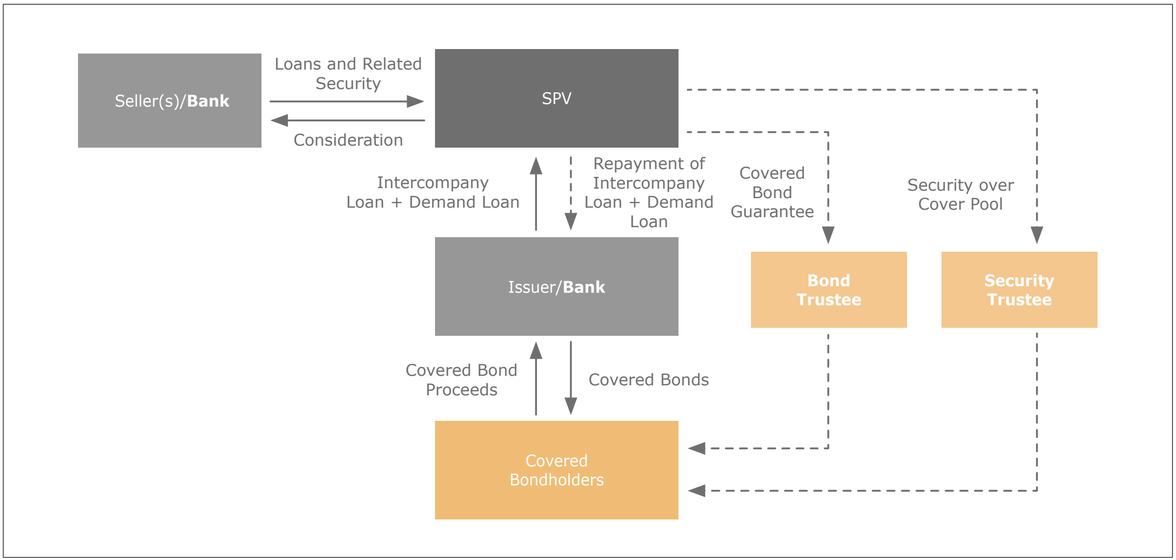
Australian banks, referred to under the Banking Act as "authorised deposit-taking institutions" or "ADIs", are the issuers of covered bonds; not SPVs or any other entity. However, a covered bond special purpose vehicle (the Covered Bond Guarantor) is established which holds the cover pool assets acquired by a true sale from the issuer. The Covered Bond Guarantor is in the form of a trust. It provides a guarantee over the issuer's obligations in respect of issued covered bonds, which guarantee is secured by the granting of a security interest over the cover pool assets in favour of a security trustee.

The guarantee will be called upon if an event of default in respect of the issuer were to occur. At such time, the Covered Bond Guarantor will be required to pay interest and principal on the covered bonds in accordance with the original payment schedule and payments under the covered bonds will not be accelerated. In addition, at such time, the bond trustee (on behalf of the covered bondholders) will make a claim, as an unsecured creditor, against the insolvency estate of the issuer bank. Any amount recovered against the insolvency estate of the issuer bank will be paid to the Covered Bond Guarantor to be held as additional collateral in the cover pool and to be used to make payments under the guarantee.

If an event of default were to occur in respect of the Covered Bond Guarantor, payments under the covered bonds would then be accelerated and become immediately due and payable.

Under the Banking Act, an issuer bank must not issue covered bonds if the value of the assets in the cover pool exceeds 8% of the issuer bank's assets in Australia. Further, if the issuer bank exceeds the 8% cap on issuance in breach of the Banking Act, it will also attract a deduction from its regulatory capital base equal to the value that exceeds 8%.

> FIGURE 1: STRUCTURE



Source: Australian Securitisation Forum

III. COVER ASSETS

Section 31[1] of the Banking Act sets out the assets that can be included in the cover pool. These are:

a. an at call deposit held with an ADI and convertible into cash within 2 business days;
b. a bank accepted bill or certificate of deposit that:
   1. matures within 100 days; and
   2. is eligible for repurchase transactions with the Reserve Bank; and
   3. was not issued by the ADI that issued the covered bonds secured by the assets in the cover pool;
c. a bond, note, debenture or other instrument issued or guaranteed by the Commonwealth, a State or a Territory;
d. a loan secured by a mortgage, charge or other security interest over residential property in Australia;
e. a loan secured by a mortgage, charge or other security interest over commercial property in Australia;
f. a mortgage insurance policy or other asset related to a loan covered by paragraph (d) or (e);
g. a contractual right relating to the holding or management of another asset in the cover pool;
h. a derivative held for one or more of the following purposes:
   1. to protect the value of another asset in the cover pool;
   2. to hedge risks in relation to another asset in the cover pool;
   3. to hedge risks in relation to liabilities secured by the assets in the cover pool.

The value of assets in the cover pool which are bank accepted bills or certificates of deposit as referred to in paragraph (b) above must not exceed 15% of the face value of the issued covered bonds.

At the time of publication, all Australian covered bond issuers have limited their programmes to residential mortgage collateral for their cover pools and no such programmes include commercial mortgages.

1 http://www.austlii.edu.au/au/legis/cth/consol_act/ba195972/s31.html.

IV. VALUATION AND LTV CRITERIA

Contractually, cover pool assets are subject to revaluation every month by way of indexation, which varies between programmes. Please refer to each issuer's individual website for details of the index used and the methodology applied.

LTV criteria – in addition to indexation, for the purposes of calculating the minimum overcollateralisation requirements contained in Section 31A[2] of the Banking Act as well as the monthly asset coverage testing, the following LTV requirements apply:

> Residential mortgages – if the mortgage loan exceeds 80% of the value of the mortgaged property securing that loan then the value of the loan is reduced by the amount of the excess; and

> Commercial mortgages – if the mortgage loan exceeds 60% of the value of the mortgaged property securing that loan then the value of the loan is reduced by the amount of the excess.

V. ASSET – LIABILITY MANAGEMENT

This is principally a matter for the credit rating agencies in relation to timely payment and their opinions on the value of the pool in liquidation scenarios. The issuers have regard to ECAI's methodologies and criteria to seek to ensure maintenance of AAA ratings.

VI. TRANSPARENCY

Since August 2012, an Australian Transparency Template has been in force, followed by each of the eight Australian covered bond issuers. It is in line with the guidelines of the ECBC's Covered Bond Label Initiative, and covers the following areas of each issuer's programme:

> Dates
> Ratings
> Parties
> Prepayments
> Pool Summary
> Mortgage Pool
> Compliance Tests
> Bond Issuance
> Asset Coverage Tests

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The Banking Act requires that a cover pool monitor be appointed in respect of a cover pool. The cover pool monitor must either be a registered auditor or hold an Australian financial services licence that covers the provision of financial services as the cover pool monitor. The cover pool monitor is appointed by the bank issuer but must be independent and must provide reports in respect of the cover pool to, amongst others, APRA on request. The Banking Act requires the cover pool monitor to undertake specific functions, and report on such functions, biannually. Those functions involve assessing and reporting on the following:

> compliance with the 103% statutory minimum overcollateralisation requirement;

> compliance of the assets in the cover pool with the eligibility requirements under the Banking Act; and accuracy of cover pool asset register.

In addition, the cover pool monitor is also required contractually to check the arithmetic accuracy of the asset coverage tests on an annual basis.

As the regulator of banks in Australia, APRA has some general powers under the Banking Act with respect to bank issuers but not the Covered Bond Guarantor. For example, under section 11CA(2) of the Banking Act APRA may give a direction to a bank issuer not to transfer any amount or asset to a cover pool. However, APRA may only give such directions in specific and limited circumstances including when APRA has reason to believe that the bank issuer is unable to meet its liabilities, there has been a material deterioration in the bank issuer's financial condition, the bank issuer is conducting its affairs in an improper or financially unsound way, the

2 http://www6.austlii.edu.au/cgi-bin/viewdoc/au/legis/cth/consol_act/ba195972/s31a.html.

failure to issue a direction would materially prejudice the interests of the bank issuer's depositors, or the bank issuer is conducting its affairs in a way that may cause or promote instability of the Australian financial system.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Cover pool assets are sold by the bank issuer to the Covered Bond Guarantor, which is a special purpose trust. The sale is a true sale and will be enforceable against the issuer in the event of its insolvency. In addition, the Covered Bond Guarantor will grant a security interest over the cover pool assets in favour of a security trustee which will be recognised at law and will not be enforceable against the Covered Bond Guarantor in the event of its insolvency.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

NNot in compliance with UCITS because Australian issuers are not domiciled in member states of the EEA.

Risk weighting varies depending upon the jurisdiction concerned, pending standardised risk-weights from the EBA and the outcome of the current Basel consultation.

Covered bonds issued by Australian issuers are currently not eligible assets for repurchase agreements with the ECB or NCBs, or the BoE. There is, however, a view that some Australian covered bonds may be eligible for inclusion in the calculation of LCR in some regulatory jurisdictions.

Covered bonds issued by Australian issuers and denominated in Australian dollars are repo eligible with the Reserve Bank of Australia subject to satisfying an assessment by the Reserve Bank of Australia and the issuer meeting disclosure requirements on an ongoing basis. Furthermore, covered bonds may qualify as Level 2 High Quality Liquid Assets (HQLA2A) for liquidity purposes under APRA's implementation of Basel III LCR guidelines.

There are no special Australian federal or state investment regulations regarding Australian covered bonds.

X. ADDITIONAL INFORMATION

The development of the Australian covered bond market largely came about due to the financial crisis and the effective seizure of non-sovereign global capital markets through this period. After the events of 2008 and 2009, the Australian Federal government recognised the need for increasing funding diversity within the Australian banking system. The Australian Federal government subsequently passed changes to the Banking Act, enabling banks to issue covered bonds in the form prescribed by the Banking Act. The first covered bond issuances from Australian banks occurred in late 2011. Issuance volumes subsequently increased dramatically through 2012 as issuers properly established their programmes in global bond markets.

In principle, Australian ADIs have three primary term funding options for their balance sheets: senior unsecured bonds, residential mortgage backed securitisation and covered bonds. In practice, the larger institutions have effective access to all three options while smaller institutions principally issue senior unsecured bonds and residential mortgage backed securities for term funding.

It is expected that Australian covered bond issuers will continue to use their issuance capacity sparingly; balancing maintaining a global market presence against the higher all-in funding costs associated with covered bonds and program management costs (in comparison to funding through senior unsecured bonds or residential mortgage backed securities), and the need to be able to respond quickly to deterioration in funding conditions. Feedback from a range of market participants suggests that this funding strategy may drive a scarcity premium in terms of the relative valuation of Australian covered bonds against other forms of Australian bank secured financing and other global covered bond markets.

Issuers: There are eight issuers of Australian covered bonds. These are Westpac Banking Corporation, National Australia Bank Limited, Australia and New Zealand Banking Group Limited, Commonwealth Bank of Australia, Suncorp Bank, Macquarie Bank, Bank of Queensland and ING Bank Australia. These eight Australian based banks have primarily issued soft bullet covered bonds. However, Bank of Queensland has issued conditional pass-through covered bonds (CPTCB) and is the first Australian ADI to issue a covered bond in that format.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Australian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.3 AUSTRIA

By Jochen Deiss, Raiffeisen-Landesbank Steiermark AG, and Heiko Langer, Erste Group Bank AG

I. FRAMEWORK

Based on the EU Covered Bond Directive[1], the Austrian legislator sets into force a new Mortgage Bond Act "Pfandbriefgesetz – PfandBG[2]" by July 8th, 2022. This law finally brings together the existing frameworks of:

1. Hypothekenbankgesetz: Mortgage Banking Act (Law of 7/13/1899) "Pfandbriefe"
2. Gesetz betreffend fundierte Bankschuldverschreibungen: Law on Secured Bank Bonds (Law of 12/27/1905) „FBS"
3. Pfandbriefgesetz: Mortgage Bond Act (Law of 12/21/1927) "Pfandbriefe"

These laws had already converged toward each other in recent years such that the foundation to unify them in just one Covered Bond Act was laid out. The new Mortgage Bond Act ensures with its transitional regulations that every Cover Pool and its associated Covered Bonds can be perpetuated safely. In the case of a continuing Cover Pool with both legacy bonds and new issued bonds, existing investors (i.e. those holding covered bonds issued before July 8th, 2022) also benefit from the new features, such as the introduced risk management system, improved supervision by national authorities or a standardised reporting that is geared to the ECBC Harmonised Transparency Template.

II. STRUCTURE OF THE ISSUER

In continuation of the three former laws, only duly authorised credit institutions, with a special license to such effect, have the right to issue covered bonds. Credit institutions that already issued covered bonds will keep their concession for issuing under the new Mortgage Bond Act. Under the new framework, the issuer either holds the cover assets on its balance sheet or uses another bank's eligible claims as cover assets, which is permitted under joint funding rules that already existed in the previous laws. The assets are not transferred to a separate legal entity anyway. The following well-established principles will continue to apply from July 8th, 2022, onwards:

1. Dual recourse, meaning that covered bond investors have both a claim against the issuer and, in case of insolvency or resolution of the issuer, a priority claim against the principal and any accrued and future interest on covered bonds,
2. Bankruptcy remoteness, meaning that covered bonds are not subject to automatic acceleration upon insolvency or resolution of the issuer, and
3. Special administrator, meaning a person or entity appointed to administrate a covered bond programme in the event of the insolvency of the issuer.

III. COVER ASSETS

The new Mortgage Bond Act defines two different qualities of eligible cover pool assets:

1) Assets subject to CRR[3] Art 129 (1) that conform to CRR Art 129 (1a) – (3), e.g. risk positions vis-à-vis or guaranteed by public sector entities (central governments, central banks, regional governments or local authorities), loans secured by residential or commercial property and loans secured by ship liens or
2) high-quality cover assets that constitute a claim for payment which is secured by physical collateral assets recorded in a public register.

1 Directive (EU) 2019/2162 on the issue of covered bonds and covered bond public supervision

2 Austrian Federal Law Gazette 2021/I/199

3 Directive (EU) 575/2013 as amended by December 2019 and legally effective as of July 8th, 2022

Only Covered Bonds covered by assets of the first quality category (CRR Art 129 compliant) qualify themselves to be labelled as "European Covered Bond (Premium)" and can hereby be seen as the legitimate successor of all legacy Austrian Covered Bonds. However, both quality types may only be used in separated cover pools.

The Mortgage Bond Act also defines three distinct types of covered bonds, depending on the cover assets used as collateral. Covered bonds backed by mortgage loans are referred to as "Hypothekenpfandbriefe", while covered bonds backed by public sector or public sector guaranteed assets are referred to as "öffentliche Pfandbriefe". Covered bonds backed by loans secured by ship liens are referred to as "Schiffspfandbriefe". For each of these types, the issuer has to form at least one separate cover pool. However, an issuer has the possibility to form more than one cover pool within a certain covered bond type and hereby create distinct pools for sub-categories (e.g. just retail mortgage loans).

The quoted primary cover assets for each type (i.e. public sector debt, mortgage loans or ship liens) have to represent at least 85% of the collateral required to secure the outstanding covered bonds. The remaining 15% can consist of substitute cover assets that meet the requirements of Art. 129 par. 1 of the CRR.

The geographical scope of eligible mortgage assets is restricted to EU / EEA countries, Switzerland and the United Kingdom.

Derivative contracts are allowed in the cover pool if they are entered to hedge interest rate, currency and credit default risks. Derivatives are only allowed for hedging and there is no limit in place on the volume of derivatives in the cover pool. However, the volume of derivatives in the cover pool has to be adjusted or eliminated if the underlying risk decreases or ceases to exist.

IV. VALUATION AND LTV CRITERIA

The Mortgage Bond Act stipulates conditions for physical property valuation that are modelled on CRR Art 229. It determines that the valuation must be carried out by an appraiser with necessary qualifications who is independent from the lending process. He may not take into account speculative elements in the assessment of the mortgage lending value and has to document that value in a transparent and clear manner. At the time of inclusion of the cover assets in the cover pool, the (reviewed) property value may not be older than one year, in compliance with CRR Art 129 (3).

LTV (loan to value) limits are not explicitly addressed by the Mortgage Bond Act, but deduced from CRR Art 129 (1) lit d, f and g. For residential mortgages, an 80% LTV limit applies. The LTV limit for commercial mortgage loans is set at 60%. The same 60% limit applies to ship liens.

Issuing banks may legally commit themselves to lower LTV limits for their covered bond programmes by recording in the statutes of the issuing institution.

V. ASSET – LIABILITY MANAGEMENT

Austrian covered bonds are subject to a matching principle whereby the total volume of assets in the cover pool must at least cover the total nominal amount of outstanding covered bonds as well as net interest liabilities from the covered bonds, net liabilities from derivatives and expected costs related to maintenance and administration for the winding-down of the covered bond programme. In addition, nominal overcollateralization of 2% of the outstanding amount of covered bonds must be maintained. The excess cover can be provided by primary cover, substitute cover, liquid funds eligible for the liquidity buffer or derivative claims. Issuers can voluntarily commit themselves to net present value cover calculations by statute. This also includes a minimum overcollateralization of 2%. The requirements of the nominal cover calculation and overcollateralization must also be met in this case.

The Mortgage Bond Act contains an obligation for issuers to maintain a liquidity buffer. The liquidity buffer is intended to cover the net liquidity outflows of the programme (related to cover pool and outstanding covered bonds) for the next 180 days. Assets that meet the requirements of Level 1, 2a or 2b of the EU Liquidity Coverage Requirement (LCR) Regulation can be used to fill the buffer. Unsecured exposures to credit institutions that also meet the criteria for substitute cover are also permitted. However, these may account only for a maximum of 15% of the liquidity buffer. To prevent a double burden for issuing banks caused by overlapping liquidity buffer requirements (Covered Bond Directive vs. LCR-DelReg[4]), the EU Commission amended the LCR-DelReg (legally effective as of July 8th, 2022) such that the required liquidity buffer assets held in the cover pool shall be deemed to be unencumbered during the 30 calendar day LCR stress period.

Issuers can opt to issue covered bonds that provide for a potential 12-months maturity extension in the event of an insolvency of the issuer (soft bullet). The postponement may not be at the discretion of the issuer. In the event of insolvency, the special administrator may trigger the postponement if he is convinced that the liabilities can be serviced in full at the extended maturity date.

If an institution issues covered bonds with a possible maturity extension, the following information must be provided in the bond terms and conditions:

> Trigger event of the maturity extension;
> Maximum period of maturity extension of the covered bond;
> Possible effects of the insolvency of the issuer;
> Role of the supervisory authority and the special administrator

VI. TRANSPARENCY

Issuers are legally required to publish information about their programmes on their websites on a quarterly basis. The following information must be published according to the Mortgage Bond Act:

> Amount of cover pool and outstanding bonds;
> Listing of ISIN numbers of all issues made;
> Geographic distribution and type of cover assets, size of loans, and valuation method;
> Information on market risk, including interest rate risk and currency risk, as well as credit and liquidity risks;
> Maturity structure of cover assets and outstanding bonds; overview of maturity extension triggers, if applicable;
> Amount of required and available coverage, including amount of statutory, contractual and voluntary overcollateralization;
> Share of loans defaulted in accordance with CRR Art 178 and in any case share of non-performing loans in the cover pool.

Quarterly cover pool reports published by the Austrian issuers organized in the Austrian Covered Bond Forum can be found at the forum’s website: http://www.pfandbriefforum.at/downloads.html.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The cover pool is monitored by a trustee (“Treuhänder”), who is appointed by the credit institution and is notified to the Austrian Finance Market Authority. The trustee is liable according to the Austrian Civil Code. The trustee has to ensure that the prescribed cover for the covered bonds exists at all times and that the cover assets are recorded correctly in the cover register. Without his or her approval, no assets may be removed

4 Commission Delegated Regulation (EU) 2015/61

from the cover pool. Before the issuance of a Covered Bond, the trustee has to certify that both sufficient coverage and correct recording in the cover register exist. Any disputes between the issuer and the trustee would be settled by the regulator.

In case of insolvency proceedings, the Bankruptcy Court must appoint a joint special representative of the covered bond creditors ("Kurator") according to the Austrian insolvency regime.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

The Cover Register ("Deckungsregister") in which all cover assets are entered permits the identification of the cover assets. All mortgages, public-sector loans, substitute cover assets and derivative contracts which form part of the cover must be registered in the cover register.

The issuers must not include a loan (or derivative contract) in the cover pool before the debtor (or the counterparties of derivative contracts) has agreed with this. The issuer must also notify the debtor of his intention to include a loan in the cover pool before doing so and that it is not allowed to discharge his debt through any set-off. An exemption from the general prohibition of set-off applies to derivative contracts, when the set-off (or netting) occurs in respect of receivables arising under one and the same Master Agreement (i.e. pertaining to the cover assets).

The legal effect of registration is that, in the case of insolvency of the issuer, the assets which form part of the separate legal estate (the so-called "Sondermasse") can be identified: All values contained in the register would be qualified as part of the separate legal estate.

While the bank carries out the daily administration of the cover register, it is the cover pool monitor who supervises the required cover und registration in the cover register.

Asset segregation

Cover assets may only be enforced by the covered bond creditors (or counterparties of derivative contracts which form part of the cover pool).

If the issuer becomes insolvent, the cover assets are segregated from the remainder of its assets. The cover assets form what is known as ''Sondermasse' (pool of special assets) and are earmarked for the claims of the covered bond holders. Any voluntary overcollateralization is also bankruptcy-remote. Only cover assets that are evidently not needed to satisfy the claims of the covered bond holders are passed back to the issuer's general insolvency estate.

The cover assets are managed by a special administrator ("besonderer Verwalter"), who is appointed by the bankruptcy court after consultation with the Austrian regulator (the FMA). The special administrator has the right to manage and dispose of the recorded assets.

Impact of insolvency proceedings on covered bonds and derivatives

Covered bonds are not automatically accelerated in case of insolvency of the issuer, but will be repaid at the time of their contractual maturity. The cover assets are administered in favour of the bond holders and any claims of the covered bond holders in respect of interest or principal repayments are to be paid (primarily) from the cover assets. Equally, in respect of derivatives which belong to the pool, there is no (immediate) legal consequence of insolvency and the counterparty claims as derivative transactions rank pari passu with the claims of the covered bond holders.

Preferential treatment of covered bond holders

Covered bond holders enjoy preferential treatment, as the law stipulates the separation of the cover assets on the one hand and the insolvency estate on the other hand. To the extent that they are not satisfied from the cover assets, the covered bond holders may also participate in the issuer's general insolvency proceedings. Only if the cover assets do not suffice to satisfy the covered bond creditors are the covered bonds accelerated.

Access to liquidity in case of insolvency

Once appointed, the special administrator for the cover pool has the duty to manage the cover pool in order to satisfy the claims of the covered bond holders. The administrator may, for example, sell assets in the cover pool or enter into a bridge loan in order to create liquidity to service the bonds in issue.

The administrator also has access to any voluntary overcollateralization, which is considered bankruptcy-remote. Any surplus collateral may only be transferred back to the insolvency estate to the extent that it is evident that it will not be needed to cover the claims of the covered bond holders.

Sale and transfer of mortgage assets to other issuers

By virtue of his or her appointment, the special administrator has the right to manage and dispose of the cover assets. In particular, the special administrator must collect the cover assets according to their contractual maturity.

The special administrator is also entitled to sell the assets collectively to a separate credit institution. This institution must then take over all liabilities with regard to the covered bonds. In fact, one of the tasks of the special administrator is to find a suitable credit institution that will buy the assets collectively. If a sale is not feasible, the cover pool administrator has to continue the servicing of the cover pool and the outstanding covered bonds.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The legislation, when taken together with the practices, processes and procedures across the industry should fall within the criteria of Article 129 of the CRR. Austrian covered bonds fulfil the criteria of Article 52(4) of the UCITS Directive as well as those of Article 129 of the CRR. This results in a 10% risk-weighting in Austria and other European jurisdictions where a 10% risk-weighting is allowed.

Austrian covered bonds are eligible in repo transactions with the National Central Bank.

Issuers: BAWAG P.S.K. Bank für Arbeit und Wirtschaft und Österreichische Postsparkasse AG, Erste Group Bank AG, Allgemeine Sparkasse Oberösterreich Bank, Bausparkasse der österreichischen Sparkassen Aktiengesellschaft, Volksbank Wien AG, Kommunalkredit Austria AG, Raiffeisen Bank International AG, Raiffeisenlandesbank Oberösterreich AG, Raiffeisenlandesbank Niederösterreich-Wien AG, Raiffeisen-Landesbank Steiermark AG, Raiffeisen-Landesbank Tirol AG, UniCredit Bank Austria AG, HYPO NOE Gruppe, HYPO NOE Landesbank, HYPO Tirol Bank AG, Vorarlberger Landes- und Hypothekenbank Aktiengesellschaft, HYPO Bank Burgenland AG, Austrian Anadi Bank AG, Hypo Oberösterreich, Hypo Salzburg, BKS Bank AG, Oberbank AG, BTV-Bank für Tirol und Vorarlberg AG, Sparkasse Schwaz.

COVERED BOND LABEL **:** UniCredit Bank Austria AG (2 pools).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Austrian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.4 BELGIUM

By Dries Janssens, Belfius Bank

I. FRAMEWORK

The legal basis for Belgian covered bonds is incorporated into the banking law, meaning the law of 25 April 2014 on the status and the supervision of credit institutions (the "Banking Law"). The legislation with respect to Belgian covered bonds has been supplemented by two Royal Decrees and several regulations.

The following gives an overview of the legislative framework for Belgian covered bonds:

> The Law of 25 April 2014 on the status and supervision of credit institutions (*Wet van 25 april 2014 op het statuut van en het toezicht op kredietinstellingen/Loi du 25 avril 2014 relative au statut et au contrôle des établissements de crédit*), as amended by the Law of 26 November 2021 (the "**Banking Law**");

> The Law of 3 August 2012 on various measures to facilitate the mobilization of claims in the financial sector (the "**Mobilisation Law**");

> The Royal Decree of 11 October 2012 on the issuance of Belgian covered bonds by Belgian credit institutions"), as amended by the Royal Decree of 15 February 2022 (the "**Covered Bond Royal Decree**");

> The Royal Decree of 11 October 2012 on the cover pool administrator in the context of the issuance of Belgian covered bonds by a Belgian credit institution, as amended by the Royal Decree of 15 February 2022 (the "**Cover Pool Administrator Royal Decree**");

> The Regulation of the National Bank of Belgium ("NBB") concerning the practical modalities for the application of the Law of 25 April 2014 as amended by the law of 26 November 2021 in view of transposing Directive (EU) 2019/2162 (the "**NBB Covered Bonds Regulation**"); and

> The Regulation of the NBB addressed to the cover pool monitors of Belgian credit institutions that issue of Belgian covered bonds (the "**NBB Cover Pool Monitor Regulation**").

II. STRUCTURE OF THE ISSUER

Belgian covered bonds can be issued by credit institutions established in Belgium. However, such institutions first need to be licensed by the NBB as covered bond issuer (general authorization as issuer) and also the covered bond program itself needs to get approval from the NBB (specific program license).

An extensive issuer license file detailing aspect like its strategy, solvency, risk management, asset encumbrance, IT systems, internal audit, etc. needs to be submitted. At program level the issuer has to detail the impact of the covered bond issuance on its overall liquidity, the quality of the cover assets and maturity matching of assets/liabilities in the program. The statutory auditor of the issuer has to report to the NBB on the organiza -tional capacity of the credit institution to issue and follow up the covered bonds.

The license is conditional upon respecting the program limits that the NBB has approved. If licensed, the issuer and the program(s) are added to specific lists that are available for consulta tion on NBB's website.

The indirect issuance limit on covered bonds, limiting the amount of cover assets to 8% of the Belgian GAAP balance sheet, will be abolished as from 1 January 2024. In the meanwhile, under certain circumstances/conditions stipulated in the Covered Bond Royal Decree, the issuer can request a (temporary) waiver of this limit.

At program level a distinction is made between Article 129 CRR-compliant European covered bonds (premium), i.e. "Belgian pandbrieven/lettres de gage", and non-Article 129 CRR-compliant European covered bonds, i.e. "Belgian covered bonds". The denomination of both terms is protected by law. However, the way that the Banking Law and the Royal Decree are stipulated, makes that in practice the Belgian credit institutions are only able to issue Article 129 CRR-compliant European covered bonds (premium). Therefore, in what follows we will only concentrate on the Belgian pandbrieven.

Consultation of the NBB’s website will hence give an overview of:

> Belgian credit institutions licensed to issue covered bonds

> Belgian pandbrieven programs and their specific issuances

When a credit institution issues Belgian pandbrieven, its assets consist by operation of law of its general estate on the one hand and (one or more) separate, ringfenced “special estate(s)” on the other hand. Assets become part of the cover pool upon registration in a register held by the issuer for such purpose. As of that moment these assets form part of the special estate and are excluded from general bankruptcy claw back risk.

The Belgian pandbrieven investors have a direct recourse to (i) the general estate of the issuing credit institution (i.e. repayment of the Belgian pandbrieven is an obligation of the issuing bank as a whole) and (ii) the special estate, that comprises the cover pool that is exclusively reserved for the Belgian pandbrieven investors under the specific program to which the special estate is attached and for the claims of other parties that are or can be identified in the issue conditions.

When insolvency proceedings or resolution proceedings are opened with regard to the issuing credit institution, by operation of law, Belgian pandbrieven investors fall back on the cover pool assets (= the special estate) for the timely payment of their bonds but at the same time they continue to have a claim against the insolvent general estate. Creditors that are not related to the special estate do not have any recourse to these cover pool assets.

III. COVER ASSETS

All assets and instruments that are legally segregated for the benefit of the Belgian pandbrieven investors in a segregated estate constitute the cover pool. The cover pool can be composed of assets that are part of any of the following categories:

> category 1: residential mortgage loans

> category 2: commercial mortgage loans

> category 3: exposure to the public sector

> category 4: exposure on financial institutions, in the form of short-term notes (max 3 months), short-term deposits (maximum initial term 100 days) or derivatives

These four general categories are subject to further eligibility criteria:

> geographical scope: OECD, except for category 1 and 2 that are further restricted to EEA;

> for the mortgage loans mentioned in category 1 and 2: the loans need to be guaranteed by first lien (and subsequent lower ranking) mortgages on residential respectively commercial properties located in the EEA. Mortgage loans with properties under construction/in development can only be added to the cover pool if they do not represent more than 15% of all the mortgage loans taken up in the cover pool. Residential real estate is defined as real estate property that is destined for housing or for leasing as housing by the owner. Commercial real estate is real estate property that is primarily used for industrial or commercial purposes or for other professional activities such as offices or other premises intended for the exercise of a commercial or services activity;

> for category 3: exposure to the public sector can only be (i) exposure to or guaranteed by central governments, central banks, public sector entities, regional governments and local authorities or (ii) exposure to

or guaranteed by multilateral development banks or international organizations that qualify as a minimum for a 0% risk weighting as set out in article 117 and 118 CRR;

> for category 4: only exposures to counterparties with credit quality step 1 or step 2 as set out in Article 136 CRR. Maximum 10% exposure to credit quality step 2. Total exposure to category 4 maximum 15%. For derivatives, (i) they cannot be terminated upon insolvency/resolution of the issuing credit institution; (ii) they must be under a separate credit support annex (CSA); (iii) group related entities are not eligible; (iv) only LCR level 1 assets are eligible for collateral posting; and (v) they can only be used to cover interest rate risk or currency risk.

The cover pool can be composed of assets out of each of the four categories. But for each program (and accordingly for each segregated estate), assets out of one of the first three categories (so either residential mortgage loans, commercial mortgage loans or exposure to public sector) need to represent a value of at least 85% of the nominal amount of Belgian pandbrieven outstanding under such program. In practice this comes down to three types of Belgian pandbrieven programs that can be set up: residential mortgage covered bond program, commercial mortgage covered bond program or public covered bond program. How such value is determined, is explained in the following chapter.

IV. VALUATION AND LTV CRITERIA

The valuation rules of the cover assets determine the maximum amount of Belgian pandbrieven that can be issued. The value of the cover assets of each of the categories as mentioned in the section above will be determined as follows:

> category 1: minimum of [the outstanding loan amount, 80% of the value of the mortgaged property, the mortgage inscription amount (which can include Belgian mortgage mandates but upon the condition that there is a first lien mortgage inscription of at least 60% related to one and the same property].

> category 2: minimum of [the outstanding loan amount, 60% of the value of the mortgaged property, the mortgage inscription amount].

> category 3: value is equal to the book value (nominal amount outstanding).

> category 4: for derivative exposure, the value is based on the close-out amount. For short-term deposits and short-term notes the value is based on the book value.

Additional valuation rule applicable to any category: in case of delinquencies above 30 days, the value as determined per category is reduced by 50%. In case of default, no value can be given anymore.

When it comes to property valuation (applicable to cat 1 and cat 2), the royal decree stipulates that this should be done cfr. Art. 208 CRR. The value of the real estate has to be controlled at least annually.

V. ASSET-LIABILITY MANAGEMENT

Each issuer is required to perform several asset cover tests. The first one has been already mentioned in section III and requires that the value of either category 1, 2 or 3 is at least 85% of the nominal amount of Belgian pandbrieven (the "**85% asset coverage test**"). Secondly the value of the cover assets has to exceed the nominal amount of Belgian pandbrieven by 5% at all times (5% overcollateralisation) (the "**overcollateralisation test**"). Finally, the sum of the interest, principal and other revenues has to be sufficiently high to cover for the sum of interests, principal and other costs due under/with regard to the Belgian pandbrieven, as well as any other obligation of the Belgian pandbrieven program (the "amortization test").

Next to the asset cover tests, a liquidity test has to be performed whereby the issuer calculates its maximum net liquidity outflow within the next 180 days (the "**liquidity test**"). This amount has to be covered by (sufficiently) liquid cover assets. Liquid assets are assets that (i) meet the cover asset eligibility criteria and (ii) qualify as Level 1 LCR assets or category 4 short-term notes or category 4 short-term paper.

If an issuing credit institution fails to meet the requirements of the liquidity test, it has 14 days to take the necessary redress measures. As long as an issuing credit institution has not taken the necessary redress measures, it is not allowed to issue new Belgian covered bonds.

The issuer is also required to manage and limit its interest and currency risk related to the program and will be able to sustain severe & adverse interest/exchange rate movements.

Finally, it is important to highlight that the tests have to be met on a daily basis. It is the task of the cover pool monitor to verify at least once a month whether the issuer is compliant with all the tests.

An issuer will have the possibility to create retained Belgian pandbrieven for liquidity purposes.

VI. TRANSPARENCY

The royal decree imposes monthly investor reporting. It sets minimum disclosure criteria.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

A Belgian credit institution licensed to issue Belgian pandbrieven is subject to special supervision by the NBB as well as the permanent control by a cover pool monitor.

The cover pool monitor:

> is chosen by the issuer from those persons appearing on the official list of certified/statutory auditors established by the NBB;

> shall be appointed subject to prior approval from the NBB;

> cannot be the certified/statutory auditor of the issuer.

The main tasks of a cover pool monitor consist of ensuring compliance with legal and regulatory requirements, e.g. are the cover assets duly recorded in the register, do the cover assets fulfil the eligibility criteria, is the value correctly registered, etc. The cover pool monitor is required to perform these tasks not only on an ongoing basis, but also prior to the first issuance of Belgian pandbrieven by the credit institution. The ongoing verifications must be done at least once a month.

Next to that the cover pool monitor has a reporting obligation towards the NBB on several aspects such as level of overcollateralisation and results of the different tests that have to be performed. The issuer is obliged to provide full cooperation to the cover pool monitor and shall give the cover pool monitor the right to review the register, loan documents, accounting book, or any other document. The NBB at its discretion can ask the cover pool monitor to perform other tasks and verifications.

If the NBB considers that a category of Belgian pandbrieven no longer fulfills the criteria or the issuer no longer fulfills its obligations, it can withdraw the license of the issuer and consequently withdraw the issuer from the list of Belgian covered bond issuers. Such a deletion from the list will be reported to the European Commission but does not have consequences for existing Belgian pandbrieven holders.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Assets need to be registered before they form part of the segregated estate. The law protects these registered assets (including all collateral and guarantees related to such assets) from a claim of the creditors of the insolvent general estate and therefore they are not affected by the start of insolvency proceedings against the issuer. Also, any assets that would be posted via a CSA that is in place would be protected from insolvency proceedings as it is required to register these types of assets as well, although as explained before one cannot consider those as pure cover assets.

The cover assets once registered are exclusively and by operation of law reserved for the benefit of the Belgian pandbrieven investors and other creditors that might be linked to the program (e.g. a swap counterparty of which the derivative is included in the cover pool). These creditors also have a claim on the general estate. Only when all obligations at program level have been satisfied, will any remainder of assets of the segregated estate return to the general estate of the issuer. Before such time, the bankruptcy receiver of the credit institution, in consultation with the NBB, could ask the restitution of cover assets if and when there is certainty that not all assets will be necessary to satisfy the obligations under the Belgian pandbrieven program.

Commingling risk has been addressed in the Belgian framework both pre- and post-insolvency. Collections received from cover assets as of the date of bankruptcy will by law be excluded from the insolvent general estate. Registered collections received from the cover assets before the date of bankruptcy are part of the segregated estate and legally protected via the right of ‘revindication’. Pursuant to this mechanism, if collections from the cover assets cannot be identified in the general estate, unencumbered assets in the general estate will be selected by taking into account criteria specified in the issue conditions. Set-off and claw back risk have been addressed by the Mobilisation Law.

Upon the initiation of bankruptcy proceedings or the instruction of an exceptional recovery measure by the competent supervisor with regard to the credit institution, or even before whenever the NBB considers it to be necessary (e.g. at the moment the license is withdrawn), a cover pool administrator ("gestionnaire de portefeuille") will be appointed that will take over the management of the Belgian pandbrieven program from the credit institution. The cover pool administrator (appointed by the NBB) is legally entrusted with all powers that are necessary for the management of the segregated estate, and can take all such actions (some in consultation with/upon approval of both the NBB and the representative of the noteholders) required to fulfill in a timely manner the obligations under the Belgian pandbrieven. Such actions could consist in a (partial) sale of the underlying cover assets, taking out a loan, issuance of new bonds to use for ECB purposes or any other action that might be needed to fulfill the obligations. Acceleration of the Belgian pandbrieven is not possible, unless after the appointment of a cover pool administrator:

- noteholders would decide otherwise;
- (after consultation with the noteholders' representative and with the consent of the NBB) it is clear that further deterioration of the cover assets would lead to a situation whereby it is impossible to satisfy the obligations under the Belgian pandbrieven (i.e. in a situation of insolvency of the cover pool).

The bankruptcy receiver has a legal obligation to cooperate with the NBB and the cover pool administrator in order to enable them to manage the special estate in accordance with the law.

The Cover Pool Administrator Royal Decree specifies the tasks of the cover pool administrator. These include, amongst other things, to procure the payment of interest and principal on the Belgian covered bonds, collec tion of moneys from the cover assets (including any enforcement), entering into relevant hedging and liquidity transactions and carrying out of certain administrative tasks. The cover pool administrator will also have to test compliance with the cover tests and inform the NBB and the noteholders' representative thereof.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The legislation when taken together with the practices, processes and procedures across the industry should fall within the criteria of Article 129 CRR.[1] Belgian pandbrieven comply with the requirements of Article 129 CRR if and to the extent they are listed by the NBB as such.

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): https://hypo.org/ecbc/covered-bonds/.

Issuers: Argenta Spaarbank, Belfius, BNP Paribas Fortis, KBC and ING Belgium.

COVERED BOND LABEL **:** Argenta Spaarbank NV/SA and BNP Paribas Fortis NV/SA (1 pool).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.
In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database). For further national information on the Belgian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.5 BRAZIL

By ABECIP – The Brazilian Association of Real Estate Loans

I. LEGAL FRAMEWORK

On 19 January 2015, the Letra Imobiliária Garantida ("LIG") – Brazilian Covered Bonds – was created by Law 13.097 (Articles 63 to 94), which defined their main characteristics and structure, with due regard for CBs best international practices. The LIG is a transferrable, freely tradable security issued directly and exclusively by financial institutions approved by the BCB and registered with a central depositary, also approved by the BCB.

This law delegated to the National Monetary Council ("CMN"), and the Central Bank of Brazil ("BCB"), the secondary regulations for LIGs. The CMN, in turn, edited in 2017, among others, Resolution 4.598, detailing the regulations for issuers and fiduciary agents of LIGs. Recently Resolutions CMN 5.001 (March 2022) and BCB 225 (April 2022) consolidated the previous rules, with no material change. As secondary regulations, the Central Bank of Brazil edited Circulars 3.866 and 3.872, in 2017, 3.891, 3.895 and 3.896, in 2018.

This law also attributed to the Brazilian Securities and Exchange Commission ("CVM") the regulation for public offerings of LIGs in the local Market. In October 2020, the CVM enacted Resolution nº 8, to be effective as of February 2021, with such regulation.

Brazilian financial institutions are regulated by the National Monetary Council in its capacity as the collegiate regulator of the National Financial System, and by the Central Bank of Brazil which also supervises them.

II. STRUCTURE OF THE ISSUER

In addition to the issuing institution's direct responsibility for their redemption, LIGs are collateralised by financial assets owned by the financial institution, and which must be identified and segregated from its regular assets, thereby comprising segregated assets referred to as the Cover Pool, protected by a trust scheme for legal purposes called "Regime Fiduciário" (Fiduciary Regime). Although these remain under the management of the issuing institution, they must have their own controls and bookkeeping. The composition of the Cover Pool must comply with the specifications and limits stipulated in the law and regulations already mentioned, and their management by the issuing institution is subject to monitoring by a Fiduciary Agent approved by the monetary authority for that purpose, in addition to supervision by the Central Bank of Brazil of the issuing institution's role as the trustee.

III. COVER POOL

The Cover Pool can only be composed of:

(i) Mortgage loans,

(ii) National Treasury securities,

(iii) derivatives instruments (for hedging purposes only) and

(iv) cash and cash flows arising from the assets that are part of the Cover Pool.

i.1) Mortgage loans mean loans resulting from the following transactions:

a) financing for the acquisition of residential or non-residential property,

b) financing for the construction of residential or non-residential property,

c) financing for legal entities to produce residential or non-residential property, and

d) personal loans guaranteed by a mortgage or fiduciary lien on residential properties and insurance cover ("home equity").

i.2) However, mortgage loans can only be included in the Cover Pool if the following criteria are met:

a) performing credits only,

b) free of any type of encumbrance,

c) guaranteed by a first-degree mortgage or by a secured fiduciary lien on the property,

d) financing for construction, only if the property development is subject to a special regime which segregates a specific construction financing from all other liabilities of the developer, and

e) the credit risk rating of the transaction is not less than "B" (in a scale that goes from AA to H).

It should be emphasized that the Cover Pool should have an over-collateral of no less than 5% of the LIGs issued, while the mortgage loans should represent at least 80% of the total amount of the Cover Pool.

IV. VALUATION AND LTV CRITERIA

The issuer of the LIG may incorporate into the contract the revaluation and the loan-to-value limits criteria.

The LTV criteria for the property given as collateral for the credits linked to the real estate assets of the LIG shall abide by the following maximum percentages:

> Residential financing – 80% of the value of the property evaluation;

> Commercial financing – 60% of the value of the property evaluation;

> Home equity – 60% of the value of the property evaluation; and

> Financing for construction – 80% of the ratio between the restated nominal amount of the financing, and the property's production cost.

The value of the guarantees in order to check the LTV will be verified, as mentioned above, by the issuer at the most every three years.

V. ASSET AND LIABILITY MANAGEMENT

The issuing institution must undertake stress testing capable of measuring the impact of the main risk factors to which the Cover Pool is exposed in relation to the sufficiency requirement.

To comply with this rule, at least the interest rate risk and, when applicable, the currency risk must be factored in. The frequency of the stress testing and the holding period must be at least quarterly.

These stress tests must be carried out by the issuing institution using its own methodology based on consistent, documented and verifiable criteria, assumptions and procedures, especially bearing in mind:

> rates, indices, terms and other material information involving the nature and complexity of the Cover Pool and the LIGs guaranteed by it;

> individual effects of the risk factors, as well as the interaction between these factors;

> historical elements represented by historical series of the values of each risk factor, covering at least the five years preceding the date when the test is carried out;

> hypothetical elements that consider new information and the possibility of emerging risks not incorporated by the historical elements;

> effects arising from scenarios that simulate extreme market conditions on each risk factor, incorporating the correlation effects;

> forward interest rate structure as a risk factor, using at least the same vertexes defined when calculating the present values;

> asymmetries, non-linearities, correlation breakages and other assumptions; and

> counterparty risk involving derivative instruments, when applicable.

Regarding the liquidity requirement, the assets portfolio shall contain liquid assets in an amount equivalent to the LIG-related commitments secured by the Portfolio and falling due in the next 180 days.

VI. TRANSPARENCY

The Brazilian legislation requires a series of reports and records that must be kept up to date and monitored by the issuer, the LIG trustee and by the BCB, among which we would draw attention to:

(i) The issuing institution, in managing the Cover Pool, must:

> make available on the internet documentation about the methodologies adopted for complying with the requisites of the Cover Pool;

> disclose on a quarterly basis, in the notes to the financial statements, information showing the status of the Cover Pool, as well as the percentage ratio of the sum of the assets comprising the Cover Pool, to the institution's total assets;

> send to the trustee, on the fifth business day of each month, the information referring to verification of compliance with the requisites of the Cover Pool;

(ii) The local rules also contain parameters which it is mandatory to insert in the instruments of issuance such as:

> name of the issuing financial institution and the name of the holder;

> sequential number, place and date of issuance;

> face value; maturity date; and fixed or floating interest rate;

> exchange rate variance adjustment clause, as the case may be;

> manner, frequency and place of payment;

> identification of the Cover Pool;

> identification and amount of the mortgage loans and other assets comprising the Cover Pool;

> identification of the trustee, indicating their obligations, responsibilities and remuneration, in addition to the situations, conditions and way in which they can be removed from office or substituted, and the other conditions of their position;

> amortisation regime;

> Cover Pool management transition plan;

> rules for the general meetings of investors holding the LIG.

BCB's Circular No. 3.872 (of 12/2017) specifies more transparency requirements for LIG issuance such as: issuing institution must publish the Asset Portfolio Statement (DCA) on its website;

(i) the distribution of assets included in the asset portfolio by maturity bands, detailing the type of assets, updated nominal value and percentage participation in the total value of the asset portfolio;

(ii) the notional value of derivative instruments;

(iii) the distribution of residential and non-residential mortgage loans, with updated nominal value and percentage participation in the total value of the mortgage loans;

(iv) Detailed report on the relevant acts or facts that have occurred or may represent a significant change in the situation of the asset portfolio and the LIGs guaranteed by it.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The Cover Pool, along with the LIGs themselves, are registered with an entity approved by the Central Bank of Brazil under the fiduciary regime to which they were submitted, representing segregated assets linked to the LIGs they must guarantee. Its management, for which the issuing institution is responsible, and compliance with the legal requisites of eligibility and sufficiency of the underlying assets are monitored by the Fiduciary Agent which is specifically authorized by the Central Bank to engage in this role. In turn, the Fiduciary Agent's performance is supervised by the monetary authority, which accumulates the overall power for supervising the financial institutions.

The Brazilian Central Bank carries out assessment of the issuers as part of banking supervision activity, supervises the Fiduciary Agent's performance and has legal power to take appropriate measures.

VIII. SEGREGATION OF THE COVER POOL AND THE REMOTE CHANCE OF BANKRUPTCY OF THE COVERED BONDS

Under Brazilian legislation (Law 6.024 dated 13 March 1974) in the event of default or even financial imbalance, financial institutions face administrative intervention proceedings or extrajudicial liquidation. In the first case, the Central Bank appoints an administrator to run the institution which, if recovered, will see management returned to its owners. In the second case, where insolvency is detected, and recovery is considered unviable, the monetary authority appoints a liquidator to realize the assets and liabilities. The liquidator may file for the bankruptcy of the entity when its assets are insufficient to cover at least half of the amount of unsecured credits or, additionally, when there is hard evidence of bankruptcy fraud.

In the case of intervention, liquidation or even bankruptcy of the issuing institution, management of the asset portfolio is immediately transferred to the Fiduciary Agent, who will have full and wide-ranging powers to man- age it, in addition to undertaking the redemption of the LIGs with the respective investors who will also become involved in this process through a general meeting specifically convened by the Fiduciary Agent.

The main legal effect of the fiduciary agent regime and the asset segregation that characterises it is the absolute ring-fencing in relation to the regular assets of the issuing financial institution. So, in the event of one of the situations described above, the trustee takes over management of the Cover Pool in order to redeem the LIGs, thereby ensuring that those assets will not be affected by the administrative intervention procedures or extrajudicial liquidation by the monetary authority, nor by the bankruptcy court proceedings, and are therefore exempted from competing with the issuing institution's other creditors, whether of an unsecured, fiscal or labour law nature.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The LIGs issued directly by financial institutions with registered offices in Brazil are neither CRR nor UCITS-compliant as both frameworks require the issuer to be based in the EU. Thus, LIGs do not benefit from the lower risk weighting for bank treasuries in the EU.

The LIGs are issued under specific Brazilian legislation which has not yet established specific prudential regulations for the purchase of LIGs by other financial institutions. However, the banking authority ("BCB") has indicated that it will abide by the international standards on this subject matter, as it has done with other risk issues.

Issuers: Banco Santander Brazil, Banco Inter, Itaú Unibanco and Banco Bradesco.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Brazilian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.6 BULGARIA

By Yolanda Hristova, UniCredit Bulbank AD and Franz Rudolf, UniCredit

I. FRAMEWORK

The legal basis for the issue of covered bonds in Bulgaria is the new Covered Bonds Law, adopted by the 47th National Assembly on 16 March 2022 and published in the State Gazette (*Darzhaven vestnik*) issue 25 of 29 March 2022, entering into force on 8 July 2022, with which the previously existing Mortgage-backed Bonds Law adopted in 2000 was repealed.

The covered bonds are debt securities, which are secured by assets serving for satisfying receivables of investors in their capacity of preferred creditors, issued in accordance with the Covered Bonds Law or the legislation of national legislation of a Member Country of European Union for transposition of Directive (EU) 2019/2162 of the European Parliament and of the Council of 27 November 2019 on the Issue of Covered Bonds and Covered Bond Public Supervision and amending Directives 2009/65/EC and 2014/59/EU (OB, L 328 of 18 December 2019).

Issue of a Covered Bond Program or issue of a single Covered Bond Issue is only allowed after an explicit permission is received by the Bulgarian National Bank (BNB). The application shall include legally required information and confirmation of meeting certain criteria.

II. STRUCTURE OF THE ISSUER

The Covered Bonds may be issued by banks that have been granted a banking license under the Credit Institutions Law. The public supervision of the Covered Bonds is of the responsibility of the Bulgarian National Bank under the Covered Bonds Law and the Ordinance No42 adopted by BNB on 21 June 2022, in force since 8 July 2022.

III. COVER ASSETS

The Covered Bonds are secured by assets of the issuing bank, which are acceptable assets that are:

> **Principal cover**: primary assets under art.129, paragraph 1, letters (a), (b), (d) to (g) of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012 ("Regulation (EU) No 575/2013" or the "Capital Requirement Regulation"), which shall form at least 85% of the outstanding covered bond principal. The cover pool of primary assets shall be of the same type.

The tangible assets securing the assets in the principal cover shall have received permission for use and other authorizations for proper utilization and for them to be available generally accepted evaluation methods for estimating their value and the acts or certificates arranging the property transfer rights shall be entered in the Property Registry, respectively for ships – shall be entered in Unified Ships Register

Upon approval by BNB under Chapter VI of the Covered Bond Law the issuing bank may include other primary assets in the cover pool up to 15% of the outstanding principal of the covered bonds. These shall have similar features, maturity structure and risk profile with the initially included primary assets.

> **Substitution cover** under art. 129, paragraph 1, letter (c) of Regulation (EU) No 575/2013;

The assets included in each of letters from (a) to (g) in art.129, paragraph 1 of Regulation (EC) No 575/2013 form **a separate coverage asset type**.

The cover assets shall meet the requirements of art. 129, paragraph 1a – 3 of Regulation (EC) No 575/2013.

Banks may issue covered bonds as a result of using **intragroup pooled covered bond structures**. The covered bonds issued by a bank from a particular group ("**internally issued covered bonds**") are included in the cover pool of covered bonds issued by another bank that belongs to the same group ("**externally issued covered bonds**") subject to the certain requirements under Section III of Chapter II of Covered Bonds Act.

The covered assets may be **intragroup issued covered bonds** provided the following conditions were met:

- issuer bank has acquired the intragroup issued covered bonds and has include them in its balance sheet prior to or simultaneously with their inclusion in the cover pool; and
- the cover pool of the externally issued covered bonds (issued outside issuer's group) includes only intragroup issued covered bonds issued by only one bank from this group
- the externally issued bonds are designated for placing to external investors not part of the issuer group
- the externally and intragroup issued cover bonds shall meet the quality requirements for first quality rank at the time of issue as per the requirements of part III, section II, chapter II of Regulation (EU) No 575/2013 or in case of change in the credit quality – to second quality rank, as per the requirements of part III, section II, chapter II of Regulation (EU) No 575/2013, provided BNB grants permission on the basis of such quality change is not a result from breach of the requirements of Covered Bond Law for issue of covered bonds.

Derivative contracts could be included in the cover pool where each of the following conditions is cumulatively met:

1. the derivative contracts concluded under the terms of a derivative transactions framework agreement other than the rest of the framework agreements of the issuing bank and segregated for each covered bond programme of the said bank or particular issues under the said programme or, respectively, for each covered bond issue that is not part of a programme
2. the derivative contracts cannot be terminated upon the insolvency or resolution of the bank issuing covered bonds and are not part of a netting set which includes any derivative contracts concluded outside the framework agreement under item 1
3. the derivative contracts are exclusively for purposes of hedging interest rate and currency risks associated with cover assets and contain provisions ensuring that in the case of a reduction in the hedged risk the exposures under the contracts are adjusted in accordance with the reduction, as well as that the hedge is called or otherwise closed out when the hedged risk cases to exist, and
4. the derivative contracts are performable in accordance with the terms and conditions thereof.

Requirements for coverage, overcollateralization and liquidity

All present and future covered bond liabilities must be covered by claims for payment attached to eligible cover assets. The said **liabilities** represent obligations for 1. payment of the principal amount of covered bonds; 2. payment of interest and other monetary liabilities attached to covered bonds; 3. payment attached to derivative contracts included in the cover pool; 4. covering the costs related to maintenance and administration of covered bonds and cover assets in the event of placing the covered bonds under separate administration in accordance with Chapter Eight of the Covered Bonds Act. The **permitted assets to cover these liabilities** are primary assets; substitution assets; assets included in the liquidity buffer and claims for payment attached to derivative contracts included in the cover pool. The cover assets may not include any assets in respect of which a default is considered to have occurred within the meaning given by Article 178 of Regulation (EU) No. 575/2013.

The issuing bank shall ensure that the aggregate principal amount of all cover assets recorded in the cover register is at any time at least equal to the aggregate principal amount of outstanding covered bonds ("nominal principle") and shall furthermore maintain at any time a minimum level of 5% of overcollateralisation calculated under the nominal principle. BNB may set a higher minimum level of overcollateralisation and may further revoke or amend this decision setting a different level of overcollateralisation. The conditions containing the rights and obligations attached to covered bonds may provide for a minimum level of overcollateralisation that is higher than the levels set at 5% or such higher level determined by BNB.

IV. VALUATION AND LTV CRITERIA

Valuation

The valuation of the cover assets, which value serve for calculation of the coverage percent, overcollaterisation and liquidity of a cover bond issue shall be carried out according to applicable accounting standards and art. 6 of the Covered Bands Act, as well as art. 4 of Covered Bonds Act in respect to evaluation of the derivatives contracts. For valuation of the cover assets generally accepted methods shall be used by the appointed independent appraisers. For evaluation of a tangible asset – real estate shall be applied the comparable approach, income approach and cost approach, as well as the generally used methods related to these approaches.

LTV criteria

The LTV criteria for the assets in the pool are generally defined in the banks' own lending policies depending on their risk appetite and their internal rules. No specific legal requirements are imposed by the local banking law.

V. ASSET – LIABILITY MANAGEMENT

The covered bond issuer shall adopt separate rules and procedures for management of the risk associated with the issue of covered bonds, including for the performance of periodic stress tests of the cover pool and liquidity management. The stress tests of the cover pool shall be performed at least once every quarter in order to assess whether the value of the cover pool will continue to meet the requirements for coverage and minimum level of overcollateralisation and in the conditions of the covered bond issue, in the event of a sharp deterioration of market conditions, as well as ad hoc stress tests depending on the prevailing at that time market conditions. In case the amount of the cover pool is below the required coverage amount, it shall be replaced by cover assets at the amount at least equaling to discovered during the stress test shortage amount within 1 (one) month.

The issuing bank shall lay down rules and procedures ensuring that cover assets are properly segregated from the rest of the assets of the issuer and will be shown on its balance sheet separately from the rest of the property thereof, as well as to ensure the proper administration of cover assets in case the said assets are placed under separate administration according to the winding-up proceedings and reorganisation measures.

Covered bond liabilities shall be collateralised by a first-rank registered pledge on the set of cover assets recorded in the cover register. The pledge shall be subject to recording in the Central Register of Special Pledges ("CRSP") except in the cases of a pledge on dematerialised internally issued covered bonds which shall be recorded in the Central Register of Securities kept by Central Securities Depository ("CD"), or in other relevant central securities depository where the internally issued covered bonds are registered. The collateral agent, as designated in the conditions containing the rights and obligations attached to covered bonds, shall be named as pledgee.

A pledge on the separate cover assets in the cover pool shall not be subject to recording in the CRRP. The pledge shall be considered to be created and enforceable with regard to any cover asset upon the recording of the pledge in the CRRP or, respectively, upon a subsequent inclusion of an asset in the cover register. The issuing bank shall record the original cover pool in the relevant cover register on the day of issue of the covered bonds and on the same day shall provide the BNB and the cover monitor, where such has been appointed, with the necessary data regarding the cover pool and proof that the recording has been effected.

The issuing bank shall record all new assets that are included in the cover pool in the relevant cover register. A legally valid and enforceable inclusion of an asset in the cover pool, which is enforceable against the issuer and against all third parties, shall be considered to exist as from the time of recording of the said asset in the cover pool. As from the time of recording in the cover register of each subsequently included asset, the said asset shall be included in the pledge created to secure covered bond liability claims without the need of an additional recording.

The removal from the cover register of an asset, including the replacement of an asset by another asset which is included in the cover pool, shall be effected according to a procedure which has been approved in advance by the cover monitor or, respectively, by the BNB, where a cover monitor has not been appointed. Any removal effected in conflict with the procedures shall be ineffective.

VI. TRANSPARENCY

Upon the exercise of the powers thereof regarding public supervision under this Act, the BNB, as an authority performing covered bond public supervision, shall cooperate, inter alia by exchanging information, with the Bulgarian Financial Supervision Commission ("FSC"), with the respective competent authorities of the other Member States performing covered bond public supervision, with the EBA and, where appropriate, with the European Securities and Markets Authority.

The issuing bank shall publish, on a quarterly basis, detailed information on each covered bond programme or, respectively, covered bond issue, to allow investors to assess the characteristics of the covered bond issue or programme and the risks associated therewith and to carry out their due diligence.

In the case of externally issued covered bonds, the issued bank shall be obliged to provide investors with the information with regard to the internally issued covered bonds which are included in the cover pool of the externally issued covered bonds on at least an aggregated basis or via a link to a relevant Internet site on which the said information is available. The information shall be current as of the end of each calendar quarter and shall be published within 30 days after the end of the quarter concerned.

The issuing bank shall publish the information in a separate section on the Internet site thereof for a period expiring not earlier than five years after the date of payment of all obligations attached to the covered bond issue or programme.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

A cover monitor may be a bank authorised in the Republic of Bulgaria or in another Member State, including where such a bank has appointed a collateral agent, or an audit company according to the Independent Financial Audit Act. An audit company may not be a cover monitor for covered bonds issued by a bank of which the said company has been an auditor before the lapse of two years after the completion of the audit engagement under Article 76 of the Credit Institutions Act.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

The issuing bank shall show and record assets recorded in a cover register separately on the balance sheet thereof in a manner that the said assets are identifiable at all times. These assets shall not be affected by the opening or continuation of winding-up proceedings or reorganisation measures with regard to the issuing bank and shall not fall within the scope of any such proceedings or measures. In case bankruptcy proceedings are opened against the issuing bank, assets recorded in a cover register by the date of the decision to initiate bankruptcy proceedings as well as the proceeds from any payments on or in connection with such assets effected after the date of the decision to initiate bankruptcy proceedings shall not form part of the bankruptcy estate.

Any obligations for payment attached to covered bonds shall not be subject to automatic acceleration and shall not be otherwise affected by the opening or continuing of winding-up proceedings or reorganisation measures with regard to the issuing bank, shall not fall within the scope of any such proceedings or measures, and shall continue to originate, to be serviced and enforced in accordance with the conditions applicable under Covered Bond Act notwithstanding any such proceedings or measures.

Any actions of issuing covered bonds, recording assets in a cover register and removing assets from such a register and discharging covered bond liabilities, taken before and on the date of commencement of winding-up proceedings or a reorganisation measure, shall not be null and void, unenforceable or voidable and may not be reversed by a competent authority or party in winding-up proceedings or reorganisation measure.

When covered bonds are placed under separate administration, claims attached to cover bonds shall be satisfied as preferred claims from the proceeds from cover assets, including from the proceeds upon the realisation of the collateral. The proceeds shall be recorded in the cover register, with a separate sub-register being kept for the said proceeds. Cover assets and the funds left after the claims attached to cover bonds have been satisfied shall be restored to the rest of the property of the issuing bank.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Risk weighting

Criteria for exposures secured by mortgages on immovable property are treated in Ordinance No. 7 of 24 April 2014 on Organisation and Risk Management of Banks, adopted by the Bulgarian National Bank ("Ordinance 7")[1], in which article 27(1) states as regards the application of Article 124, paragraph 2 of Regulation (EU) No 575/2013:

1. The part of the exposure secured by mortgages on residential property that receives a risk weight of 35% shall not exceed 70% of the lower of the market and mortgage lending value of the property in question;
2. Part of the exposure secured by mortgages on commercial immovable property that receives a risk weight of 50% shall not exceed 50% of the lower of the market and mortgage lending value of the property in question.

For the purpose of updating the ratios mentioned in paragraph 1, banks shall submit data required under Article 101 of Regulation (EC) No 575/2013 and in Annex VI and Annex VII of the Implementing technical standard for supervisory reporting, taking into account the percentages under items 1 and 2 above.

According to Article 29. (1) of Ordinance No 7 referring to Article 400, paragraph 2 of Regulation (EU) No 575/2013 in calculation of large exposures under Article 395, banks shall exempt legally required guarantees used when a mortgage loan financed by issuing mortgage bonds is paid to the mortgage borrower before the final registration of the mortgage in the land register, provided the guarantee is not used as reducing the risk in calculating the risk-weighted exposure amounts. According to article 29 (2), item 3., in calculation of the large exposures under Article 395, banks shall include 20% of the following exposures: covered bonds falling within the terms of Article 129, paragraphs 1, 3 and 5 of Regulation (EU) No 575/2013. According to article 29 paragraph 5 in applying the exemptions, banks shall monitor compliance with the requirements of this Article and Article 400, paragraph 3 of Regulation (EU) No 575/2013. The BNB may at any time carry out a check on compliance with this requirement and to require information evidencing the compliance.

Compliance with European Legislation

The Covered Bonds Act is transposing Directive (EU) 2019/2162 of the European Parliament and of the Council of 27 November 2019 on the issue of covered bonds and covered bond public supervision and amending Directives 2009/65/EC and 2014/59/EU (OJ L 328/29 of 18 December 2019) that are secured by assets which serve to satisfy covered bond investors as preferred creditors.

1 Published in the State Gazette (Darzhaven Vestnik), Issue 40 of 13 May 2014, last amended by issue 40 of 14 May 2021. http://www.bnb.bg/bnbweb/groups/public/documents/bnb_law/regulations_risk_management_en.pdf.

The Covered Bonds Law is compliant with the requirements of Article 52(4) of Directive 2009/65/ EC (the "UCITS Directive"). The legislation when taken together with the practices, processes and procedures across the industry should fall within the criteria of Article 129 of the Regulation (EU) No 575/2013.

A collective investment scheme may invest up to 25% of the assets thereof in covered bonds. The total value of the investments above the limit for exposures to a single issuer may not exceed 80% of the assets of the collective investment scheme.

X. ADDITIONAL INFORMATION

The provisions of the Public Offering of Securities Act ("POSA"), the statutory instruments for the application thereof, Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are **offered to the public or admitted to trading on a regulated market**, and repealing Directive 2003/71/EC (OJ L 168/12 of 30 June 2017) (Regulation (EU) 2017/1129) and the other applicable acts of European Union law shall apply when covered bonds are offered to the public, as well as where public bonds are admitted to trading on a regulated market, which requires publishing a prospectus subject to approval by the FSC.

The issuing bank shall be obliged to submit an application and necessary documents and information for obtaining permission to BNB, unless the said bank has already obtained such permission, not later than 60 days before the submission of an application for approval of a prospectus by the FSC. In such cases, the issuer shall be obliged to provide the prospectus as drawn up to the BNB simultaneously with the submission of the application for approval of the prospectus by the FSC.

Where covered bonds are **offered without a requirement to publish a prospectus**, a proposal shall be drawn up for subscription for covered bonds according to the procedure established by the Commerce Act or, respectively, an offer document according to the procedure established by Article 89c or 89d of the POSA.

The prospectus or, respectively, the proposal for subscription of covered bonds, shall contain the following **additional information**:

1. rules and measures taken by the issuing bank for storing information in the cover register and for access to the said register;

2. cover pool, including (a) data on the value of the cover pool; (b) the geographical distribution and type of cover assets; (c) the maturity structure of cover assets; (d) the minimum level of required coverage and the minimum level of required overcollateralisation; (e) information on the outstanding principal amount of each cover asset by the time of origination of the said asset and by the end of the last full calendar quarter; (f) total valuation of the assets securing cover assets and ration of the outstanding principal amount and the valuation by the time of origination of the cover assets and by the end of the last full calendar quarter, as well as the valuation method used to carry out the valuation; (g) characteristics of cover assets, including applicable interest rates, fees and commissions; (h) the risks associated with cover assets by the end of each calendar year from the time of the origination of the said assets and by the end of the last full calendar quarter.

Bulgarian covered bond market information

Since 2000 until 2014 in Bulgaria had been issued 29 mortgage bonds by 11 issuing banks and totalled EUR 273.3 mn. As of 31 March 2022 there were no mortgage or other covered bonds outstanding.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.
In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database). For further national information on the Bulgarian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.7 CANADA

By Lily Shum, Canada Mortgage and Housing Corporation (CMHC)

I. FRAMEWORK

From 2007 until 2012, Canadian covered bonds were issued pursuant to a contractual framework. In June 2012, Canada implemented dedicated covered bond legislation with the amendment of the National Housing Act (NHA) making Canada Mortgage and Housing Corporation (CMHC) responsible for administering the legal framework for covered bonds. In December 2012, CMHC implemented the legal framework and published the Canadian Registered Covered Bond Program Guide (CMHC Guide) which prescribes detailed requirements for registered issuers and programmes. The NHA and the CMHC Guide together form the legal framework for Canadian registered covered bonds. The legal framework provides statutory protection for covered bond investors, pre scribes eligible issuers, programmes and cover pool collateral, and establishes a high standard of disclosure.

Since 2013, all new Canadian covered bond issuance has occurred as "registered" covered bonds issued under the legal framework. In order for an issuer to be able to issue registered covered bonds, issuers must submit applications to CMHC to obtain registered issuer and registered programme status. Issuers and programmes that meet the minimum requirements and are approved by CMHC are added to the Canadian Covered Bonds Registry maintained by CMHC. CMHC has the power to suspend a registered issuer's right to issue further registered covered bonds.

All of the current Canadian covered bond issuers, except for one issuer regulated by the Quebec Autorité des marchés financiers (AMF), are regulated by the Office of the Superintendent of Financial Institutions (OSFI) that regulates Canadian federally incorporated financial institutions. Under OSFI and AMF regulatory requirements, total assets pledged for covered bonds must not, at any time, represent more than 5.5% of a deposit-taking institution's total on-balance sheet assets.

II. STRUCTURE OF THE ISSUER

Only banks, trust and loan companies, cooperative credit associations and insurance companies in Canada are eligible to register as issuers under the Canadian covered bonds legislative framework. The framework requires that at least one rating agency provide current ratings at all times for at least one series or tranche of covered bonds outstanding.

Canadian registered covered bonds are direct obligations of the issuer. In addition, in the event of issuer insolvency or default, investors have a claim over the pool of cover assets. The cover assets are held in a bankruptcy-remote special-purpose guarantor entity, which provides an irrevocable guarantee in respect of interest and principal payments due and payable under the covered bonds that would otherwise be unpaid by the respective issuer. In Canada, the guarantor may be set up as a Limited Liability Partnership (LLP) or a trust. To date, all registered programs have used an LLP as the guarantor entity. A bond trustee (which has to be arm's length and bankruptcy remote from the issuer) must be designated to represent the views and interests (and enforce the rights) of covered bond holders.

Cover assets are segregated from the issuer through a contractual true sale of the mortgage loans to the guarantor entity. However, registered legal title to the mortgage collateral typically remains with the issuer or lender from which they are purchased by the guarantor until the earliest to occur of: (1) material breach or default by the issuer; (2) impending or actual issuer insolvency; (3) material breach or default by the servicer of eligible loans; or (4) any other event as prescribed in the issuer's transaction documents. Each registered issuer must engage an arm's length bankruptcy-remote custodian with appropriate systems and knowledge of

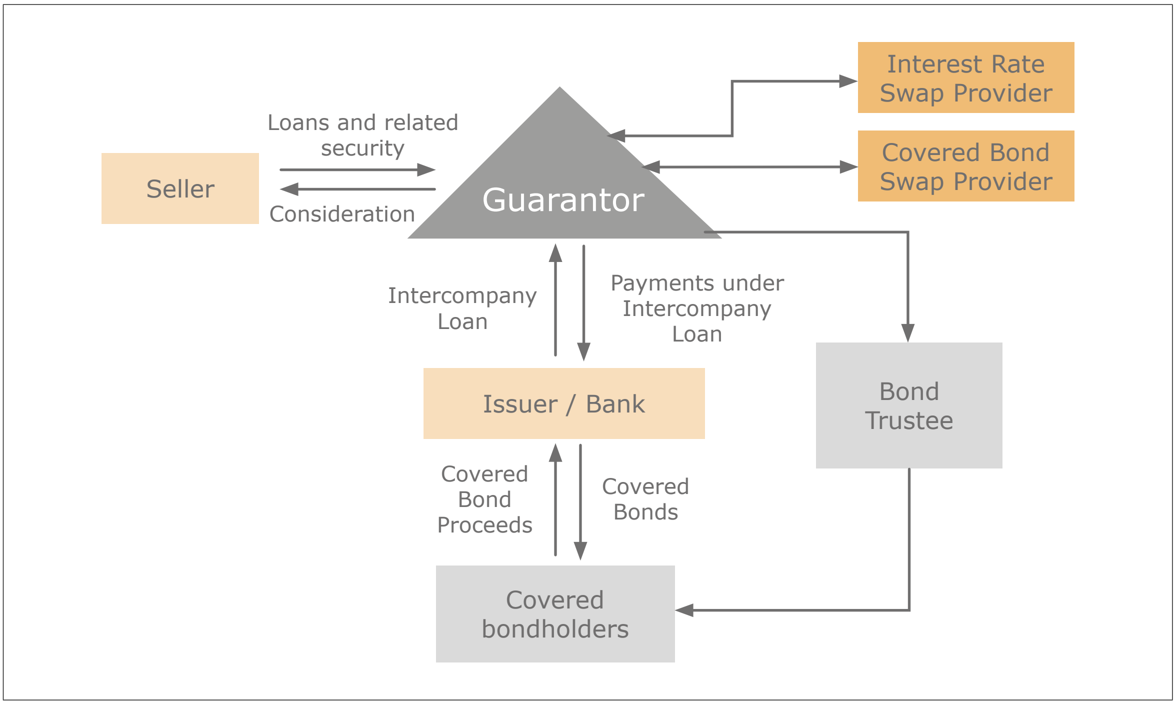
1 See National Housing Act R.S.C., 1985, c. N-11.

2 See CMHC's Canadian Registered Covered Bond Programs Guide (www.cmhc-schl.gc.ca).

handling mortgages. The issuer must provide the custodian with the details of eligible and substitute assets, and quarterly updates thereof.

An intercompany loan is provided by the issuer to the guarantor. The guarantor uses the proceeds from the intercompany loan to acquire all rights, title, interests in and certain records related to a specific pool of mortgage loans originated by the seller. The intercompany loan, denominated in Canadian dollars, is comprised of a guarantee loan and demand loan. The guarantee loan amount must be equal to the sum of the Canadian-dollar amount of all covered bonds outstanding and the overcollateralisation required for the Asset Coverage Test to be met at all times. The demand loan is a revolving credit facility equal to the difference between the intercompany loan and the guarantee loan. The Guarantor enters into swaps or collateral hedges to minimise interest rate and FX mismatches (see section V – Asset-Liability Management).

> Figure 1: General Covered Bond Structure



Source: CMHC

III. COVER ASSETS

Eligible assets for Canadian registered covered bonds are:

> Eligible loans, comprised of Canadian residential loans on properties with 1-4 units that:

- are not insured against borrower default;
- are first ranking mortgages;
- have a maximum 80% loan-to-value (LTV);
- are not in arrears at the time of transfer to the Guarantor and have had at least one payment made (of principal or interest) in accordance with the terms of the loan;
- are not the subject of any dispute, proceeding, set-off, counterclaim or defence;

- are not subject to a right of set-off by the borrower (and since July 2014, must include an express waiver of set-off); and
- are originated by the issuer or otherwise comply with its underwriting policies.

> Substitute assets up to the prescribed limit (10%) of total value of cover pool assets. They must be Canadian government bonds or other prescribed assets.

> Cash in an amount not exceeding the amount necessary to satisfy the guarantor entity's payment obligations for the next six months.

Where the mortgage securing an eligible loan also secures other indebtedness, such other indebtedness must (i) be owned by the same lender, (ii) be the subject of a release of security and (iii) have the benefit of a cross default provision with the eligible loan that is enforceable against the borrower. Only eligible loans may be transferred to the guarantor. Any loan that did not meet the eligibility requirements at the time of transfer must be repurchased by the issuer.

IV. VALUATION AND LTV CRITERIA

As noted above, the maximum LTV at the time of transfer of a loan to the guarantor is 80%. In Canada, prudential regulators require property values to be assessed during the underwriting process prior to making a mortgage loan. Property valuation is either performed by an accredited third-party property appraiser or an independently maintained valuation/risking model is used to assess the stated property value based on similar properties recently sold in the same area. Effective July 2014, property values must be indexed at least on a quarterly basis for the purposes of valuing the covered bond collateral. The indexation methodology for a covered bond programme is disclosed to investors in the covered bond programme prospectus and must be in line with any regulatory requirement.

V. ASSET – LIABILITY MANAGEMENT

Overcollateralisation and Coverage Tests

Within covered bond programmes, there is an inherent liquidity mismatch due to the bullet payment nature of the covered bonds and the cash flows generated from the cover assets. Following a default by the issuer, the principal cash flows generated from the cover assets may not be sufficient to ensure timely repayment of the outstanding covered bonds. To mitigate this credit and liquidity risk, the covered bond framework requires issuers to establish a contractual minimum and maximum level of overcollateralisation by adopting a minimum and maximum value for the Asset Percentage (AP) used to discount mortgage loans in the cover pool as part of the Asset Coverage Test (described below). The CMHC Guide also stipulates that cover pool collateral assets shall be at least 103% of the outstanding Canadian dollar equivalent nominal amount of covered bonds secured at all times. As with market practice in other jurisdictions, issuers tend to maintain an OC level higher than the regulatory minimum OC level required.

Typical of SPV structures, Canadian issuers must meet the following tests:

> Asset Coverage Test (ACT): Conducted on a monthly basis, the ACT ensures that sufficient assets are available to cover the outstanding amount of covered bonds plus a level of OC. An asset monitor also tests the accuracy of the ACT calculation yearly, or more frequently under specific circumstances.

> Valuation Test (VT): Conducted on a monthly basis, the VT ensures a covered bond programme's exposure to market risk (namely, volatility in interest rates and currency exchange rates) is monitored. The VT measures the present value to the covered bond collateral relative to the Canadian dollar equivalent of the market value of the outstanding covered bonds guaranteed by it.

> Pre-Maturity Test (PMT): Covered bonds may be issued with an Extended Due Date for payment ("soft bullet"), or as ("hard-bullet") covered bonds that are not extendible. In respect to hard-bullet covered bonds, at programme specific ratings' triggers, the PMT ensures that the covered bond collateral includes sufficient cash to meet in full all principal payments due under the maturing hard-bullet series covered bonds (together with all other payment obligations ranking in priority) for a period prescribed in the transaction documents of the specific programme.

> Amortisation Test (AT): Following an issuer event of default, the AT ensures that the notional value of cover assets is at least equal to the outstanding Canadian Dollar equivalent covered bonds principal.

Covered Bond Collateral Hedges and Ratings Triggers

Furthermore, the issuer is required to have in place covered bond collateral hedges for the guarantor at the time of each transfer of covered bond collateral or covered bond issue in order to minimise interest rate or FX mismatches which may include contingent covered bond collateral hedges, which become effective, e.g., in case of an event of default of the registered issuer. The guarantor carries out monthly valuations to assess market risks (see above). Hedging counterparties must meet the counterparty requirements set out in the CMHC Guide, including minimum standards established by rating agencies. The terms of each transaction document must explicitly state that the guarantor may replace a specific counterparty upon rating triggers or in case of an event of default of the registered issuer. CMHC must be informed of counterparty replacement, termination or resignation. Swap counterparties rank pari passu with covered bondholders prior to issuer default.

The framework requires a rating trigger for the establishment of a cash reserve for the benefit of the guarantor sufficient to meet in full all interest payments due on outstanding covered bonds for a period of time specified by the issuer in its transaction documents together with all payment obligations of the guarantor entity ranking prior to such interest payments. It is retained in a bank account and, following an issuer event of default, the balance of the cash reserve forms part of available revenue receipts to be used by the guarantor to meet its obligations under the covered bond guarantee.

VI. TRANSPARENCY

The Canadian covered bond legal framework is prescriptive and comprehensive in terms of information disclosure and reporting frequency. All material information and transaction documents related to a registered issuer and covered bond programme must be accessible on an ongoing basis, mainly through a dedicated website set up by the issuer. A monthly report must be prepared within 15 business days following the end of each month and include detailed information on the covered bond programme.

As of April 2022, eight of the ten Canadian covered bond issuers had joined ECBC Covered Bond Label and published its Harmonised Transparency Template (HTT).

VII. COVER POOL MONITOR AND BANKING SUPERVISION

In Canada, federal financial institutions are prudentially regulated by OSFI. Provincially regulated financial institutions are subject to prudential regulation by the applicable provincial entity, including, in the case of provincially regulated issuers in Quebec, the AMF.

CMHC takes the lead role in assessing and monitoring compliance with the Canadian legal covered bond framework requirements. A registered issuer shall deliver to CMHC a certificate signed by the issuer's executive officer attesting that the Issuer has complied with the requirements of the Canadian covered bonds legal framework. Notification to CMHC of material change to an issuer's registered covered bond program or terms of covered bonds is required. Registered issuers must also provide immediate notice to the CMHC in case of: (1) a failed ACT and/or AT; (2) awareness of a rating downgrade/withdrawal/trigger; (3) a breach or default under the terms of the covered bond programme; and (4) breach or default under the covered bonds legal framework.

Issuers are required to appoint an independent third-party cover pool monitor (CPM) with adequate qualifications. The responsibilities of the CPM consist of ensuring the accuracy of the records regarding the cover pool and of the required tests particularly the Asset Coverage Test. Issuers are required to make available all information needed by the CPM. Following issuer insolvency, the CPM remains in place for the benefit of the guarantor.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

The guarantor is structured as a bankruptcy-remote, special-purpose entity and, as such, following insolvency of the issuer, all the assets of the guarantor are segregated from those of the bankrupt estate of the issuer. Covered bond holders shall retain a claim against the issuer for any deficiency in the repayment of all principal, interest and other amounts owing thereunder, and such covered bond holders shall rank pari passu with the ordinary depositors of the issuer.

> Upon an issuer event of default, the guarantor is required to meet the covered bond obligations using the cash flows generated from the cover assets. In case of insufficient cash, the guarantor is permitted to sell the cover assets, find alternative funding or enter repos. The entire pool of cover assets is available as security for all the outstanding covered bonds issued under the programme, so there is no direct link between particular assets and a specific series of covered bonds.

> Upon a guarantor event of default, covered bonds accelerate. Preferential rights are limited to the guarantor's assets. Payments are made in accordance with the applicable order of priority.

An issuer or guarantor event of default include at a minimum (other events maybe prescribed in the documentation) the following: (1) impending or actual insolvency; (2) failure to pay principal, interest or any other amount due under the covered bond programme when due; (3) failure to comply with the remedial action following a rating trigger; and (4) failure to meet the AT by a guarantor on a calculation date. An issuer's transaction documents can provide a remedy period of up to 10 business days for a failure to pay principal, and up to 30 days for failure to pay interest or other payment under the covered bonds.

In April 2018, the Government of Canada published the Bank Recapitalisation (Bail-in) Conversion Regulations, SOR/2018-57, under the Bank Act and CDIC Act (Bail-in Regulations). The Bail-in Regulations specify the prescribed shares and liabilities that are eligible for bail-in conversion and their conversion terms. Covered bonds are specifically excluded from prescribed liabilities under the bail-in regulations. Similarly, the AMF has excluded covered bonds from the prescribed debts eligible for conversion as part of the recapitalization of a Quebec-regulated domestic systemically important financial institution in its Regulation Respecting. The Classes Of Negotiable And Transferable Unsecured Debts And The Issuance Of Such Debts And Of Shares published on March 29, 2019 and effective March 31, 2019 pursuant to section 40.50 of the Quebec Deposit Institutions and Deposit Protection Act (chapter A-26).

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Canadian regulated covered bonds may be eligible to be used as liquid assets (Level 2A) under the European Union's implementation of the Basel liquidity coverage ratio requirements provided for in Regulation (EU) No 575/2013 (Capital Requirements Regulation – CRR), as supplemented by Commission Delegated Regulation (EU) 2015/61 (LCR Delegated Regulation), provided that they are assigned a credit assessment by an external credit assessment institution (ECAI) which is at least credit quality step 1 or have otherwise been assigned a 10% risk weight under Article 129 of the CRR and provided that they also comply with the other requirements set out in the LCR Delegated Regulation. As of July 8, 2022, those other requirements include that covered bonds issued by credit institutions in third countries comply with the transparency requirements laid down in Article 14 of Directive (EU) 2019/2162. In the case of Canadian registered covered bonds programs, compliance with the disclosure requirements in the Canadian legal framework will result in the requirements in Article 14 of Directive (EU) 2019/2162 being met, provided issuers voluntarily provide additional disclosure, at least quarterly, of loans where a default is considered to have occurred based on the indications in Article 178(3)(a) of Regulation (EU) No 575/2013[3]. Canadian regulated covered bonds may be eligible for the same risk-weighting as unsecured bank debt for purposes of calculating regulatory capital ratios under Article 120 or 121 of the CRR.

If denominated in euro and admitted to trading on certain markets, Canadian covered bonds may be eligible as collateral for Eurosystem credit operations as a haircut category III asset pursuant to Guidelines 2015/510 and 2016/65 of the European Central Bank (ECB) on the implementation of the Eurosystem monetary policy framework. Valuation haircuts are generally based on credit quality, residual maturity and coupon structure of the covered bond.

Canadian covered bonds are subject to the same spread risk factors and concentration thresholds as unsecured bonds or loans pursuant to Articles 176 and 185 of Commission Delegated Regulation (EU) 2015/35 that supplements Directive 2009/138/EC on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II). Canadian covered bonds are not covered by Article 52 (4) of Directive 2009/65/EC on undertakings for collective investment in transferable securities (UCITS) because Canadian issuers do not have their registered head office in an EU member state and Canadian covered bonds are not issued in accordance with the provisions of a national law implementing Directive (EU) 2019/2162 (Covered Bonds Directive – CBD). Therefore, they do not benefit from the more preferential risk weighting under Article 129 (4) and (5) of the CRR, and are not eligible for the preferential risk factors and concentration thresholds in Articles 180 (1) and 187 (1) of Commission Delegated Regulation (EU) 2015/35. Third country covered bonds, including Canadian covered bonds, do not benefit from the preferential risk weighting under the CBD.

X. ADDITIONAL INFORMATION

X.1. Eligible for Level 2A assets under Canada's implementation of Basel's Liquidity Coverage Ratio (LCR) and treatment under Bank of Canada programs

Covered bonds that are issued and owned by a bank or mortgage institution, and are subject by law to special public supervision designed to protect bond holders (i.e. the dedicated covered bond legislation under the National Housing Act administered by CMHC, which came into force on 6 July 2012) may be included as Level 2A assets for the LCR, provided they satisfy the following conditions:

> Not issued by the institution itself or any of its affiliated entities;

> Either (i) have a long-term credit rating from a recognised external credit assessment institution (ECAI) of at least AA- or in the absence of a long-term rating, a short-term rating equivalent in quality to the long-term rating; or (ii) do not have a credit assessment by a recognised ECAI but are internally rated as having a probability of default (PD) corresponding to a credit rating of at least AA- (and, in the event of split ratings, the applicable rating should be determined according to the method used in Basel II's Standardised Approach for credit risk, and local rating scales (rather than international ratings) of a supervisor-approved ECAI that meet the eligibility criteria outlined in paragraph 21.2 of the Basel Consolidated Framework [CRE 21.2] can be recognised if covered bonds are held by an institution for local currency liquidity needs arising from its operations in that local jurisdiction);

> Traded in large, deep and active repo or cash markets characterised by a low level of concentration; and

> Have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions: i.e. maximum decline of price or increase in haircut over a 30-day period during a relevant period of significant liquidity stress not exceeding 10%.

Eligible covered bonds may be used as collateral under the Bank of Canada's (BoC) Standing Liquidity Facility, and the Standing Term Liquidity Facility. Eligible covered bonds are those that are compliant with the fed-

3 Disclosure of loans that are more than 90 days past due is already required by the Canadian legal framework.

eral legislative framework for covered bonds, and of sufficiently high quality as determined by BoC (which is considered to be broadly equivalent to a rating of AAA). The combined amount of covered bonds, term ABS and ABCP originated or sponsored by a single institution pledged by a Large Value Transfer System (LVTS) participant cannot be more than 5% of the total value of all the collateral pledged by that participant (but this condition does not apply for borrowings of less than $10 million). BoC announced temporary expansion for its Term Repo Operations eligible securities by including covered bonds (including own-name covered bonds) from March to October 2020. Effective July 2021, certain USD-denominated securities were added to Bank of Canada's eligible collateral including registered covered bonds.

X.2. Market Overview

Canadian banks remain key participants in international covered bond markets, issuing opportunistically in the CAD, EUR, USD, GBP, CHF, and AUD markets upon favourable basis swaps and strong market technicals.

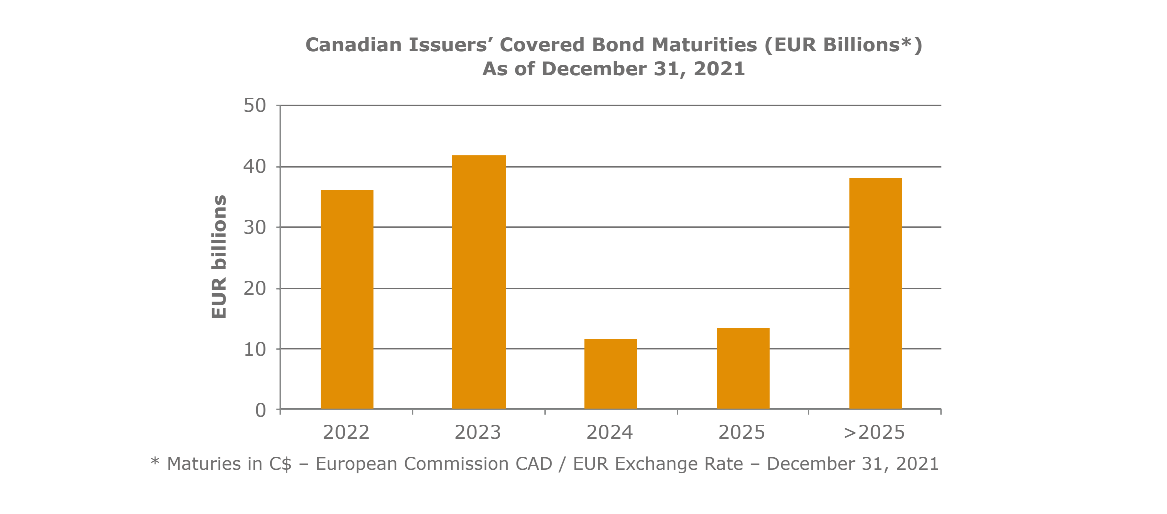
Figure 2: Canadian Banks' Covered Bond Issuance

At 31 December 2021 (C$ bn)	BMO	BNS	EQB	FCDQ	CIBC	HSBC	LBC	NBC	RBC	TD	Total
OSFI 5.5% covered bond encumbrance limit	54.3	65.1	1.9	18.2	46.0	6.6	2.4	19.5	93.8	94.3	402.7
Outstanding covered bonds	26.1	50.0	0.5	9.2	28.6	3.8	0.2	12.1	47.1	25.1	203.2
OSFI Covered Bond Ratio Limit	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	
**Covered Bond Ratio (%)	2.8%	4.5%	1.6%	2.9%	3.6%	3.4%	0.6%	3.7%	2.9%	1.5%	
Remaining encumbrance capacity	**2.6%**	**1.0%**	**3.0%**	**2.5%**	**1.8%**	**2.0%**	**4.8%**	**1.7%**	**2.5%**	**3.9%**	

Source: CMHC

** Covered Bond Ratio refers to total assets pledged for covered bonds relative to total on-balance sheet assets.

> Figure 3: Canadian Issuers' Covered Bond Redemptions (as of 31 December 2021, EUR bn)



Source: CMHC

Issuers: Royal Bank of Canada (RBC), Bank of Montreal (BMO), Bank of Nova Scotia (BNS), Canadian Imperial Bank of Commerce (CIBC), Fédération des Caisses Desjardins du Québec(FCDQ), National Bank of Canada (NBC), Toronto Dominion Bank (TD), HSBC Bank Canada, Laurentian Bank (LBC), Equitable Bank (EQB).

COVERED BOND · LABEL · : Royal Bank of Canada (1 pool), The Toronto-Dominion Bank (1 pool), The Bank of Nova Scotia (1 pool), Fédération des caisses Desjardins du Québec (1 pool), National Bank of Canada (1 pool), Canadian Imperial Bank of Commerce (1 pool), Bank of Montreal (1 pool), HSBC Bank Canada (1 pool).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Canadian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.8 CHILE

By Danilo Castañeda, Camila Herrera and Sindy Olea, Banco Santander Chile

I. FRAMEWORK

The legal framework for Chilean covered bonds (*Bonos Hipotecarios*, also BHs) is determined by:

> The General Banking Law (Ley General de Bancos, LGB): Article 69, n°2, BH issuances; and Articles 125, 126 and 134, special treatment of banking entities under bankruptcy.

> The Chilean Central Bank: Financial Regulation Compendium (*Compendio de Normas Financieras*, CNF), Chapter II.A.2, Chilean Central Bank complementary rules.

> Superintendency of Banks (*Superintendencia de Bancos e Instituciones Financieras*, SBIF) today Financial Market Commission (*Comisión para el Mercado Financiero*, CMF): *Recopilación Actualizada de Normas* (RAN), Chapter 9-2, Complementary rules of the Chilean banking regulatory agency.

In 2010, Law 20.448 – also called MKIII, the third reform to the Capital Markets Law – introduced a series of changes in terms of liquidity, innovation and integration of the capital markets. Among them was the amend- ment of Article 69, n°2 of the LGB which enabled banks to issue bonds with no special guarantees, called BHs. These securities are specific aimed to raise funds for the origination of mortgage loans (*mutuos hipotecarios*) used to finance the acquisition, construction, reparation or extension of residential properties. Only residential mortgages for these purposes are accepted as collateral, excluding commercial, public or other types of loans. An additional restriction imposed to defi an eligible mortgage is that only new mortgages are accepted. Hence, a maximum time limit of 18 months was set for the origination of eligible loans since the date of the BH's issuance. Thus, BH bonds also have an anticipated rescue clause for a proportional prepayment of the bond in case of insufficient origination. The issuer has the fly of an additional one-month period to incorporate new mortgage loans of the same nature and quality to comply with the cover asset limit and balance principle at the end of these 18 months allocation period and at the end of each month along the life of the bond.

Under an eventual credit event/default of an issuer, Articles 125, 126 and 134 of the LGB give BHs the same treatment and current legal status as that of outstanding *Letras Hipotecarias* (LH), a type of mortgage bond frequently used by Chilean banks in the past to finance their mortgage business. These articles regulate the procedures in such case and the mechanisms for the tender process and subsequent transference of eligible loans/assets and liabilities from the defaulted issuer to a new entity.

In September 2012, a new regulation was published in a joint statement by the Chilean Central Bank and the SBIF, describing BHs as a new source of long-term funding for banking entities, thus allowing better conditions for clients as well as a new investment alternative for institutional investors. At the same time, it explicitly incor- porated a prudential regulation associated with financial stability objectives. In particular, it stated the obligation of periodic reporting of both bonds and loans, the definition of certain credit indicator limits, specific policies to grant loans and other transparency objectives for the benefit of both clients and investors.

In January 2019 a new Banking Law was published and included a new restriction regarding mortgages eligi- bil- ity. This new law established that loans granted by the issuer within a timeframe of twelve months prior to the issuance of the BH will be accepted as eligible collateral.

Chapter II.A.2 of the CNF regulates issues related with eligible loans, as well as investments in fixed income securities as substitute collateral since the date of issuance during the period of loan origination, specifying limits for compliance during the whole life of the bond.

The SBIF's RAN mainly regulates the issuance of BHs, the relationship between bonds and loans, and the estab- lishment of a special Register for further control which includes detailed up-to-date information to comply with transparency and monthly reporting objectives.

II. STRUCTURE OF THE ISSUER

Under current legislation only banking entities are allowed to issue *Bonos Hipotecarios*. Cover assets are held within the balance sheet with the proper internal controls to monitor the cover pool and its relationship with its related bond ratios and limits over time.

Banco Santander Chile issued the first ever local covered bond (Bono Hipotecario). The first covered bond programme was for a total amount of UF 3 Million (approx. USD 116 million), the first issuance out of the programme was in 1 August 2013 for a total amount of UF 1.5 MM (approx. USD 58 million) and then the second one was in 20 November 2013. Both issuances generated a great appetite from local investors and the result was a spread of 15 bps lower than the senior unsecured debt outstanding. In 2014 Banco Santander Chile successfully registered a second covered bond programme for a total amount of UF 5 million and issued an amount of UF 1.5 million in September 2014.

As of 31 December 2021, Santander Chile is still the only active issuer of covered bonds in the Chilean market.

III. COVER ASSETS

Regulation states that issuers can consider eligible mortgages already granted within a timeframe of twelve months prior the bond's date of issuance to allocate the resources to the origination of mortgages. After that period, at the end of each month during the life of the BH, the outstanding balance of mortgages, excluding amounts in arrears, should not be lower than 90% of the outstanding balance of the respective bonds. Any difference between the outstanding amounts of the mortgages and the bonds must be covered by high credit quality fixed income instruments.

Figure 1: Fixed income substitute collateral: minimum 80% in sovereign bonds (Categories: I. and II.)

I.	Sovereing bonds	Fixed income instruments issued by Chilean Central Bank.
II.	Sovereing bonds	Fixed income instruments issued by Chilean Treasury.
III.	Corporate bonds	Local Corporate bonds rated AA+ or higher (by at least two rating agencies). Sublimit of up to 10% of the total of funds by each *Bono Hipotecario* issuance.
IV.	Bonos Hipotecarios	*Bonos Hipotecarios* issued by other banking entities.
V.	Term deposits	Term deposits originated by high rated banks established in Chile, excluding those of the issuer of the covered bonds.
VI.	LCH	Housing LH: *Letras De Crédito Hipotecario* issued for housing purposes by other banking entities.
VII.	Unsecured bank bonds	Unsecured bank bonds rated AA+ or higher (by at least two rating agencies), excluding those of own issuance.

Source: Chilean Central Bank, Banco Santander Chile

IV. VALUATION AND LTV CRITERIA

Eligible loans are only accepted as collateral for the corresponding issued bond once the accredited third-party property appraiser has finished the valuation process and after it has been registered at the corresponding CBR (*Conservador de Bienes Raíces*) – the local entities that certify legal dominion of properties.

The minimum loan-to-value (LTV) defined by law is 80%. Conditions for valuation are also subject to performing or non-performing status of loans. The maximum accepted number of arrears of any single loan in the pool is 10. Above that, the loan must be replaced with a new one of the same nature. As explained before for the cover-to-bond outstanding balance ratio, all amounts in arrears are excluded.

LTV alone is not enough for eligibility of mortgage loans. In addition, a maximum debt-to-income ratio of 25% is demanded.

V. ASSET – LIABILITY MANAGEMENT

Current legislation does not prescribe overcollateralisation for the issuance of BHs.

Under a balance principle the nominal amount of cover assets must always be at least equal to the outstanding amount of related *Bonos Hipotecarios* and loans in arrears or prepaid should be replaced always under the restriction that only new mortgages are potentially eligible as collateral for BHs.

Banks are free to structure the covered bonds according to their own needs and criteria. Banco Santander's first programme bond was a 15-year amortising structure reflecting the expected amortisation schedule of the underlying loan portfolio adjusted by the empirical loan prepayment rate. The second registered bond programme was an 18-year amortising structure reflecting the expected amortisation schedule and the empirical prepayment rate of the new loan portfolio.

VI. TRANSPARENCY

Current regulation includes a prudential approach associated with financial stability objectives: mandatory monthly reports of assets and liabilities in the Register and compliance of required ratios; a specific Credit Policy for mortgage eligibility which must be approved by the Board of Directors and published on the issuer's webpage; and client's LTV and debt-to-income ratios reported in a monthly basis.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Article 69, n°2 of the LGB mandates banks to maintain a special mortgage register (*Registro de Mutuos Hipotecarios*) for the identification and control of the relation between mortgages and their respective BH issuances.

SBIF's RAN 9.2, n°5, sets conditions for inscription of mortgages on the Register and the required information including: identification of bond issuance and loans; dates of inscriptions; original and substitute loans; identification of fixed income assets held as substitute collateral; and elimination from the register by number of arrears or property value deterioration.

Central Bank's CNF Chapter II.A.2, n°18, within its explicit transparency and information objectives, details monthly reporting data including: up-to-date average debt-to-income ratios of clients with eligible loans for each series of BH issuances; average value of properties linked to BHs at the date the credit was granted; LTV of the pool updated by loan replacements; loan characteristics (maturity, interest rates, fixed, floating or mixed type, currency denomination, inflation link mechanism and loan prepayment conditions); outstanding balances of loan portfolios and associated BH issuances and, finally, the total amount of fixed income assets and its general characteristics.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

There are 2 main issues related with bankruptcy in the BH legislation:

1) Since only new loans are accepted as collateral, this avoids the possibility of structuring BHs with a selection of the best quality assets which could be against the interests of other creditors such as depositors in case of bankruptcy.
2) In the case of bankruptcy, a special procedure in the way of a separated auction or tender process is triggered for those assets and liabilities clearly identified and associated with BHs in the Register. Eligible bidders are other public or private financial institutions, and the final buyer must take care of BH payments. This process is thoroughly covered in the LGB, same as for Letras de Crédito Hipotecarias (LH).

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Chile is not a member of the European Union. Therefore, Chilean BHs are issued under the existence of a specific country legislation – which is a requirement for these matters – no special treatment or benefit is granted in terms of preferred risk-weighting for regulatory capital purposes.

X. ADDITIONAL INFORMATION

In a clear intent to provide these Bonds with more liquidity the Chilean Central Bank announced on the 28 March 2013 a special Repo programme ("Repo BH") which accepts exclusively BHs as collateral. The Repo BH is offered for up to 14 days at a floating rate equivalent to the current monetary policy rate (MPR) of each day plus 25 basis points. Eligible BHs will be subject to the credit rating of the BH issuer banking entity which must be in AAA, AA or A.

On top of this, on July 2015 the SBIF announced a change in the regulation for Liquidity Management. This amendment introduces the compulsory measurement and reporting of the Liquidity Coverage Ratio and the Net Stable Funding Ratio. This local LCR ratio recognises BHs as high-quality liquid assets, which could promote the appetite of financial institutions for this asset class.

On an additional attempt to promote the issuance of this type of instruments, the SBIF announced on the 31 January 2017 an amendment on Chapter 9-2, n°5.1 of the RAN, allowing mortgage loans issued before the bond's date of issuance to be eligible for the cover pool as long as they were granted after the beginning of the interest accrual period stated in the amortisation schedule of such bond and after the registration certificate of such bond is published by the issuer in its website. The main objective of this amendment is to make the cover pool easier to build in the 18-month time limit after the date of issuance of the BH.

Despite these incentives, there have not been BHs issuances in the Chilean market other than the ones placed by Santander Chile. This lack of activity can be explained by the fact that the more relevant Chilean issuers already have the maximum credit risk rating (AAA), and therefore the double recourse guarantee provided by the BHs is currently not as valuable for the potential investors, specifically for banks, given that it does not provide an advantage in terms of capital consumption compared to standard corporate bonds.

Additionally, on 12 January 2019 a new Banking Law was published to start the process of transitioning into Basel III. In 2020, a new regulation about capital requirements entered in vigor affecting the BHs, among various other topics. In the calculation of the risk weighted assets there was a decrease in the weighting of BHs to 10% from 20% for AAA issuers. At the same time, this weighting is lower for BHs than a senior corporate bond.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Chilean market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.9 CYPRUS

By Christina Kypri-Georgiadou, Bank of Cyprus

I. FRAMEWORK

Cyprus first introduced the covered bond legislation in December 2010, with the Covered Bond Law of 2010, (130 (I)/2010), which came into force on December 23, 2010 (the "Law"). On the same day, the CBC issued a Directive (526/2010) under the provisions of the Law, which constitutes the regulatory framework for the issue of covered bonds (the "Directive").

The Law and the Directive (the "Cypriot Legal Framework") are further supplemented by other laws (e.g. the Bankruptcy Law, the Banking Business Law, the Companies Law etc.) as referenced by the Law.

The Cypriot Legal Framework has been finalized in consultation with and following the positive opinion of the ECB, dated 14 October 2010 and 23 March 2011 related links are:
http://www.ecb.int/ecb/legal/pdf/en_con_2011_27_f_sign.pdf and
http://www.ecb.int/ecb/legal/pdf/en_con_2010_73__f_sign.pdf).

In November 2019, EU Directive 2019/2162 on the issue of covered bonds and covered bond public supervision and amending Directives 2009/65/EC and 2014/59/EU was published.

For the purposes of harmonisation with the EU Directive, the Law on the Issue of Covered Bonds and Covered Bond Public Supervision and Related Matters of 2021 (166(I)/2021) and the CBC Directive on the Issue and Supervision of Covered Bonds of 2021 (RAA 456/2021) were issued. The Law and the Directive apply from July 8, 2022, at which time the 2010 Law and Directive is repealed.

II. STRUCTURE OF THE ISSUER

Under the Cypriot Legal Framework, Credit Institutions which have been approved by the Competent Authority (i.e. the CBC), are only allowed to issue covered bonds using the direct issuance route.

Approved Institutions are those Cypriot Credit Institutions which have been registered in the Register of Approved Institutions, (publicly available at the following link:

https://www.centralbank.cy/en/licensing-supervision/banks/register-of-credit-institutions-operating-in-cyprus) following a relevant application to the Competent Authority.

Approval of such application is granted only after the Credit Institution has successfully demonstrated its ability to carry out the legal obligations of an Approved Institution, and that it fulfils the criteria and conditions determined by the Competent Authority.

With respect to individual covered bond issuance, Approved Institutions must subsequently apply to the Competent Authority for registration of such new issue in the Covered Bonds Register (publicly available at the following link: http://www.centralbank.gov.cy/nqcontent.cfm?a_id=11439&tt=article&lang=en).

III. COVER ASSETS

As per the provisions of the new legislation coming into force July 8, 2022, the covered bonds must be at all times secured by:

(a) assets that are eligible pursuant to Article 129, paragraph 1, of Regulation (EU) No 575/2013, provided that the credit institution issuing the covered bonds meets the requirements of paragraphs 1a to 3 of Article 129 of that Regulation;

(b) high-quality cover assets that ensure that the credit institution issuing the covered bonds has a claim for payment and are secured by collateral assets, subject to certain conditions as described in the legislation; or

(c) assets in the form of loans to or guaranteed by public undertakings, subject to certain conditions as described in the legislation.

Primary assets may include:

> Public claims;

> residential loans;

> commercial loans;

> maritime loans; or

> other asset that the competent authority may determine as primary asset.

Hedging contracts may also be included in the cover pool, only to the extent that they are used exclusively for the purpose of hedging any type of risk that may adversely affect the value of the cover assets.

Finally, apart for the Primary Assets, Substitution Assets may also be included in the cover pool, as prescribed in the legislation with certain limitations such as the total value of substitution assets included in the cover pool and counted in the measurement of the Basic Collateralisation, not to exceed 15% of the total value of covered bonds.

IV. VALUATION AND LTV CRITERIA

The Approved ACI follows the methodology and procedures for valuing the value of the tangible assets securing the cover assets as set out in the Central Bank's Directive issued to Credit Institutions on Credit Granting and Review Processes.

Additionally, and pursuant to the legislation, the Covered Bond Monitor ("CBM"), has a duty to examine the valuation process in relation to the valuation of the cover assets.

V. ASSETS – LIABILITY MANAGEMENT

Nominal Value and Present Value Tests

As per the provisions of the new legislation coming into force July 8, 2022, a credit institution shall include in the cover pool primary assets, substitution assets and derivatives contracts of which:

(a) the total value covers the value of the outstanding amount of the covered bonds by 105%; and

(b) the total present value covers the total present value of the payments to cover pool investors and other cover pool creditors by 105%.

The value of a cover asset counted for the purposes of point (a) is equal to:

a) for a cover asset that is a residential, commercial or maritime loan secured by a mortgage or other equivalent collateral, in accordance with the Central Bank's Directive issued to Credit Institutions on Credit Granting and Review Processes, and

(i) in case where it is not subject to set-off, the lower of (a) the loan balance corresponding to the LTV determined by Article 129 of Regulation (EU) No 575/2013; and (b) the loan balance

(ii) in case where it is subject to set-off, the lower of (a) the loan balance corresponding to the LTV determined by Article 129 of Regulation (EU) No 575/2013; and (b) the net loan balance, where the net loan balance equals to the balance net of the set-off amount.

b) for a cover asset that is a claim against a public or credit institution or other entity referred to in Article 129(1)(b) of Regulation (EU) No 575/2013:

(i) in case where it is not subject to set-off, the value of the public claim;

(ii) in case where it is subject to set-off, the value of the public claim net of the set-off amount.

The effect of any hedging contract included in the cover pool is taken into account.

The present value of a cover asset counted for the purposes of point (b) is estimated:

(i) in case where the cover asset is not subject to set-off, on basis of the nominal value;

(ii) in case where the cover asset is subject to set-off, on the basis of the nominal value net of the set-off amount.

The above 105% condition must also be met in the following scenarios:

(a) Parallel interest rate shift of +200 and -200 basis points;

(b) Interest rate shifts determined by a 99% 6-month confidence interval using daily changes for the last 365 days;

(c) Exchange rate changes:

> Euro and member-state currencies: 10%;

> Currencies of the United States, Canada, Japan, Switzerland, Australia: 15%; and

> Other currencies: 25%.

(d) Exchange rate shifts determined by a 99% 6-month confidence interval using daily changes for the last 365 days.

Weighted Average Life Test

The weighted average life of cover assets counted in the measurement of basic collateralisation and the supervisory overcollateralization must be longer than the weighted average life of the covered bonds.

Liquidity Buffer

The cover pool includes at all times a liquidity buffer composed of liquid assets available to cover the net liquidity outflow of the covered bond programme. The cover pool liquidity reserve shall cover the maximum cumulative net liquidity outflow over the next 180 days. The types of assets that can be used to cover the cover pool liquidity reserve are described in detail in the legislation.

Additionally to the above statutory tests, and with a view to protect the depositors and all other unsecured creditors in case of insolvency proceedings, and to potentially provide for a reserve of assets that may be used in the future to sustain further stresses, the Directive provides that an Approved Institution is not permitted to issue covered bonds, if such an issue would result in:

> the total value of the primary assets which are required to be included in the institution's cover pools for each cover bond category, to exceed 90% of total value of the institution's eligible primary assets for that cover bond category, or

> the total value of the cover assets included in all cover pools and counted in the cover pool adequacy, to exceed 25% of the total value of the institution's assets.

VI. TRANSPARENCY

Transparency is ensured through a series of reporting and registers that need to be maintained, updated and monitored by the covered bond issuers as well as by the Competent Authority.

Ccovered bond Issuers are required to maintain a cover pool register for each covered bond issue or programme outstanding. Specific conditions for maintaining such Cover Pool Register (e.g. form, content, entry recording etc.) are outlined in the Directive. The Cover Pool Register is to be updated whenever an asset is included or excluded from the cover pool (and at least on a monthly basis) and shared with the Competent Authority and the CBM.

Specifically, the Directive set further transparency obligations to the covered bond issuers, requiring them to disclose, on a quarterly basis and in a publicly accessible area (e.g. their websites), specific statistical information relating to their outstanding covered bonds, in the form determined therein.

With respect to the covered bond issuers and the covered bonds issued and outstanding in Cyprus, transparency is ensured through the maintenance of a Register of Approved Institutions as a well as a Covered Bonds Register by the Competent Authority. Both registers are kept in an electronic form and are publicly accessible in the website of the Competent Authority.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The Cypriot Legal Framework is structured in a manner which ensures very vigilant regulatory supervision of covered bond issuers. In accordance with the Law, each institution applying for registration in the Register of Approved Institutions, is required to appoint a qualified entity (e.g. an audit fi not associated with the covered bond issuer) as a Covered Bond Monitor (the "CBM"), such appointment being subject to the approval of the Competent Authority. The CBM must possess the necessary knowledge, experience and ability for the effective discharge of its functions and have the necessary qualifications outlined in the Directive. To the extent that, for any reason, the covered bond issuer has not managed to appoint a CBM, the Competent Authority is entitled to appoint one.

The duties of the CBM include a broad range of responsibilities, ranging from verifying to the Competent Authority, ahead of the application for the registration of bonds in the Covered Bonds Register, that the institution fulfils the conditions for registration as an approved institution, to submitting information and regular reports to the Competent Authority.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Investors in cover bonds and counterparties of derivative contracts are entitled to the following claims:

(a) a claim against the credit institution issuing the covered bonds;

(b) in the case of the insolvency or resolution of the credit institution issuing the covered bonds, a priority claim against the principal and any accrued and future interest on cover assets;

(c) in the case of the insolvency of the credit institution issuing the covered bonds and in the event that the priority claim as referred to in subparagraph (b) cannot be fully satisfied, a claim against the insolvency estate of that credit institution, which ranks pari passu with the claims of the credit institution's ordinary unsecured creditors determined in accordance with The Companies Law and The Business of Credit Institutions Law.

The claims referred to above shall be limited to the full payment obligations attached to the covered bonds.

The payment obligations attached to covered bonds are not subject to automatic acceleration upon the insolvency or resolution of the ACI issuing the covered bonds.

The fact that an ACI with covered bond obligations is subject to dissolution proceedings does not affect

(a) the claims and rights of covered bond investors, and other cover pool creditors;

(b) the claims and rights that a counterparty has under any derivative contract entered into by the credit institution as long as these contracts are included in the cover pool.

The obligations of a credit institution with covered bond obligations towards covered bond investors, and other cover pool creditors, continue to be in effect and are enforceable irrespective of the fact that the credit institution is subject to a dissolution proceedings.

Where an ACI with covered bond obligations is subject to dissolution proceedings, the powers of the Central Bank, as a competent authority to appoint a special administrator and cover pool and covered bond monitor continue to be in force until the claims of all covered bond investors and other cover pool creditors are satisfied.

Until all legal claims of covered bond investors, and other cover pool creditors have been fully satisfied, the cover assets shall not be part of the assets available to meet the claims of all other creditors, members and contributories of the credit institution with covered bond obligations that are subject to dissolution.

The cover assets are not liable to attachment, sequestration or other form of seizure by any person other than the special administrator, as long as the legal claims of covered bond investors and other cover pool creditors remain unsatisfied.

In case where the cover assets or cover pool are sold or otherwise disposed of, the cover pool creditors, covered bond investors, and other cover pool creditors may, satisfy their claims and rights, in accordance with the terms of the issue, contract, or appointment, from the proceeds of the sale or other form of disposal in priority of all other creditors, members, and contributories of the credit institution with covered bond obligations subject to dissolution proceedings.

Provided that, this section applies irrespective of whether the claims of creditors other than covered bond investors, and cover pool creditors are preferred under any other law and irrespective of whether those claims are secured or unsecured.

In case where the claims of covered bond investors and other cover pool creditors are not satisfied in full from the proceeds of the sale or other form of disposal of the cover pool, those creditors are, with respect to the unsatisfied part of their claims, unsecured creditors, pari passu with the other unsecured creditors of the credit institution with covered bond obligations subject to dissolution proceedings.

Notwithstanding the provisions of any other law in force in the Republic, where the collateral assets held by credit institution with covered bond obligations or by a special administrator in connection with a cover asset counted in the cover pool adequacy criteria, as provided for in the legislation, is also held by a credit institution in connection with an asset not included in the cover pool, any amount resulting from the security, guarantee, indemnity or insurance, as the case may be, shall be applied in priority to discharge the cover asset.

In addition, where a covered bond Issuer is subject to dissolution proceedings, a Covered Bond Business Administrator (the "CBBA") is appointed by the Competent Authority (as per Article 59(1) of the Law), who takes all necessary measures to assume the control and the management of the cover pool and carries out the covered bond business. Any Cover assets not counted for the purposes of fulfilling the Statutory Tests shall be removed from the cover pool and the Cover Pool Register only by the CBBA.

The treatment of the cover pool following the commencement of dissolution proceedings is summarized below:

> Upon the initiation of dissolution proceedings, the CBBA assumes control of the cover pool (*according to the provisions of Article 40 of the Law*) and also of any liquid assets maintained outside the Register for the purposes of meeting the Prematurity Test, and is responsible to review the adequacy of the cover pool in accordance with Article 19 and Article 23 of the Directive;

> Cover pool adequacy assessment is being performed by the CBBA as per Article 18(6) of the Law, using solely those cover assets which are counted for the purposes of such assessment;

> To the extent that the above assessment has been successfully met, any assets which are not required to meet such assessment, including relevant requirements under a contractual OC, are being released

and become available to satisfy the claims of all other creditors, members and investors of the credit institution;

> To the extent that the above assessment has not been successfully met, the CBBA (*according to the provisions of Article 29(2) of the Directive*) is entitled to use any assets included in the cover pool register that do not meet the criteria, terms and conditions for counting a cover asset in the cover pool adequacy. (*To the extent that such assessment is not met, the CBBA has the right to accelerate or transfer the CB business to another approved institution, in accordance with Article 62 (1) of the Law*).

With respect to an automatic acceleration of the covered bonds, this is something that is not provided for by the Law, where a covered bond Issuer is subject to dissolution proceedings.

In accordance with Article 40(1) of the Law, all outstanding covered bonds will remain in force (subject to the terms and conditions under which they were issued), and the obligations of the covered bond Issuer under the covered bonds continue to be enforceable.

IX. RISK WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The legislation when taken together with the practices, processes and procedures across the industry should fall within the criteria of Article 129 CRR. Cypriot covered bonds meet the criteria of UCITS 52(4)[1]. Covered bonds issued under the Cypriot Legal Framework form acceptable collateral for refinancing purposes with the ECB, following the typical ECB eligibility assessment and their inclusion on the ECB Eligible Assets Database (EADB).

X. ADDITIONAL INFORMATION

Set-off

Covered bond issuers are required to maintain, throughout the life of the covered bonds, a set-off reserve in connection with cover assets that are subject to set-off.

The Directive provides for the maintenance of such a set-off reserve, in the form of additional assets which are included in the cover pool

The set-off reserve is quantified by the Issuer and such calculation is subject to the monitoring of the CBM. The set-off reserve is segregated from the Issuer's other assets, forming part of the cover pool where Cover Pool Creditors have a priority claim over amounts in such reserve.

Extendable maturity structures

The Central Bank, as a competent authority, may allow for the issue of covered bonds with extendable maturity structures where investor protection is ensured by at least the following:

(a) the maturity can only be extended subject to objective triggers specified by the Central Bank, as a competent authority, with its Directive, and not at the discretion of the credit institution issuing the covered bonds;

(b) the maturity extension triggers are specified in the contractual terms and conditions of the covered bond;

(c) the information provided to covered bond investors about the maturity structure is sufficient to enable them to determine the risk of the covered bond, and includes a detailed description of (i) the maturity extension triggers; (ii) the consequences for a maturity extension of the insolvency or resolution of the ACI issuing the covered bonds; (iii) the role of the Central Bank, as a competent authority, and, where relevant, of the special administrator with regard to the maturity extension;

(d) the final maturity date of the covered bond is at all times determinable;

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): https://hypo.org/ecbc/covered-bonds/.

(e) in the event of the insolvency or resolution of the credit institution issuing the covered bonds, maturity extensions do not affect the ranking of covered bond investors or invert the sequencing of the covered bond programme's original maturity schedule;

(f) the maturity extension does not change the structural features of the covered bonds regarding dual recourse, and protection against insolvency.

In September 2015, the only Cypriot covered bond outstanding (issued by Bank of Cyprus Public Company Ltd) was converted to a conditional pass-through note further to the amendment of the programme documents. The amended structure mitigates the risk of refinancing by introducing features such as maturity extension and a pass-through mechanism.

As such, upon the occurrence of a failure by the issuer to pay the final redemption amount on the final maturity date, the cover bond will convert into pass-through and the maturity of the bond will be extended. Once the covered bond converts into pass-through, an appointed portfolio manager may try to sell portfolio loans and any such proceeds from the sale of cover assets would be used for the repayment of the covered bond.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Cypriot market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.10 CZECHIA

By Petr Vybíral, Allen & Overy (Czechia) LLP

I. REGULATORY FRAMEWORK

The Czech legal and regulatory framework of covered bonds (the **Czech Covered Bonds Rules**) is laid down under Czech Act No. 190/2004 Coll., on Bonds, as amended (the **Czech Act on Bonds**), Czech Act No. 182/2006 Coll., on Insolvency and Methods of its Resolution (Insolvency Act), as amended (the **Czech Insolvency Act**) and certain other provisions of the applicable laws.

In April 2022, a bill amending the Czech Covered Bonds Rules passed the legislative process (the **CBD Amendment**). The CBD Amendment introduces some of the mandatory features of Directive (EU) 2019/2162 (the **CBD**) not yet present in the Czech Covered Bonds Rules as well as some of the optional features of it. Furthermore, the CBD Amendment introduces further changes (not relating to the CBD) aiming mainly to fill gaps in the Czech Covered Bonds Rules. The CBD Amendment will enter into force on 29 May 2022.

II. COVERED BONDS AND THEIR TYPES

The Czech Covered Bonds Rules recognise three types of covered bonds (*kryté dluhopisy*): (i) mortgage covered bonds (*hypoteční zástavní listy*); (ii) public covered bonds (*veřejnoprávní zástavní listy*); and (iii) mixed covered bonds (*smíšené zástavní listy*).

The distinction between these three types of covered bonds depends on what cover assets must prevail in the cover pool that serves as a cover in respect of those covered bonds and by virtue of which cover assets the applicable Statutory 85% Limit (as described below) must be complied with.

III. STRUCTURE OF THE ISSUER

Under the Czech Covered Bonds Rules, covered bonds may only be issued by a bank (a credit institution) that holds a Czech banking licence and that has its seat in Czechia.

The CBD Amendment has introduced a requirement for permission for a covered block (see below). Apart from that, the Czech Covered Bonds Rules do not lay down any further requirements for a special authorisation or any requirements for an issuer to be set up as a specialised credit institution (with a restricted scope of permitted activities, for instance).

The Czech Covered Bonds Rules operate on the dual-recourse concept (with holders of covered bonds having a direct, unconditional and senior unsecured claim *vis-à-vis* the issuer, and a preferential claim on the cover pool). This means that the assets in the cover pool(s) are reserved for the preferential satisfaction of claims of holders of covered bonds and the repayment of certain other debts so designated in the Czech Act on Bonds, and the terms and conditions or the prospectus of covered bonds or in an agreement related to covered bonds (the relevant parts of which must be disclosed to the investors in the same manner as the terms and conditions or the prospectus of covered bonds). Consequently, the covered bond holders have a dual recourse against (i) the relevant cover pool; and (ii) the insolvency estate of the issuer.

IV. COVER ASSETS, COVER ASSETS REGISTER AND COVERED BLOCK RECORDS

The eligible assets comprise the following asset classes:

(i) mortgage loan receivables;

(ii) receivables against, or receivables guaranteed by, a person controlled by a state, regional self-governing unit or an individual or legal person performing tasks in the area of public administration so long as certain conditions stipulated under the Czech Act on Bonds are met (**Public Undertaking Receivables**);

(iii) other assets or exposures under Article 129(1) and (2) of Regulation (EU) No. 575/2013 (the **CRR**) so long as the issuer meets the requirements laid down in paragraphs 1a to 3 of Article 129 of the CRR;

(iv) the issuer's cash on an account kept by a bank or another person set out in Czech Act No. 240/2013 Coll., on Investment Companies and Investment Funds, as amended (the **Issuer's Cash**) and other Liquid Assets (as defined below); and

(v) rights arising under a derivative in accordance with Article (2)(5) of Regulation (EU) No. 648/2012 of the European Parliament and of the Council, on OTC derivatives, central counterparties and trade repositories (EMIR) (the **Derivative**).

A Derivative is considered an eligible asset only if the following cumulative conditions are met:

(i) the purpose of the Derivative is to hedge against the risks related to cover assets or covered bonds;

(ii) the Derivative was clearly concluded in relation to covered bonds;

(iii) the terms of the Derivative provide that the insolvency of an issuer, crisis resolution or similar measure in respect of an issuer cannot constitute an event of default or similar event which could lead to early termination of the Derivative; and

(iv) the issuer's counterparty to the Derivative has granted its prior consent to the registration of the Derivative in the cover assets register (while the same applies also to its removal from the cover assets register) whereas where the issuer's counterparty to the Derivative is a financial counterparty within the meaning of Article 2(8) of Regulation (EU) No. 648/2012 it must have been assigned at least with a credit quality step 3, and the derivative contract must have been sufficiently documented.

Upon registration of an eligible asset in the cover assets register, it becomes a cover asset, which is protected by the Czech Act on Bonds and cannot be transferred, pledged or otherwise used as a security (until deregistered from the cover asset register).

Depending on the type of covered bonds involved, particular eligible assets will have to constitute such cover that the aggregate value of certain cover assets in the cover pool must be equal to at least 85% of the aggregate value of all debts for whose cover the cover pool serves (the Statutory 85% Limit), unless a higher limit is stipulated by the terms and conditions of a series of covered bonds. In meeting this limit, the following cover assets are always disregarded: (i) the Issuer's Cash; (ii) rights arising under a Derivative; and (iii) assets under Article 129(1)(c) and 129(2) of the CRR.

Besides the cover assets, the cover pool also includes, without the need of their registration in the cover assets register, the following assets (each designated as an accessory asset):

(i) rights from a security provided in relation to the cover asset included in the cover pool, in particular rights from mortgages of real property in relation to the mortgage loans;

(ii) rights from agreements entered into in relation to the cover assets included in the cover pool (especially rights from any insurance agreements or policies);

(iii) an asset provided as a collateral or other security in respect of a Derivative, unless the terms and conditions of a series of covered bonds provide otherwise;

(iv) rights from agreements concluded in relation to the administration of the covered block whose part is the cover pool; and

(v) upon appointment of an involuntary administrator of covered blocks, funds accepted as payment for the repayment of a debt corresponding to a receivable arising under another (cover) asset that is included in the cover pool or in direct connection with such an asset or funds obtained as a proceeds from cover assets liquidation.

The cover assets register forms the core part of the covered block records that an issuer of covered bonds (or involuntary administrator of the covered blocks, once appointed) is obliged to keep. The cover assets register, and the covered block records must be kept separately in respect of each cover pool and each covered block. The covered block records must provide complete information for assessing whether and how the issuer fulfils its duties under the Czech Act on Bonds. Further details on how the covered blocks records should be kept are laid down under delegated regulation to the Czech Covered Bonds Rules.

V. COVER POOL(S) AND COVERED BLOCK(S)

The cover pool is created upon registration of at least one eligible asset in the cover assets register. The issuer may, at its sole discretion, create only one cover pool or multiple cover pools, which may serve to cover its obligations from individual or multiple series of outstanding covered bonds or all series of covered bonds issued under one covered bond programme.

The cover pool is a fully segregated and ring-fenced pool of assets registered in the cover assets register, identified and designated by the issuer to constitute cover in respect of certain covered bonds that it has issued (and which are outstanding) and certain other debts of that issuer, as well as other assets (the accessory assets) which belong to that cover pool by operation of law. Any assets included in the cover pool must be held by the issuer and those assets will remain at all times on the issuer's balance sheet.

The issuer is obliged to monitor the eligibility of the assets in the cover pool continuously. The issuer must remove from the cover assets register those assets that no longer satisfy the eligibility criteria from the cover pool and substitute them with other eligible assets. However, the involuntary administrator of covered blocks, if and once appointed, has no such duty. The priority right of holders of covered bonds to the cover pool(s) extends also to any overcollateralisation.

With the creation of one or more cover pools, an issuer also creates a covered block, which is a fully segregated and ring-fenced block of assets and liabilities (debts) of that issuer. A covered block consists of the cover pool and the debts that it covers.

The CBD Amendment introduces a requirement for covered block permission. Consequently, each issuer of covered bonds must, no later than on the issue date of the relevant covered bonds, obtain permission for a covered block granted by the CNB. The Czech Act on Bonds stipulates conditions for both the granting and removal of that permission.

VI. COVER POOL LIQUIDITY BUFFER

The CBD Amendment has introduced a requirement that a cover pool must at all times include a cover pool liquidity buffer composed of the following liquid assets (each a **Liquid Asset**):

(i) assets qualifying as level 1, level 2A or level 2B assets under Commission Delegated Regulation 2015/61, that are valued in accordance with that delegated regulation, and are not issued by the credit institution issuing the covered bonds itself, its parent undertaking, other than a public sector entity that is not a credit institution, its subsidiary or another subsidiary of its parent undertaking, or by a securitisation special purpose entity with which the credit institution has close links; or

(ii) short-term exposures to credit institutions that qualify for credit quality step 1 or 2, or short-term deposits to credit institutions that qualify for credit quality step 1, 2 or 3, in accordance with point (c) of Article 129(1) of the CRR.

According to the Czech Covered Bonds Rules, claims from exposures considered in default under Article 178 of the CRR cannot contribute to the cover pool liquidity buffer.

The cover pool liquidity buffer will cover the maximum cumulative net liquidity outflow over a period of 180 days. Where the issuer of covered bonds is subject to liquidity requirements set out in other EU acts that result in an overlap with the cover pool liquidity buffer, the provisions of the Czech Act on Bonds regulating cover pool liquidity buffer do not apply for the period provided for in those EU acts.

VII. EXTENDED MATURITY (SOFT-BULLET) STRUCTURES

The Czech Covered Bonds Rules allows the issuers to issue covered bonds with a feature of extending their scheduled maturity for a pre-determined period of time if a specific trigger event specified in the terms and conditions of a series of covered bonds occurs. Note that only the events recognised under the Czech Act on Bonds may be used as trigger events for the purposes of an extended maturity structure feature.

VIII. ASSET MONITOR AND INVESTOR INFORMATION

The CBD Amendment has not introduced a requirement for the issuers of covered bonds to appoint mandatory asset (or cover pool) monitor within the meaning of Article 13 of the CBD. However, the issuers are free to appoint asset (or cover pool) monitor which, however, does not have to follow the requirements placed on 'obligatory' cover pool monitors under Article 13 of the CBD.

Under the Czech Covered Bonds Rules, the issuers of covered bonds are required to publish information about their covered blocks so that the investors may assess the profile and risks of a particular covered block and carry out their due diligence. The scope of the information that must be published on the issuer's website is laid down under the Czech Act on Bonds (and follows Article 14(2) of the CBD).

IX. STATUTORY MINIMUM OVERCOLLATERALISATION LEVEL AND OTHER TESTS

The Czech Covered Bonds Rules further require the aggregate value of all cover assets included in the cover pool to represent at least 102% of the aggregate value of all debts that are covered by the respective cover pool (whereas the expected costs relating to the maintenance and administration of the covered block in the amount of 1% of the cumulative nominal amount of the covered bonds falling within that covered block will always be added) and thus resulting in a minimum 2% overcollateralisation (the **Statutory Minimum OC Level** and the Statutory 85% Limit and the Statutory Minimum OC Level, jointly also the **Cover Tests**).

Where the issuer of the covered bonds meets the Statutory 85% Limit predominantly using the Public Undertaking Receivables, the Statutory Minimum OC Level is modified. In that case, the aggregate value of all cover assets included in the cover pool must represent at least 110% of the aggregate value of all debts that are covered by the respective cover pool. The terms and con ditions of a series of covered bonds may also set a higher overcollateralisation level.

In the case of mortgage covered bonds, the nominal value of any mortgage loan receivable in the cover pool must not exceed 100% of the mortgage lending value of the mortgaged real property (the Statutory 100% Individual LTV Limit), unless a lower limit is stipulated by the terms and conditions of a series of covered bonds (which may implement stricter, CRR-conform criteria in their programmes or an individual series of covered bonds). However, this requirement does not operate as a strict eligibility criterion (but is rather set as a soft limit only) since, to the extent the nominal value of an individual mortgage loan exceeds that limit, it will be partially disregarded for the purposes of calculating the Cover Tests.

The issuer regularly (at least each calendar quarter) informs the CNB on whether and how the issuer meets its duties, including, but not limited to, compliance with the Cover Tests and the Statutory 100% Individual LTV Limit.

X. MORTGAGE LOANS – ELIGIBILITY CRITERIA

Mortgage loans included in the issuer's cover pool(s) are subject to certain conditions, including that:

(i) the mortgaged real property must be located in Czechia or in an EEA country;

(ii) compliance with the Statutory 100% Individual LTV Limit is ensured (which is, however, set as a soft limit rather than as a strict eligibility criterion, whilst, to the extent the nominal value of an individual mortgage loan exceeds that limit (and only to that extent), it will be partially disregarded for the purpose of the Cover Tests);

(iii) there may not be any other mortgage or similar third-party right attached to the mortgaged real property having the same or priority ranking to those mortgage rights securing mortgage loan receivables (or a part of them) used as a cover (if this condition is not met, the nominal value of the relevant mortgage loan is equal to zero for the purposes of the Statutory 85% Limit); and

(iv) the issuer of covered bonds must have in place procedures to monitor that the mortgaged real property is adequately insured against the risk of damage and that insurance claim under relevant insurance contract are included in the respective cover pool.

Additionally, in the case of a default of a borrower under the relevant mortgage loan under Section 178 of the CRR (or if a stricter condition set out in the relevant terms and conditions is met), the nominal value of the relevant mortgage loan receivable in the cover pool will be equal to zero (ie decreased by 100%) for the purpose of calculating the Cover Tests.

XI. ENHANCED PROTECTION AND FULL RING-FENCING IN INSOLVENCY

The Czech Insolvency Act explicitly provides that cover pool(s) do not constitute a part of the issuer's insolvency estate and are fully segregated and ring-fenced from any other (general) assets of the issuer which fall within the issuer's insolvency estate, regardless of whether the aggregate value of these assets is lower or higher than the limits set out in the Czech Act on Bonds. The Czech Insolvency Act further provides that:

(i) the automatic acceleration of debts from covered bonds as a result of the commencement of insolvency proceedings and declaration of bankruptcy in relation to the assets of the issuer will not apply (which on its own represents an extremely credit-positive change compared with the previous regulatory regime);

(ii) neither the commencement of the insolvency proceedings against the issuer, the issuing of a decision on the insolvency of an issuer nor the declaration of bankruptcy in relation to the assets of an issuer will affect the covered block(s) (especially the satisfaction and maturity of debts that are part of that covered block(s)); and

(iii) the insolvency administrator must not intervene in the administration of the covered block (which is entrusted to the involuntary administrator) and must render assistance to the involuntary administrator of covered blocks.

XII. INVOLUNTARY ADMINISTRATOR OF COVERED BLOCKS

Upon (i) commencement of the insolvency proceedings in respect of an issuer of covered bonds, (ii) the issuer of covered bonds enters into liquidation; and (iii) the CNB revokes the banking licence of the issuer of covered bonds, the CNB will, without undue delay, appoint an involuntary administrator of covered blocks to ensure proper management of the covered blocks.

The involuntary administrator of covered blocks may only be a Czech bank or a foreign bank with its registered office in another EEA country that issues securities comparable to covered bonds or that administers assets comparable to cover assets, and it cannot be a person in respect of which there is a risk of a conflict of interests.

The involuntary administrator of covered blocks is entrusted with full administration of all covered blocks of the relevant issuer and may agree an obligation both for the benefit and to the detriment of a covered block to improve liquidity or hedge against risk.

The involuntary administrator of covered blocks must, without undue delay after its appointment, open an account with a bank to accept payments, and inform the persons whom this may concern about an unequivocal identifier of that account. Any other person that receives a payment in favour of the cover pool will, without undue delay, transfer it to that account or to the involuntary administrator of covered blocks in favour of the relevant cover pool.

The involuntary administrator of covered blocks may:

(i) transfer the relevant covered block to another eligible entity and entrust it with its administration (whilst a transfer made without the consent of the CNB will be disregarded);

(ii) conduct a proportional decrease (a *pari passu* haircut) of debts belonging to the covered block;

(iii) liquidate selected cover assets (cover pool(s)); or

(iv) liquidate all the cover assets (cover pool(s)) and consequently proceed with early repayment of the covered bonds).

In all instances, only the CNB's consent is required and the CNB will only grant its consent so long as any of these actions is in the best interest of the holders of covered bonds. The effectiveness of the transfer, the *pari passu* haircut, or the liquidation towards third parties does not require any other (prior or subsequent) public or private consent or notification.

Issuers: Česká spořitelna, a.s., Hypoteční banka, a.s., Komerční banka, a.s., Raiffeisenbank a.s., MONETA Money Bank, a.s., UniCredit Bank Czech Republic and Slovakia, a.s., Wüstenrot hypoteční banka a.s (now MONETA Money Bank, a.s.)., Equa Bank a.s. (now Raiffeisenbank a.s.)

COVERED BOND LABEL : Komerční banka, a.s. (1 pool)

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.
In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database). For further national information on the Czech market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.11 DENMARK

By Mette Saaby Pedersen, Finance Denmark, Svend Bondorf and Anton Holmgaard Nielsen, Nykredit

I. FRAMEWORK

In Denmark the legal basis for covered bond issuance is the Danish Mortgage-Credit Loans and Mortgage-Credit Bonds etc. Act (the "Mortgage Act") (*Lov om realkreditlån og realkreditobligationer mv.*) and the Danish Financial Business Act (*Lov om finansiel virksomhed*). The Mortgage Act is applicable only to Danish mortgage banks. The mortgage banks are specialised banks. The Capital Requirements Regulation (CRR) is directly applicable to the commercial banks and the mortgage banks.

Specific bankruptcy regulations laid down in the Financial Business Act and the Mortgage Act prevail over general bankruptcy regulations (sections 247a-247i of the Financial Business Act and sections 22-33 of the Mortgage Act).

II. STRUCTURE OF THE ISSUER

The Danish Financial Supervisory Authority (FSA) may license mortgage banks, commercial banks and ship financing institutions[1] to issue covered bonds.

Until 1 July 2007, only mortgage banks were allowed to issue mortgage covered bonds. Since this date, also commercial banks can obtain a license to issue covered bonds.

The Danish legal basis for covered bonds was amended in 2021 to transpose the Covered Bonds Directive (CBD) and the changes are applied as of 8 July 2022.

There is three types of Danish covered bonds:

- Særligt Dækkede Obligationer (SDOs) issued by either commercial or mortgage banks. SDOs are both CBD and CRR compliant (Article 129). This is a "European Covered Bond (premium)".
- Særligt Dækkede Realkreditobligationer (SDROs) issued exclusively by mortgage banks. SDROs are both CBD and CRR compliant (Article 129). This is a "European Covered Bond (premium)".
- Realkreditobligationer (ROs) issued exclusively by mortgage banks. ROs are CBD compliant). This is a "European Covered Bond".

All SDOs and SDROs issued before 8 July 2022 have also maintained their covered bonds status being both CBD and CRR (Article 129) compliant and ROs issued after 1 January 2008 and before 8 July 2022 are CBD compliant.

Danish mortgage banks operate subject to a specialist banking principle in accordance with Danish legislation, which confines the activities of issuers to the granting of mortgage loans funded by the issuance of covered bonds. The cover pool may include unsecured loans to public authorities and guarantees issued by public authorities, but this is rarely used. Mortgage banks may also carry on other business related to mortgage banking.

The specialist banking principle implies that mortgage banks are confined to granting loans that meet the requirements for cover assets imposed by legislation. Similarly, the funding sources are limited to ROs, SDOs and SDROs. This is due to the fact that Danish mortgage banks are not allowed to accept deposits, etc. as a source of funding, cf section 8 of the Financial Business Act.

The issuer (mortgage bank or commercial bank) holds the cover assets on its balance sheet as well as all rights under the cover assets. Bonds and cover assets are assigned to individual capital centers in mortgage banks and to registers in commercial banks. The individual bonds, however, are not linked to individual mortgage loans.

1 Ship financing institutions are regulated by the Act on a Ship Financial Institute (Consolidating Act no 1780 – 12 December 2018 and amended rules in 2021)

III. COVER ASSETS

Assets eligible as the basis for mortgage covered bond issuance:

SDO	SDRO	RO
> Loans secured by real property > Exposures to public authorities > Exposures to credit institutions (up to a maximum of 15% (CQS 1)/10% (CQS 2) and total exposures not exceed 15%) > Collateral in ships (not an option for mortgage banks)	> Loans secured by real property > Exposures to public authorities	> Loans secured by real property > Exposures to public authorities

To serve as cover assets, mortgages must be entered in the Danish land register, which is kept by the Danish district courts. Land and loan registration has been digital since 2009 with faster and more efficient handling of customers' loans as a result.

The mortgage loans are originated in a mortgage bank or a credit institution in the same group (use of intra-group pooled covered bond structures in CBD), or transferred to a mortgage bank according to a structure in which the mortgage bank has knowledge of and is responsible for correct valuation of the mortgaged property and verification of the debtor's creditworthiness and ability to pay (joint funding in CBD).

The difference between funding and lending may be hedged through derivatives, which are included in the cover pool assets. Counterparties in derivative contracts in the cover pool shall fulfil credit quality step 1 or 2.

In a capital centre in a mortgage bank the cover pool is dynamic as a result of the current addition and disposal of loans in connection with the granting and repayment of loans. In most capital centers assets may exclusively be transferred to or from the cover pool upon new lending and (p)repayment. On (p)repayment, the corresponding amount of issued bonds will be redeemed from the capital center. Each mortgage loan (cover asset) refers to specific ISIN codes and both cover assets and ISIN codes are assigned to specific capital centers. It is therefore not possible for the issuer to (i) change the cover pool unless in connection with new lending and (p)repayment nor (ii) transfer cover assets between different cover pools. Cover assets must be identifiable, and the FSA supervises cover asset identification.

IV. VALUATION AND LTV CRITERIA

The financial legislation contains provisions on property valuation. Valuations are based on the market value of a property.

LTV limits – an overview

Loan Type / Property category	SDO	SDRO	RO
Residential property	80% or 75%[1)]	80% or 75%[1)]	80%
Holiday property	75%[2)]	75%[2)]	75%[2)]
Agricultural property	60%[3)]	60%[3)]	70%
Commercial property	60%[3)]	60%[3)]	60%

Note: 1) 80% for loans issued with up to 30 years maturity and 10 years interest-only period and 75% for loans with an unlimited maturity and interest-only period.
2) 75% for holiday property for private use. The LTV limit is 60% for holiday property for commercial use.
3) The LTV can be raised to 70% if the bank adds additional collateral.

In connection to the issuance of SDOs and SDROs, mortgage banks and commercial banks must ensure continuous LTV compliance – i.e. not just at disbursement of the loan as is the case for ROs. Where an LTV ratio exceeds the statutory limits, the bank must add supplementary collateral to the capital center/register. Otherwise, the issues may lose their status as SDOs or SDROs.

Mortgaged property is valued (on-site inspection) as part of the processing of loan applications. When a loan is granted, the LTV thereof is assessed on a case-by-case basis. A basic principle of the valuation regulations is that valuations must be performed by a valuation officer of an issuer. Provided that a number of conditions are met, valuations may be outsourced. AVMs may also be used if approved by the Danish FSA and most Danish mortgage banks have got an approval to use own models. The detailed conditions for valuation are set out in the financial legislation.

V. ASSET – LIABILITY MANAGEMENT

The financial legislation and the Executive Order on bond issuance, balance principle and risk management require mortgage banks and commercial banks to observe a balance principle and a set of rules on risk management in connection with the issuance of RO, SDRO and SDO. The mortgage banks and commercial banks should also observe a nominal coverage requirement and that all payment obligations of covered bonds are covered by claims for payment attached to the cover assets.

The Executive Order provides limits to the scope of differences allowed on one hand the payments from borrowers and on the other hand the payments to the holders of the issued ROs, SDROs and SDOs. The limits are adjusted by loss limits to the interest rate, foreign exchange, option and liquidity risks that follow from cash flow differences in the balance sheet. The Executive Order also contains a number of other provisions limiting financial risk.

For commercial banks, the balance principle is applicable at register level. For mortgage banks, the balance principle is applicable at the level of the individual capital centers and the banks in general.

Despite the risk limits of the balance principle, Danish mortgage banks have in practice structured their mortgage lending business in such a way that they do not assume significant financial risks with respect to mortgage lending and funding. Thus, the mortgage banks have nearly eliminated interest rate risk, foreign exchange risk and prepayment risk.

Since mortgage bond issuance is the only eligible funding source for Danish mortgage banks, issuance takes place on a daily basis. The mortgage bank commonly achieves this through *tap issuance*. Each loan is closely matched to the future cash flow of one or several specific ISIN codes currently open for issuance. On any given banking day, the mortgage bank calculates the bond amounts to be tapped in the relevant ISINs corresponding to the loans disbursed that day. These bond amounts are then issued and sold to investors. These simple principles ensure that the balance principle is maintained day by day and minimises the subsequent need for active asset-liability management.

A typical mortgage ISIN is open for tap issuance for several years after opening. Issuance trades are executed alongside with other trades in a unified, highly liquid and tightly priced market. Thus, there is no strict distinction between primary and secondary markets in the Danish system.

The Danish commercial banks too, are subject to the strict ALM rules. In practice the commercial banks operate under a general asset and liability management and do not offer pass-through products.

Both mortgage banks and commercial banks are required to maintain a liquidity buffer requirement for the next 180 days. It is with the exception that the requirement does not apply to covered bonds subject to match funding and the calculation of the principal for extendable maturity structures can be based on the final maturity date.

Refinancing risk in a situation where a mortgage bank is unable to complete the refinancing of matured bonds on market terms is addressed in the legislation. The regulation applies to covered bonds where the loan term is longer than the maturity of the bond used to fund it and contains a soft bullet mechanism controlled by two triggers: a refinancing failure trigger and an interest rate trigger. The refinancing trigger automatically extends the maturity of the covered bonds by 12 months at a time in case the issuer is unable to refinance maturing covered bonds by new issuance. The mechanism is not exercisable at discretion of the issuer, but it is conditional on the specific market event of "no refinancing". The interest rate trigger, which applies solely to bond maturities of 2 years or less, comes into effect in case of a 5% point bond yield increase over the last year before ordinary maturity. This trigger may extend the bond maturity by 1 year. For the Danish commercial banks issuing covered bonds there are also rules governing extendable maturity structures.

According to the legislation, there is a requirement of minimum 2% overcollateralization (OC) for Danish mortgage banks and commercial banks issuing SDOs and SDROs.

Furthermore, according to the legislation, the capital base without any buffers must represent at least 8% of risk-exposure amount (REA). Mortgage banks must observe the capital adequacy requirement both at individual capital center level and at the level of the institution.

VI. TRANSPARENCY

A high level of transparency is an important characteristic of the Danish covered bond market. The Danish covered bond issuers publish information via many different platforms, such as prospectuses, investor reports, trading venues, standardised transparency templates and issuers' investor relations websites. Information is thus easily accessible.

As part of the ECBC Label Initiative, the Danish issuers report information in the standardised format in the Harmonised Transparency Template (HTT). In addition, the Danish market participants have gathered available information and consolidated it in an intuitive and user-friendly structure in a national transparency template (NTT).

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Specialised supervision of covered bond issuers is carried out by the Danish FSA (Denmark has not joined the single supervisory mechanism – SSM). The FSA supervises compliance with the legislative framework for carrying on mortgage banking activities and thereby the issuance of covered bonds.

The issuer monitors the cover pool continuously. Data from every single loan offer from the Danish mortgage banks and thus all property valuations for new lending purposes are reported to the FSA on a quarterly basis. The FSA performs random checks of mortgage banks' valuations by way of on-site inspections and by checks of the internal valuation reports and which other property has been used as reference to the basis for the valuation. In the Danish mortgage model where loans are originated, serviced and redeemed directly in the cover pool, there is no need for monitoring other than as provided by the FSA.

The commercial banks report on a quarterly basis to the FSA on the assets in the register. The statement of the registered assets must be verified by the external auditor of the bank.

Issuers are also required to prepare comprehensive reports on asset-liability management for the FSA on a quarterly basis. The FSA must be informed of any balance principle breaches or if the capital requirement is not observed without delay.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Capital centres of mortgage banks (regardless of whether the issuer has issued ROs, SDROs or SDOs)

The rules for resolving a mortgage bank are detailed and well considered. The main considerations are to ensure (i) that bond investors receive timely payments and (ii) that the rights of borrowers are not prejudiced materially.

Balance sheets of Danish mortgage banks are structured with a number of separate capital centres (cover pools) out of which covered bonds are issued. A capital centre consists of a group of series in which covered bonds backed by an equivalent amount of mortgage loans (match funding) are issued and a joint series reserve fund (equity). In addition, supplementary capital (senior secured debt/Section 15 bonds) may be issued out of the capital centre for overcollateralisation purposes.

If a mortgage bank is declared bankrupt, a trustee in bankruptcy is appointed. The Danish FSA may declare a mortgage bank bankrupt.

The trustee must seek the most efficient administration of the estate, having regard to the fact that the position of covered bond investors and borrowers must remain essentially as if the capital centre had still been a going concern. If a mortgage bank is declared bankrupt, no acceleration therefore takes place in respect of covered bond investors or borrowers. This is the key principle. It is only possible because the mortgage system is structured around capital centres that offer very high statu tory collateral for bonds based on ring-fenced, bankruptcy-remote capital centres and match-funded lending.

Winding-up is not fast, but orderly, with a minimum of changes for both bond investors and borrowers. No public funds are used for such winding-up, as borrowers' ongoing payments are passed through to bondholders. Holders of hybrid core capital and subordinate loan capital cannot use the bankruptcy of a mortgage bank as grounds for a claim of default. Similar rules apply to counterparties to financial instruments used to hedge risk in a capital centre.

If a mortgage lender is declared bankrupt, the assets, after deduction of estate administration costs, will be segregated to satisfy bond holders, etc., in accordance with their legal position as secured creditors. Covered bond holders have a primary secured claim against all assets in the cover pool. Counterparties to financial instruments used to hedge risk in a capital centre rank *pari passu* with covered bond holders in the relevant capital centre.

Proceeds from loans raised for the purpose of overcollateralisation (senior secured bonds/Section 15 bonds) will serve to satisfy the claims of covered bond holders in case of bankruptcy.

The EU Bank Recovery and Resolution Directive (BRRD) has been implemented in Danish regulation and came into force on 1 June 2015. The bail-in tool does not apply to covered bonds (SDO, SDRO and RO) and senior secured debt/Section 15 bonds. While exempt from bail-in, the Danish mortgage banks is subject to a debt buffer of unweighted loans. The minimum level of the buffer is 2%. For systemic mortgage banks and mortgage banks being part of a systemic financial group, a higher buffer requirement may be set. The total amount of the capital requirement and debt buffer (and MREL requirement) should always be at least 8% of total liabilities (at consolidated level). The higher level of the buffer will be phased in by 2022.

In case of resolution the debt buffer can be used by the resolution authority (in Denmark the resolution authority is Finansiel Stabilitet) to capitalise the mortgage banks when using BRRD resolution tools other than the bail-in tool. These tools can only be used according to the principle of "no-investor-worse-off". Otherwise the winding-up will be handled according to the abovementioned principle.

Commercial bank registers

A commercial bank sets up a register segregating assets, which exclusively serve as SDO cover assets.

As is the case with mortgage banks, derivative counterparties have a primary preferential right in line with the SDOs provided that the derivatives contract stipulates that the suspension of payments or bankruptcy of a commercial bank does not constitute an event of default. Bonds issued to secure assets as compensation for LTV excess or overcollateral in general (also referred to as Section 15 bonds or senior secured bonds) have a secondary preferential right to all assets of the register.

The register is kept by the commercial bank and must at all times contain all assets, guarantees received and derivatives contracts, clearly individualised. The commercial bank must submit statements of the assets to the FSA. The external auditor must perform continuous regular control of the register and at least twice a year make unannounced register audits.

Where the FSA suspends the license of a commercial bank to carry on banking business, the FSA or the bank files a bankruptcy petition, or the bank is adjudicated bankrupt following the petition of a third party, the FSA will decide whether the register is to become subject to administration by an administrator as an estate in administration. The administrator (and not the ordinary trustee) will be in charge of the assets of the register.

Any unsatisfied residual claims by SDO holders and derivative counterparties against the register may be proved against the assets available for distribution of the commercial bank as ordinary claims. Residual claims from Section 15, bonds or senior secured bonds may also be proved as ordinary claims against the assets available for distribution.

IX. RISK-WEIGHTING AND COMPLIANCE WITH EUROPEAN LEGISLATION

SDOs, SDROs and ROs fulfil the CBD. SDOs and SDROs also fulfil the requirements of Article 129 CRR. ROs issued before 1 January 2008 maintain the low risk weighting of 10% throughout the maturity of the bonds in accordance with the grandfathering option under the CRR. ROs issued after 1 January 2008 carry a risk weight of 20%. ROs, SDOs and SDROs are eligible for repo transactions and may be used as collateral for loans with the Danish central bank (Danmarks Nationalbank). Under the LCR the largest RO, SDO and SDRO series qualify as assets of the highest quality (Level 1 covered bonds).

When investing in ROs, SDOs and SDROs, the Danish investment legislation allows UCITS, to exceed the usual limits on exposures to a single issuer(cf. the Act on Investment Associations and Special-Purpose Associations as well as other Collective Investment Schemes etc.).

Issuers: Covered bonds backed by real estate collateral are primarily issued by the specialised mortgage banks: Jyske Realkredit a/s, DLR Kredit A/S, Nordea Kredit Realkreditaktieselskab, Nykredit Realkredit A/S (incl. Totalkredit A/S), Realkredit Danmark A/S. At the end of 2021 the mortgage banks' outstanding volume of covered bonds was around EUR 426 bn. Danske Bank A/S is the only commercial bank issuing covered bonds. Danske Bank has issued non-pass-through (euro-style) covered bonds of a value of around EUR 22.5 bn. Danish Ship Finance is the only Danish issuer of covered bonds backed by ship loans. The outstanding volume of covered bonds backed by ships as collateral was around EUR6.1 bn by year end 2021.

COVERED BOND LABEL : Jyske Realkredit A/S (1 pool), Danske Bank A/S (3 pools), DLR Kredit A/S (1 pool), Realkredit Danmark A/S (2 pools), Danish Ship Finance A/S (2 pools), Nordea Kredit Realkreditaktieselskab A/S (2 pools), Nykredit Realkredit A/S (2 pools).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Danish market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.12 ESTONIA

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I. FRAMEWORK

On 13 February 2019, the Estonian Parliament adopted a legislation on covered bonds in Estonia. The law entered into force on 1 March 2019. This is the first legislation that provides the possibility to issue covered bonds in Estonia. In late 2021 amendments to the law – covering (i) implementation of Directive (EU) 2019/2162 of the European Parliament and of the Council of 27 November 2019 (hereinafter Covered Bond Directive or CBD); and (ii) alignment of the covered bond regulation in three Baltic states – were adopted.

At the beginning of 2020, the first issue of covered bonds was carried out by an Estonian issuer which also constituted as a first covered bond from the Baltic region. An issue with a maturity date of 5 years in the size of EUR 500 million was carried out by Luminor Bank. The covered bonds were listed on the Irish Stock Exchange on 11 March 2020. Luminor Bank has had two additional issues of covered bonds – in February and March 2022 with the respective sizes of EUR 250 million and EUR 500 million, both with a maturity of 5 years.

In June 2020, another Estonian Bank – LHV – issued its covered bonds (with a maturity date of 5 years in the size of EUR 250 million), which were also listed on the Irish Stock Exchange. LHV has also had second issue of covered bond since – in August 2020 in the size of EUR 100 million with the maturity date of 3,5 years.

II. STRUCTURE OF THE ISSUER

A credit institution wishing to issue covered bonds must obtain additional authorisation from the Estonian Financial Supervision and Resolution Authority (hereinafter the EFSA) to issue covered bonds. During the initial application for obtaining the additional authorisation, a credit institution shall submit also information on the planned covered bond programme. If an issuer wants – after the grant of an additional authorisation - to issue covered bonds on the basis of a covered bond programme other than that provided for in the initial business plan, the credit institution must submit to the EFSA an application for approval of the new covered bonds programme.

For obtaining the additional authorisation, the credit institution must have in place the technology and other technological tools and systems, security systems, control mechanisms and systems necessary for the issuance of covered bonds and the administration of covered bond portfolios. Moreover, it must have a risk management system that enables the issuer to adequately identify, measure and manage the risks associated with the administration of the covered bond portfolio.

The pool of cover assets will be kept by the issuer itself and it will not be held by SPV. This means that the issuer has to maintain a separate cover register for both below types of covered bonds. The purpose of the cover register is to collect, systematise and store data about the cover pool required for mortgage covered bonds and mixed asset covered bonds. The register is kept in accordance with the internal rules that state the procedure for entering and deleting assets in the register. The entry of the register states information which is necessary to detect the contract or security that is the basis of the claim. Under the general principle, the issuer does not have an obligation to inform the debtor about the entry of the claim in the cover register, however such notifying becomes mandatory once the issuer estimates that it is objectively likely that the separation of a covered bond portfolio will take place.

Lastly, the issuer has to appoint a cover pool monitor, who monitors the performance of the duties of the issuer. In specific, whether the cover pool, cover register, the valuation of immovable properties encumbered with a mortgage securing credit and included in the cover pool, the issuer's risk management and reporting, and the terms and conditions of covered bonds are in compliance with the requirements of law.

III. COVER ASSETS

Primary cover assets

At least 85% of the main collateral of the relevant covered bond portfolio has to comprise of primary cover assets. The law constitutes different primary cover assets for mortgage covered bonds and mixed covered bonds.

First, the primary cover assets of mortgage covered bonds can be only the issuer's claims that arise from a credit granted to a natural person against a mortgage that is established on a residential property situated in the territory of a European Economic Area (hereinafter EAA) country.

The credit that has fallen into default after it has been entered in the cover register, can be taken into account upon calculation of the value of the cover pool in the following proportions:

1) 100 per cent of the value of the credit if it has been in default for less than 90 days;
2) 70 per cent of the value of the credit if it has been in default for at least 90 days and the ratio of the credit to the value of the property securing the mortgage credit is less than 50 per cent;
3) 40 per cent of the value of the credit if it has been in default for at least 90 days and the ratio of the credit to the value of the property securing the mortgage credit is more than 50 per cent;
4) 0 per cent of the value of the credit if it has been in delay for at least 180 days.

Second, the primary cover assets of mixed covered bonds can be only the issuer's claims that arise from the following:

1) a mortgage credit;
2) a housing construction credit – a credit granted to a natural person against a mortgaged residential building plot situated in the territory of an EEA country;
3) a commercial mortgage credit – a credit granted to a legal person against a mortgaged residential property, mortgaged residential building plot or mortgaged commercial immovable property situated in the territory of an EEA country;
4) a credit granted to, or debt securities issued by, an EEA country;
5) a credit granted to, or debt securities issued by, a regional government or local authority of an EEA country;
6) a credit granted to, or debt securities issued by, an EEA country's legal person governed by public law;
7) a credit or debt securities guaranteed by an EEA country or a regional government or local authority of an EEA county.

Substitute collateral

In addition to primary cover assets, the cover pool may consist of substitute collateral. Substitute collateral may be:

1) claims on or guaranteed by central banks within the European System of Central Banks, and central governments, public sector entities, regional governments or local authorities of the Member States of the EU;
2) claims on or guaranteed by third-country central governments and central banks, multilateral development banks and international organisations that qualify for the credit quality step 1[1];

1 A CQS is a simplified and standardized scale of credit quality, mapped to the credit ratings of the largest credit rating agencies. Steps are defined in the Commission Implementing Regulation (EU) 2016/1800 of 11 October 2016 laying down implementing technical standards with regard to the allocation of credit assessments of external credit assessment institutions to an objective scale of credit quality steps in accordance with Directive 2009/138/EC of the European Parliament and of the Council. Moreover, the assessment has to be in accordance with Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.

3) claims on or guaranteed by third-country public sector entities, regional governments and local authorities, for which a risk weight has been assigned the same way as for claims on credit institutions and investment firms or central governments and central banks and which qualify for the credit quality step 1 according to the risk weight so assigned;

4) claims specified in clauses 2) and 3), which qualify as a minimum for the credit quality step 2, provided that they do not exceed 20% of the nominal value of the outstanding covered bonds in the covered bond portfolio that they cover;

5) claims on credit institutions and investment firms, which qualify for the credit quality step 1, provided that they do not exceed 15% of the nominal value of the outstanding covered bonds in the covered bond portfolio that they cover;

6) claims on credit institutions and investment firms, which qualify for credit quality step 2, provided that they do not exceed 10% of the nominal value of the outstanding covered bonds in the covered bond portfolio that they cover;

7) claims on credit institutions and investment firms in the European Union with a term to maturity not exceeding 100 days, which qualify as a minimum for credit quality step, provided that they do not exceed 8% of the nominal value of the outstanding covered bonds in the covered bond portfolio that they cover and provided that an issuer has obtained corresponding authorisation from the EFSA for inclusion such substitute collateral in a cover pool;

8) net claims arising from derivative instruments that meet the conditions provided by law, which cannot be treated as the claims specified in clauses 5) or 6), provided that they do not exceed 15% of the nominal value of the outstanding covered bonds in the covered bond portfolio that they cover;

9) claims specified in clause 7 above, which qualify as a minimum for credit quality step 3, provided that they do not exceed 8% of the nominal value of the outstanding covered bonds in the covered bond portfolio that they cover and provided that an issuer has obtained corresponding authorisation from the EFSA for inclusion such substitute collateral in a cover pool.

IV. VALUATION AND LTV CRITERIA

Valuation and revaluation

The law states that the valuator of the property standing as security for mortgage credit has to comply with the following requirements:

> has sufficient knowledge, experience and skills;

> be sufficiently independent from the process of deciding on the granting of credit as to provide an objective and impartial assessment of the value of the immovable property.

The requirements for the appraisal of immovable property standing as security are the following:

> the immovable will be valuated according to the good practice of property valuation that is based on uniform and well-established market practice;

> it is in line with the good practice of property valuation;

> the valuator detects and collects all the data necessary for the valuation and analyses all factors affecting the value of the property that is being evaluated;

> the valuation is based on up-to-date and reliable data and based on an in-depth review.

The value of a property standing as security for a mortgage credit entered in the cover register must be regularly reviewed at least once a year and revaluated, if necessary. The purpose of the revaluation of the property is not to obligate the issuer to change the value of the property each time, but to review the property in the portfolio in general and to update it, based on the information available to the issuer, in case there has been a change in the value of the assets.

The value of a property standing as security for a mortgage credit, entered in the cover register, must extraordinarily be reviewed and revaluated, in the event of a significant change in market conditions, and in the event that the information available to the issuer indicates that a significant decline has occurred or is occurring on the national or local real estate market, including if it concerns only one specific property type, residential building type or other narrower category of properties.

Loan-to-Value

The claims of an issuer arising from a mortgage credit may be used as a cover asset of mortgage covered bonds in an amount of up to 70% of the value of the property securing the mortgage credit. Nevertheless, all the issuer's claims arising from the mortgage credit entered in the cover register are included in the cover pool in their entirety.

A mortgage accounting for at least 110% of the issued credit amount must be established on the property securing a mortgage credit to be entered in the cover register. The sum of the mortgage may exceed the value of the property securing the credit.

V. ASSET – LIABILITY MANAGEMENT

An issuer must, at least once every 3 months, perform a stress test on the covered bond portfolio to assess the risks set out in the stress testing methodology according to the internal rules. The managers of the issuer are responsible for ensuring the performance of stress tests. More detailed requirements for the procedure, methodology and purpose of stress testing of covered bond portfolios may be established by regulation by the minister responsible for the area, however which has not yet been done as of the date of this article.

If the value of the cover pool, as calculated during the stress test, no longer meets the following requirements, the cover assets in the cover register must be increased by the maximum deficiency determined as a result of the stress test. An issuer has a right to hedge the risks deriving from the covered bonds by way of using derivative instruments. The precise conditions for using derivative instruments for hedging purposes follow the requirements of the CBD as well as harmonize such requirements with other Baltic states.

VI. TRANSPARENCY

Covered bonds issued by a credit institution registered in Estonia, which has received additional authorisation from the EFSA, are registered in the Estonian register of securities. The EFSA publishes a decision to grant, amend or revoke an additional authorisation on its website no later than on the business day following the day of making such decision.

In addition to the disclosure obligation arising from other legislation, an issuer must disclose information about covered bond portfolios once a quarter. Information about the first 3 quarters of a year must be disclosed within 20 days of the end of the respective quarter. Information about the fourth quarter must be disclosed within 2 months of the end of the quarter. The disclosed information must be available on the issuer's website about at least the last 5 years.

The following information must be disclosed based on the types of covered bond portfolios:

1) the nominal value and the present value of outstanding covered bonds and of the cover pool;
2) the maturity structure of the covered bonds and the cover pool;
3) the percentage of fixed-interest cover assets in the cover pool and the percentage of fixed-interest covered bonds in the liabilities of the covered bond portfolio;

4) the graduated breakdown of the interest rates on fixed-interest and non-fixed-interest cover assets;
5) the percentage of cover assets denominated in a foreign currency in the cover pool and the percentage of covered bonds denominated in a foreign currency in the liabilities of the covered bond portfolio;
6) the geographical distribution of the value of cover assets, at least to the accuracy of the country, based on the location of the property standing as security for a mortgage credit or commercial mortgage credit, and the location of the debtor or issuer in the case of other cover assets;
7) the distribution of substitute collaterals, in terms of their value, between the types of substitute collateral;
8) the level of the liquidity buffer;
9) the percentage of the amount of substitute collaterals, which have been in default for over 90 days or which the issuer estimates to be doubtful, in the cover pool;
10) the methodology for calculating the ratio between credit and the value of the property standing as security for the credit.

In addition, the percentage of the amount of mortgage credit in the cover pool, which have been in default for over 90 days or which the issuer estimates to be doubtful, must be disclosed in relation to the primary cover assets of mortgage covered bonds.

The following information must be disclosed on the primary cover assets of mixed asset covered bonds:

1) the distribution of debt obligations, in terms of their value, between the types of primary cover assets of mixed asset covered bonds;
2) the percentage of the amount of debt obligations, which have been in default for over 90 days or which the issuer estimates to be doubtful, in the cover pool.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The issuer's general meeting has the authority to appoint a monitor. A monitor is appointed for a term that must not be less than 1 year. The monitor inspects whether the issuer is fulfilling its obligations. The monitor is free to choose when the inspections will be carried out. A trustworthy sworn auditor with an impeccable business reputation and with sufficient knowledge and experience may be appointed as a monitor. An audit firm that provides or has provided within the year preceding the appointment as the cover pool monitor the audit service to the issuer cannot be appointed as the monitor.

The duties of a monitor are to verify:

1) the compliance of stress testing of a covered bond portfolio and the changes introduced to the covered bond portfolio as a result of stress testing with requirements;
2) the existence of a sufficient cover pool and its compliance with requirements;
3) the compliance of the maintenance of the cover register with requirements;
4) the compliance of the valuation of immovable properties encumbered with a mortgage securing credit and included in the cover pool with requirements;
5) the compliance of the issuer's risk management and reporting with requirements;
6) the compliance of the terms and conditions of covered bonds with requirements;
7) the existence of an updated plan for separation of the covered bond portfolio and its compliance with the requirements of Estonian legislation.

The monitor notifies the issuer of any deficiencies detected during verification in a format that can be reproduced in writing and sets a reasonable deadline for the elimination of the deficiencies. In case the deficiencies are not fully eliminated by that deadline, the monitor must notify the EFSA.

VIII. ASSIGNMENT OF CLAIMS, SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Estonian legislation foresees regulation for assignment of claims to a credit institution of an EEA country or to a special purpose entity located in an EEA country that has been established for the formation of the cover pool of covered bonds in relation of formation of the cover pool. The regulation also establishes rules for segregation of cover assets which have been assigned as well as protection of such assets against recovery in case of insolvency proceedings of assignor of such claims as well as mitigates the risk of set-off related to the claims related to the cover pool.

In case the issuer is declared bankrupt, a covered bond portfolio shall be considered to be separated from the other assets of the issuer. A cover pool shall not be part of the issuer's bankruptcy estate and a moratorium shall not extend to a covered bond portfolio.

The separation of a covered bond does not affect the rights and obligations arising from covered bonds and the payment obligations attached to covered bonds are not subject to automatic acceleration upon the separation of the covered bond portfolio.

After the separation of a covered bond portfolio, an independent pool of designated assets is formed in which the cover pool and the proceeds received therefrom can only be used to satisfy the claims of the holders of the respective type of covered bonds and of the counterparty to the derivative instrument entered in the corresponding cover register and to cover the expenses related to the management of the covered bond portfolio.

If an issuer is declared bankrupt or the compulsory dissolution of an issuer is decided, a court appoints, on the proposal of the EFSA, a cover pool administrator for covered bond portfolios in the ruling on the bankruptcy or the ruling on the compulsory dissolution. The appointment is necessary to secure the continuance of the operation of the cover bond portfolio, detect the solvency of the portfolio and secure the rights of the owners of cover bonds and derivative counterparties.

Upon the appointment of a cover pool administrator, the right to manage and dispose of covered bond portfolios is transferred to the cover pool administrator. The cover pool administrator shall manage covered bond portfolios with the necessary diligence arising from their nature, and in a manner ensuring that the liabilities arising from covered bonds and from the derivative instruments entered in the cover register are met in the best possible way. To this end, the cover pool administrator has the right to transfer and encumber the cover pool, enter into derivative instruments on the account of the cover pool, and perform other necessary operation.

The cover pool administrator has the right to use the cover pool and the proceeds to be received therefrom to cover the expenses necessary for the management of a covered bond portfolio.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The Estonian legislation is in compliance with the CBD and other relevant legislation and documents related to the CBD.

Prior to issuing covered bonds, an issuer must adapt its risk management system to enable it to adequately identify, measure and manage the risks associated with the administration of the covered bond portfolio.

Issuers: Luminor Bank AS, AS LHV Pank

COVERED BOND LABEL : Luminor Bank AS (1 pool), AS LHV Pank.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.
In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database). For further national information on the Estonian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.13 FINLAND

By Timo Ruotsalainen, Aktia Bank plc

I. FRAMEWORK

In Finland, the legal basis for covered bond issuance is the Act on Mortgage Credit Bank Operations (688/2010). The current legal framework will be replaced by new framework in 2022 (Act 151/2022). The new law will be entered into force on 8th July 2022. The new legislative framework will be adopting the necessary changes of the harmonized EU legal framework (EU directive 2019/2162 and EU Regulation 2019/2160).

II. STRUCTURE OF THE ISSUER

The issuer of Finnish covered bonds can be a universal bank or a specialist mortgage bank. Generally, entities that can issue covered bonds are credit institutions authorised to engage in mortgage credit bank operations. Starting from 2022 onwards the application for the authorization process will be based on the EU harmonized legal framework. Currently the issuer of Finnish Covered Bonds can be a specialised mortgage bank, but also deposit banks or credit entities are entitled to apply for a license to engage in mortgage credit bank operations (i.e., issue covered bonds).

There are currently nine potential issuers of Finnish covered bonds and one more to start during the year 2022.

The Finnish Covered Bond Law stipulates certain requirements to receive a covered bond issuance license. The covered bond issuer should provide a business plan, show stability, expertise in mortgage credit operations, risk management and practices concerning valuation of collateral. Interestingly, the requirements to receive a Finnish Covered Bond License seem very similar to the requirements to receive a German Pfandbrief License.

The issuer holds the cover assets on the balance sheet. A subsequent transfer of the cover assets to another legal entity is not taking place. A direct legal link between single cover asset and the covered bonds issued does not exist. All obligations from Finnish Covered Bonds are direct and unconditional obligations of the issuing bank as a whole (dual recourse). In the case of insolvency, the cover pool is segregated by law from the general insolvency estate and is reserved only for the claims of the holders of Finnish Covered Bonds.

Issuers may have several active cover pools.

III. COVER ASSETS

Finnish covered bonds have a cover pool register that includes all cover pool assets, covered bonds and derivatives. Eligible assets for Finnish covered bonds are residential mortgage loans (including shares in Finnish housing companies), commercial mortgage loans, public sector loans in accordance with Article 129(1) CRR and substitution assets. At least 90% of the cover pool loans must consist of residential mortgage loan or public sector loans. In the new law (151/2022) the amount of substitution assets is limited to 20% of the cover pool. Assets securing the liquidity requirement (180 days outflow coverage) are excluded of this restriction. The geographical scope of cover assets is restricted to the European Economic Area.

Enforcement of non-Finnish cover pool assets would usually be determined by the laws of the jurisdiction in which the assets are located. Due to European Union law, inside the EU, enforcement is safeguarded in all Member States anyway. However, majority of Finnish issuers have only Finnish assets in the covered bond pools. Going forward the assets eligible as cover pool assets need to fulfil the EU Regulation 575/2013 article 129 requirements.

Specialised mortgage credit bank can grant an intermediate credit to a deposit bank or a credit entity. This intermediate credit must be covered with eligible cover assets as stated above. These assets must also be recorded into the cover register.

Up to 20% of the mortgage cover pool is allowed to consist of substitute cover assets; bonds and other debt obligations issued by the State, a municipality or another public-sector organisation or another credit institution rather than one belonging to the same consolidation group as the issuer. A guarantee as for own debt granted by a public sector organisation or credit institution referred above; a credit insurance given by an insurance company other than one belonging to the same group, referred to in the Act on Supervision of Finance and Insurance Groups; cash assets of the issuer deposited in the Bank of Finland or a deposit bank with the restriction that if the issuer is a deposit bank the cash deposit may not be in a deposit bank belonging to the same consolidation group as the issuer. ABS or MBS tranches are not eligible for the cover pool.

Derivatives are eligible for the cover pools only if they are used for hedging purposes. The nature of the cover pool is dynamic. Currency risk is perfectly matched, as the law requires cover assets to be in the same currency as the covered bonds.

IV. VALUATION AND LTV CRITERIA

The property valuation within the legal framework for covered bonds in Finland is based on market values, valuations are based on "current value", market value determined in accordance with FFSA regulations. Based on the updated regulation, the issuer needs to monitor the valuation of the property also based on statistical methods (indexed value) quarterly and set limits for the acceptable changes of the values. Should the value exceed or drop below the limits the property valuation needs to be updated accordingly.

There are different LTV levels for residential and commercial mortgage loans: 70% of the value of the residential property and 60% of the value of the commercial property accepted. This LTV is a relative limit, i.e. when a loan exceeds the 60%/70% limit, the part of the loan up to 60%/70% LTV remains eligible to the cover pool. A loan placed as collateral for a covered bond may not exceed the current value of the property standing as collateral.

V. ASSET – LIABILITY MANAGEMENT

There are legal standards for Asset-Liability Matching in the Finnish Covered Bond System. For instance, the aggregate interest received on the cover assets in any 12-month period must exceed the interest paid on the outstanding covered bonds. This regulation takes derivatives for hedging purposes into account.

The total amount of collateral of covered bonds shall continuously exceed the remaining combined capital of the covered bonds.

The net present value of the total amount of collateral of covered bonds shall continuously exceed by at least 2% the total net present value of the payment liabilities resulting from the covered bonds. The net present value test helps mitigate interest-rate, currency and liquidity risk. The regulative minimum OC level will be redescribed on the new legal framework.

As mentioned above, interest receivable on cover assets must be sufficient to cover interest payable on covered bonds on a twelve-month rolling basis. Moreover, the test needs to be stressed by +/- 1%. In case of a breach of one of these rules mentioned, the issuer might face sanctions from the FSA. Ultimately, the issuer might face the loss if its licence. In addition to the 2% net present value legal minimum, further overcollateralisation may be committed by contract. Non-performing loans (defined as 90 days past due) are excluded from cover tests. Assets that are ineligible for Finnish covered bonds (e.g. non-performing loans) are excluded from the cover tests but can be retained in the cover pool and lead to additional overcollateralisation.

VI. TRANSPARENCY

The annual and interim reports of the issuer indicate, in addition to that provided in the act on Credit Institutions, the basis of the valuation of the collateral and the amount of residential mortgage loans and possible intermediary loans and public sector loans issuer has granted, as well as the amount of covered bonds issued.

While there are no statutory transparency rules in current legislation, Finnish covered bond issuers have adopted the ECBC Label initiative for Covered Bonds and publish Finnish National Transparency Template on their websites: https://www.coveredbondlabel.com/issuers/national-information-detail/9/.

The ECBC Label Transparency Guidelines included in the Covered Bond Label Convention for 2014 are fully aligned and compliant with Art. 129 (7) CRR.

On top of the regulatory requirements all issuers provide additional information about the cover pools, ratings and other relevant topics on their websites. Please find the information about the website below (section X).

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The issuer carries out the monitoring of the cover pool. The issuer reports to the FSA on a monthly basis. With regard to UCITS 52(4), this supervision of a specialised bank as issuer of the covered bond is compliant to the "special supervision". The FSA is responsible for overall supervision, covered bond licensing, issuing regulations and compliance with the law.

The FSA has the legal power to take appropriate measures. It is allowed to conduct inspections at the bank in question or to require documents. Also, the FSA could issue a public warning or admonition. Ultimately, it is up to the FSA to revoke the banking license of the bank in question.

With regard to UCITS 52(4), this supervision of a specialised bank as issuer of the covered bond is compliant to the "special supervision".

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

A cover register allows identifying the cover assets. The legal effect of a registration of assets into the cover register is to create the priority claim of covered bond holders to these cover assets in case of an insolvency of the issuer. The cover register is managed by the corresponding bank, which in turn is supervised by the FSA.

The cover register contains information about the principle amount of covered bonds issued, the mortgages and substitute assets covering these bonds as well as derivative transactions hedging these bonds or funds placed as their collateral. The Finnish Covered Bond Law specifically excludes set-off against cover pool assets. The law also specifically excludes claw-back risk.

Asset segregation

The cover pool is a part of the general estate of the bank as long as the issuer is solvent. If the insolvency proceedings are opened, by operation of law, the assets recorded in the cover registers are excluded from the general insolvency's estate. When the insolvency proceedings are opened, the FSA appoints a special cover pool administrator. Within the insolvency procedure, the derivative counterparties rank pari passu to covered bond holders. The cover assets do form a separate legal estate, which is ring-fenced by law from other assets of the issuer.

Impact of insolvency proceedings on covered bonds and derivatives

Covered bonds do not automatically accelerate when the issuing institution becomes insolvent. The legal consequences for the derivatives in case of an insolvency of the issuing bank depend on the relevant contracts. The cover pool administrator can only accelerate the covered bonds if the cover tests can no longer be fulfilled. This would trigger the sale of the cover pool assets.

The cover pool supervisor will supervise cover pool cash flows and payments to covered bondholders. The general administrator also has powers to act in the interests of the covered bondholders under the direction of the cover pool supervisor. This includes the ability to assign the liability for a covered bond as well as the related cover pool assets to another licensed covered bond issuer (with the permission of the FSA).

Preferential treatment of covered bond holders

Covered bond holders enjoy a preferential treatment as the law stipulates the separation of the cover assets on the one hand and the insolvency's estate on the other.

Covered bond holders are allowed claims on both on the issuer and cover pool assets (dual recourse) meaning that creditors also participate in the insolvency proceedings in respect of the remaining assets of the bank.

A moratorium on the insolvency's estate cannot delay the cash flows from the cover assets and, therefore, endanger the timely payment of covered bond holders.

Access to liquidity in case of insolvency

With the appointment of the cover pool administrator, this person acts on behalf of the covered bond holders. The pool administrator has access to the cover assets. Cover assets may only be disposed with the consent of the FSA. Additionally, the pool administrator has also the first access on cash flows generated by the cover assets. The law foresees a possibility for the pool administrator together with the bankruptcy trustee to take up a loan on behalf of the cover pool to create more liquidity.

Up to 20% of the cover pool may consist of liquid substitute cover assets. Substitute assets are deposits, bonds or guarantees of public sector entities or credit institutions and certain credit insurance. With the consent of the FSA, this limit may even be higher. As all cover assets entered into the cover register are ring-fenced in case of an insolvency of the issuer, this results also in the insolvency remoteness of voluntary overcollateralisation.

Some Finnish covered bonds mitigate liquidity risk via contractual twelve-month maturity extensions ("Soft Bullet"). The extension provides additional time for principal amounts to be refinanced. Combined with the interest coverage test, maturity extensions improve the chance that principal and interest payments can be met without refinancing the covered bonds for the first twelve months after issuer default.

The 2022 updated legislation discusses in details about the procedures related to the possible insolvency situation and about the liquidity buffer requirement.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Finnish Covered Bonds comply with the requirements of Art. 52(4) UCITS Directive. The legislation when taken to- gether with the practices processes and procedures across the industry should fall within the criteria of Article 129 of the Capital Requirements Regulation (CRR)[1]. Therefore, these bonds are 10% risk weighted in Finland. Following the common practice in Europe, they accordingly enjoy a 10% risk weighting in most European countries and will fulfill the requirement to be considered European Covered Bonds (Premium) quality.

Finnish Covered Bonds are also eligible in repo transaction with national central bank, i.e. within the Euro-zone.

As far as the domestic issuers are aware, there are no further specific investment regulations regarding Finnish Covered Bonds.

European Commission has approved and published the legislative package on Covered Bonds (Directive (EU) 2019/2162 and Regulation (EU) 2019/2160). The Directive dated 27 November 2019 has entered into force and the national transposition period will last until 8 July 2021. National measures shall be applied starting at the latest from 8 July 2022. In Finland the new and updated Covered Bond legislation is defined as "Act 151/2022" ("Act of Mortgage Banks and Covered Bonds").

With regards to the Regulation, it will apply from 8 July 2022 (Regulation Art 2), in parallel with the deadline for the national application of the Directive.

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): https://hypo.org/ecbc/covered-bonds/.

The current Finnish Covered Bond legislation includes already most of the topics described in the EU Harmonization package (Article and Directive). The new legislation content is more detailed mirroring the requirements of the above-mentioned Directive and Regulation. The amendments include:

> The process of applying to operate as Mortgage Bank and Covered Bond issuer is further clarified. The regulative authority handling the applications is FIN-FSA.
> Specification that the eligible collateral in the cover pool needs to fulfill CRR article 129 requirements. (EU Covered Bond (premium) -class requirement.)
> The received collateral related to cover pool derivatives and possible receivables from insurance coverage of the cover assets are included in the cover pool as eligible collateral.
> The updated levels of regulative overcollateralization 2-5% (2%) and LTV cap 80%. (70%)
> Introduction of liquidity buffer covering 180 days net outflow of the Cover Pool cashflows (The Article 16). Soft Bullet structure of the issued bond will be recognized as significant part of the management tools.
> Determination of the terms triggering the Soft Bullet option. Authority approval is added.
> Public transparency (website information) of the Mortgage bank operation is added as regulative requirement whereas it has currently been voluntary or regulative recommendation.
> The status of cover pool in the potential Bail-in or bankruptcy situation has been clarified but changes to the current legislation are limited.

X. REGULATIVE LIMITS IN MORTGAGE LENDING

Financial service providers have a statutory obligation to identify and know their customers.

The loan cap limiting the maximum LTV level is currently 85%. For a first home purchase the cap is at 95%.

Borrower's ability to pay the loan and handle the regular living costs is stress tested with 6% interest rate.

Issuers: Aktia Bank Plc, Danske Bank, OP Mortgage Bank, Nordea Mortgage Bank, Ålandsbanken AB, The Mortgage Society of Finland, SP-Mortgage Bank Plc, Oma Savings Bank, S-Bank Plc, Bonum Bank Plc (2022)

Covered Bond Label: OP Mortgage Bank (1 pool), Danske Mortgage Bank Plc (1 pool), Nordea Mortgage Bank Plc (1 pool), Sp Mortgage Bank Plc (1 pool).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Finnish market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.14 FRANCE

By Cristina Costa, Barclays ; Jennifer Levy, Natixis ; Marc Nocart, Caisse de Refinancement de l'Habitat and Gregory Rousseau, Crédit Foncier

Three main covered bond issuing structures exist in France today:

> *Sociétés de Crédit Foncier (SCF);*

> *Sociétés de Financement de l'Habitat (SFH);*

> *Caisse de Refinancement de l'Habitat (CRH).*

While several countries allow ordinary credit institutions to issue covered bonds subject to the segregation of the cover pool in their balance sheet, France requires the set-up of an ad hoc company which is a duly licensed specialised credit institution (licensed by the *Autorité de Contrôle Prudentiel et de Résolution (ACPR)*, the French Banking Authority). The ad-hoc companies are known as société de financement de l'habitat (SFH) and *société de crédit foncier (SCF)*; these are totally distinct from the other entities of the group to which they belong and are exclusively dedicated to the issuance of covered bonds named respectively *obligations de financement de l'habitat (OHs)* and obligations foncières (OFs) and the management of the assets backing those issues (the "cover pool").

Caisse de Refinancement de l'Habitat (CRH) is the sole entity in its category. It is also a duly licensed specialised credit institution which acts independently and is distinct from the banking groups which are being financed.

Regulation of *Société de Crédit Foncier and Sociétés de Financement de l'Habitat* was substantially strengthened in 2014 by Decree n° 2014-526 dated 23 May 2014 and Arrêté dated 26 May 2014. Law n° 2016-1691 dated 9 December 2016 relating to "transparency, fight against corruption and modernisation of economy" (known as the "Sapin II Law") has amended the legal eligibility criteria of SCF's assets to allow SCF to grant secured loans benefiting from a financial guarantee constituted of real estate's loans receivables as it is already the case for the SFH. It constitutes a new step towards the legal convergence of the various French regimes.

The French covered bond legislation has been amended to be in line with the EU Covered Bond Directive. France's previous covered bond law was already in line with most of the minimum standards prescribed by the new EU rules, so did not require major changes to comply with EU requirements. Ordonnance n° 2021-858 of 30 June 2021 on the transposition of the EU CB Directive 2019/2162 was published on 1 July 2021 in the Journal Officiel n 0151 (see link). The ordonnance proposes the adoption of a number of legal measures necessary for the transposition of EU CB Directive into French law. The legal decree n° 2021-898 on the transposition was published on 7 July 2021 in the Journal Officiel n 0156 (see link). In addition, ACPR instructions were published on 9 March 2022 (see link). The new French law takes effect on 8 July 2022.

I. FRAMEWORK

SFH and SCF

The *SCF/SFH* are governed by Articles L.513-2 et seq. and R.515-2 et seq. of the French Monetary and Financial Code (the "Code"). This stringent legal framework is specifically designed to protect the holders of the *OFs and OHs*. As a credit institution, the *SCF/SFH* are also governed by French general banking regulations.

In accordance with the EU Covered Bond Directive, the segregation of the cover assets may be achieved via a true sale mechanism (SCF) or parallel mechanisms (SCF/SFH) described in the EU Collateral Directive 2002/47/EC.

The SCF/SFH structure can indeed make use of the implementation of the EU Collateral Directive, as amended, under French law (implemented into the Code under articles L. 211-36 and seq.), which allows for a segregation through either a remittance (*remise*), a pledge (*nantissement*) or the transfer by way of security of the full title (*cession en pleine propriété à titre de garantie*) of the home loans' receivables without an actual transfer (true sale) of these receivables to the issuer. Pursuant to article L.211-38 of the Code, the transfer by pledge or by way of security shall be enforceable even when the relevant collateral provider is subject to an insolvency proceeding.

The sponsor bank remits, pledges or transfers collateral to a dedicated subsidiary, which is a regulated French specialised credit institution with limited purpose licensed as a SFH/SCF (e.g. issuing covered bonds for the purpose of providing financing to the sponsor bank). The covered bond proceeds are used to fund advances to the respective sponsor bank(s). The covered bonds are secured by the legal privilege over the assets of the issuer (advances to the sponsor bank(s)), which are in turn secured by a pledge over cover assets (i.e. residential home loans for SCF/SFH or public and commercial assets for SCF), which remain on the sponsor bank's balance sheet (and/or on the balance sheets of the respective subsidiaries, affiliates or group member banks). Upon a borrower enforcement notice (for example in case of default of the sponsor bank), the respective cover assets, including underlying securities, will be transferred without any formalities to the covered bond issuer.

CRH

The Caisse de Refinancement de l'Habitat ("CRH") (previously Caisse de Refinancement Hypothécaire) is a specialised credit institution whose sole function is to fund French domestic residential mortgage to individuals granted through the forces of the market by its shareholders (currently French banks, representing c. 80% of the French Residential Real Estate market).

CRH was created in 1985 by French Government as a central agency, in order to develop the housing market in France and comfort long term liquidity for banks.

CRH is the sole agency-type structure currently existing in France, and one of the earliest French covered bond issuer, which explains it is operating under its dedicated legal framework, although it is now very close to the SCF regime, thanks to the harmonisation effect of the CB Directive.

CRH is governed by Article 13 of Law 85-695 of 11 July 1985 as amended and supplemented by the Ordonnance 2021-858 of 30 June 2021, and received approval to issue covered bonds by letter of 17 September 1985 from the Minister for the Economy, Finance and Budget.

CRH secured loans to banks take the form of mortgage promissory notes (billets à ordre) issued by the borrowing banks and held by CRH, secured by a pledge of eligible housing loans to individuals. They are governed by Articles L. 313-42 to L. 313-49 of the French Monetary and Financial Code which grant CRH, inter alia, a very strong privilege upon the covered pool.

The sponsor banks – also shareholders – pledge collateral to CRH, which is a regulated French specialised credit institution with limited purpose (e.g. issuing covered bonds for the purpose of providing financing to its shareholders). The covered bond proceeds are used to fund loans to the respective sponsor banks.

The covered bonds are secured by the legal privilege over CRH loans to the banks, which are in turn secured by a pledge over cover assets (i.e. residential home loans), which remain on each borrowing bank's balance sheet (and/or on the balance sheets of the respective subsidiaries, affiliates or group member banks).

Upon a default of the sponsor bank, the respective cover assets, including underlying securities, will be transferred without any formalities to CRH.

II. STRUCTURE OF THE ISSUER

SCF/SFH

The *SCF/SFH* is a credit institution licensed by the *Autorité de Contrôle Prudentiel et de Résolution (ACPR)*, the French Banking Authority, with a single purpose: to grant or acquire eligible cover assets, as defined by Law, and to finance them by issuing respectively *OFs and OHs*, which benefit from a special legal privilege (the "Privilege"). It may also issue or contract other debts benefiting or not from the Privilege. The *SCF/SFH* oper ates under the close control of the ACPR, which requires it to comply with strict management rules in order to ensure the company's financial security.

CRH

Caisse de Refinancement de l'Habitat, a French corporation (*société anonyme*), is a specialised credit institution licensed by virtue of the decision taken on 16 September 1985 by the French Credit Institutions Committee (*Comité des Établissements de Crédit*), with limited purpose as per its Agreement by the Minister of Economy, Finance and Budget.

CRH is therefore governed by the provisions of Articles L. 210-1 to L. 228-4 of the French commercial Code and Articles L. 511-1 et seq. of the French Monetary and Financial Code.

Its equity belongs to French banks, which as of 30 December 2021 was as follows:

> Crédit Agricole SA – Crédit Lyonnais 32.53%

> Crédit Mutuel – CIC 33.08%

> Société Générale – CDN 15.69%

> BPCE 11.14%

> BNP Paribas 7.56%

Every borrower is committed to become a shareholder of CRH, whose equity stake in CRH is proportional to its weight in CRH's weighted loans amount.

Furthermore:

> every borrower is committed to supply back up lines to CRH

> CRH benefits from cross commitments of shareholders to supply cash advances and capital contributions.

CRH is not borrowing for itself but for the account of its shareholders; nevertheless, as any fully independent credit institution, it can decline funding a shareholder.

Each covered bond proceeds are used to fund loans to the banks, perfected through mortgage promissory notes (billets à ordre), whose terms and conditions (interest rate, maturity, currency) are identical to the related covered bond issue. CRH is therefore a complete pass-through and a non-for-profit institution.

The covered bonds are secured by the legal privilege over CRH loans to the banks, which are in turn secured by a pledge over cover assets (i.e. residential home loans), which remain on each borrowing bank's balance sheet

Upon a default of the borrowing bank, the respective cover assets of the borrower, including underlying securities, will be transferred without any formalities to CRH, notwithstanding any provisions to the contrary.

III. COVER ASSETS

There are some differences between the SCF, SFH and CRH cover assets. SCF may refinance residential home loans, "public exposures" and commercial real estate loans, whereas SFH and CRH are dedicated to residential home loans. The new legislation removes the 35% balance sheet outstanding limit on guaranteed home loans from the SCF and the CRH frameworks, but also specifies that the guarantor must be rated at least 'A-' (previously loans with a guarantor in the 'BBB" category were eligible). In this way, the SCF, SFH and CRH regimes are further aligned.

SCF/SFH

The eligible assets of a SFH and SCF comprise, inter-alia:

> Secured loans which, in accordance with Article L.513-3 of the Code include loans which are secured by a first-ranking mortgage over an eligible real estate, or by other real estate security interests that are equivalent to a first-ranking mortgage, or loans that are guaranteed by a credit institution, financing company (*société de financement*) or an insurance company with a shareholder's equity of at least EUR 12 million and which does not belong to the same group as the relevant *SCF* according to Article L. 233-16 of the French Commercial Code. The property must be located in France or in any other Member State of the EU, EE or in a State benefiting from the highest level of credit assessment given by an external rating agency recognized by the ACPR;

> Mortgage promissory notes (billets à ordre) issued by credit institutions guaranteed by the pledge (nantissement) of receivables pursuant to and in accordance with the provisions of Articles L.313-42 to L.313-49 of the Code, compliant with the eligibility criteria set out in Article L.513-3 of the Code;

> Grant to any credit institution loans guaranteed by the remittance (*remise*), the transfer (*cession*) or the pledge (*nantissement*) of receivables pursuant to and in accordance with the provisions of Articles L.211-36 to L.211-40 or Articles L.313-23 to L.313-35 of the Code, regardless of the nature of such receivables, professional or otherwise, provided that they satisfy the eligibility criteria set out in Article L.513-3 of the Code;

> Loans guaranteed by the *Fonds de Garantie à l'Accession Sociale à la Propriété* (Guarantee Fund for Social Access to Home Ownership);

> ***Only SCFs:*** exposures to public entities which, in accordance with Article L.513-4 of the Code include,

> inter alia, exposures to public entities located within the EEA, in a member State of the EU or if not located in EU / EEA, such public entities must comply with specific limits and level of credit assessment given by an external rating agency recognized by the ACPR (minimum credit quality step 2);

> Substitution assets, under certain liquidity and maturity conditions and provided that their aggregate value is up to a maximum amount of 15% of the outstanding covered bonds. The new law introduces sub-limits – in line with the amended limits on corporate exposures in CRR Art 129 – of:

- Maximum 15% for credit quality step 1 exposures;
- Maximum 10% for credit quality step 2 exposures;
- Maximum 8% for credit quality step 3.

> Within the limit of the liquidity buffer, in addition to substitution assets, debt securities (titres de créances) issued or guaranteed by a central administration of a Member state of the European Union and cash invested on accounts opened within the books of a central bank of a Member State of the European Union which comply with the criteria listed in 1(a) of Article 416 of the Capital Requirements Regulation n°575/2013 dated 26 June 2013.

CRH

The eligible assets of CRH comprise, inter-alia:

> Secured loans which, in accordance with Article L.313-42 and seq. of the Code include loans which are secured by a first-ranking mortgage over an eligible real estate, or by other real estate security interests that are equivalent to a first-ranking mortgage, or loans that are guaranteed by a credit institution, financing company (société de financement) or an insurance company with a shareholder's equity of at

least EUR 12 million and which does not belong to the same group as CRH according to Article L. 233- 16 of the French Commercial Code.

> Grant to any credit institution mortgage promissory notes (billets à ordre) guaranteed by the pledge (nantissement) of receivables pursuant to and in accordance with the provisions of Articles L.313-42 to L.313-49 of the Code, compliant with the eligibility criteria set out in Article L.513-3 of the Code;

> Loans guaranteed by the Fonds de Garantie à l'Accession Sociale à la Propriété (Guarantee Fund for Social Access to Home Ownership);

> Substitution assets, under certain liquidity and maturity conditions and provided that their aggregate value is up to a maximum amount of 15% of the outstanding covered bonds. The new law introduces sub-limits – in line with the amended limits on corporate exposures in CRR Art 129 – of:

- Maximum 15% for credit quality step 1 exposures;
- Maximum 10% for credit quality step 2 exposures;
- Maximum 8% for credit quality step 3.

> Within the limit of the liquidity buffer, in addition to substitution assets, debt securities (titres de créances) issued or guaranteed by a central administration of a Member state of the European Union and cash invested on accounts opened within the books of a central bank of a Member State of the European Union which comply with the criteria listed in 1(a) of Article 416 of the Capital Requirements Regulation n°575/2013 dated 26 June 2013.

> CRH has more stringent eligibility criteria regarding the property (whose nature is entirely of residential nature, and located in France, and the secured loans themselves (max. size = EUR 1,000,000 and max. remaining maturity 25 years).

IV. VALUATION AND LTV CRITERIA

The rules for property valuations are the same for SCF, SFH and CRH. Real estate loans in the cover pool may be financed by *OFs*, *OHs*, *CRH's* debts or other privileged debt up to the lesser of: i/ the remaining principal balance of the loan; and ii/a limited regulatory percentage of the value of the pledged properties for real estate exposures.

This limited regulatory percentage is equal to:

> 80% of the value of the residential pledged properties.

> 60% of the value of the commercial pledged properties.

> In the case of loans guaranteed by the *Fonds de garantie à l'accession sociale* (FGAS – Guarantee Fund for Social Home Accession) 80% of the value of the residential property plus the portion guaranteed by the FGAS over this 80% limit.

The real estate financed by the loans is valued according to the French mortgage market accepted practice and defined by law (regulation n°99-10). **Real estate valuations must be based on their long-term characteristics. Under banking regulation (Arrêté of the 3rd of November 2014), real estate values are considered as part of the risks of *covered bonds*. The valuations are made by independent experts in compliance with banking regulation**.

Regarding valuation methods, different options are available (full valuation, use of statistic methods) that depend on the property use (residential or professional (commercial)), the loan size and the property value. For statistical methods, the real estate values are based on the index provided by INSEE (*Institut National de la Statistique et des Études Économiques*) or on the index provided by Notaries (PERVAL). The real estates are revaluated on an annual basis.

Among his duties, the Specific Controller controls the eligibility, composition and valuation of the assets. The valuation and revaluation methods as well as their results are annually validated by the Specific Controller and published in the annual reports.

V. ASSET/LIABILITIY AND RISK MANAGEMENT

The *SCF*, *SFH and CRH* must comply with asset/liability management rules as required by banking regulations and, in particular, must monitor the interest rate and liquidity gaps between their assets and liabilities.

Market risks

The *SCF*, *SFH and CRH* must manage and hedge market risks on their assets, liabilities and off-balance sheet items: interest rate risks, currency risks, liquidity and maturity mismatches between liabilities and assets. The surveillance of these points is part of the duties of the Specific Controller.

Coverage ratio

Anytime, the outstanding of the weighted eligible assets of the *SCF*, *SFH and CRH* must be at least equal to 105% of the outstanding liabilities benefiting from the Privilege.

From a regulatory standpoint, the coverage ratio is calculated on the basis of the *SCF*, *SFH and CRH* accounting data by applying a specific weight to each class of assets:

> Loans secured by a first-ranking mortgage or by an equivalent guarantee are weighted 100% of their eligible portion to collateralize the privileged liabilities;

> Residential home loans guaranteed by a credit institution or an insurance company are weighted according to the following table:

Rating of the guarantor (M/S/F)	Home loan guarantor not part of the same consolidation group as the SFH / SCF /CRH	Home loan guarantor is part of the same consolidation scope as the SFH
≥A3/A-/A-	100%	80%
<A3/A-/A-	0%	0%

> Public exposures and liquid assets are weighted 100%.

Specifities to SFH

The SFH programmes also include a dynamic Asset Coverage Test (ACT) that requires the balance of the mortgages in the collateral pool to significantly exceed the balance of the outstanding covered bonds. The minimum level of OC will depend on the credit quality of the mortgages in the cover pool as assessed by the rating agencies. For all the existing programmes the maximum asset percentage applied in the ACT is 92.5%, which translates into a minimum overcollateralisation of at least 8%. However, that being said, all SFH programmes currently exceed the minimum amount due to adjustments to the most recent rating agency methodologies.

When calculating the appropriate loan balance within the Asset Coverage Test (ACT), higher LTV loans are included in the pool, but loan amounts exceeding the respective cap do not get any value in the ACT. For all programmes, the LTV ratio of the mortgage loans cannot be more than 100%. In addition, the ACT gives no value to the loans in arrears or defaults.

Maturity mismatch

The remaining weighted average life of the eligible assets used to reach the minimum legal overcollateralisation requirement of 105% should not exceed that of the privileged liabilities by more than 18 months. In addition, new issuers and structures in run off might be exempted of this requirement.

Liquidity risk

The French issuers are required to ensure that the net outflows over the coming 180 days are covered by cash and liquid assets. The scope of this obligation will extend to forecasted principal and interest flows involving the *SCF/SFH/CRH's* assets, as well as to flows related to its derivative instruments. Net outflows may be covered, if necessary, by replacement securities, liquid assets eligible to the eurosystem liquidity facilities, and repurchase agreements with credit institutions verifying the highest short-term credit ratings or whose creditworthiness is guaranteed by other credit institutions that have the highest short-term credit ratings.

Liquidity needs may be covered by liquid assets (level 1, 2A or 2B as defined in Article 10, 11, 12 of EU Regulation 2015/61). These liquid assets cannot be issued by the SCF/SFH/CRH nor the sponsor bank.

As per the French Decree no. 2021-898 of 6 July, the new French law defines two objective triggers for covered bond maturity extensions, that should avoid the risk of premature extensions:

> If an issuer or sponsor bank falls into insolvency or resolution according to L. 613-49; or

> On decision of France's prudential regulation authority (Autorité de Controle Prudentiel et de Resolution, ACPR) if the issuer breaches the 180-day liquidity coverage requirement for covered bonds.

The *French CB issuers* are authorized to subscribe to their own *covered bonds issues* up to 10% of the outstanding of the existing privileged liabilities. These issues provided may only be used then as collateral with the central bank or canceled within 8 days.

Exposure on the group to which the SCF/SFH belongs

Decree N° 2014-526 and Arrêté dated 26 May 2014 limits the ability of the *SCF/SFH* to hold assets in the form of exposures on entities of the group to which it belongs. When these assets exceed 25% of the non-privileged assets of the *SCF/SFH*, the difference between the exposure on these entities and the sum of 25% of the non-privileged assets together with the assets received in guarantee, pledged or full property, is deducted from the numerator of the coverage ratio. CRH does not belong to any group.

VI. TRANSPARENCY

As credit institution and listed company, the *French CB issuers* must publish periodic financial information. The issuer must send a detailed annual report on risk management to the *ACPR*. Moreover, they are also required to publish:

> A quarterly report relating to the nature and the quality of their assets.

> An annual report describing:

(i) the nature and the quality of their assets, the characteristics and breakdown of loans and guarantees, the amount of defaults, the breakdown of receivables by amount and by type of debtors, the proportion of early redemptions, the list and characteristics of senior securitisation securities and RMBSs they hold (if any), the volume and breakdown of replacement securities they hold, and

(ii) the extent and sensitivity of their interest-rate exposure.

> A quarterly report, on 31 March, 30 June, 30 September and 31 December of each year relating to:

(i) the amount of its coverage ratio and the compliance with the limits they are requested to respect i.e. the 35% limit of guaranteed loans, the 10% limit of mortgage promissory notes etc.;

(ii) the data of the calculation of the coverage of its liquidity needs;

(iii) the gap of the average duration between those of its eligible assets and its privileged liabilities;

(iv) the valuation of the coverage of the privileged debts until their maturity by the available eligible assets and the estimation of the future new production of these eligible assets on the basis of prudent assumptions.

Furthermore, on a quarterly basis, as the French CB issuers must provide the ACPR with detailed information on covered bonds issued and the cover pool, as well a report on the procedures undertaken by the Specific controller which would allow the labelling of French covered bonds as European covered bonds (premium) or European covered bonds.

In addition, the French CB issuers generally publish the European Covered Bond Label Reports on a quarterly basis (under the Harmonised Transparency Template format), recently enriched by the additional regulatory requirements in connection with the eligibility of the collateral to ECB open market operations.

Covered bond label

Covered bonds that comply with both the EU Directive and Article 129 of CRR may use the 'European Covered Bond (Premium)' label ("*Obligation garantie européenne de qualité supérieure*"). Covered bonds that comply with the EU Directive, but not all the requirements of article 129 CRR, may use the 'European Covered Bond' label (*Obligation garantie européenne*'). In France, the label is granted by the ACPR, the French national regulator.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The "Specific Controller" is appointed by the *SCF, SFH and CRH* with the agreement of the ACPR. To ensure his independence, the Specific Controller cannot be an employee of either of the *SCF, SFH and CRH's* statutory auditors, of any company that controls the *SCF, SFH and CRH*, or of any company directly or indirectly controlled by a company that controls the *SCF, SFH and CRH*.

The mission of the Specific Controller includes the following verifications:

> that all assets granted or acquired by the *SCF, SFH, and CRH* are eligible to the cover pool, and in the case of mortgage assets, that they are properly valued;

> that the coverage ratio is, at any moment, at least, at 105%;

> that the *SCF/SFH/CRH* comply with all the limits required by the regulation (i.e. the limit of the loans guaranteed by a credit institution or an insurance company, the limit of the mortgage promissory notes and the limit of the replacement assets);

> that the "congruence", i.e. the adequacy of maturities and interest rates of assets and liabilities, is at a satisfactory level. The Specific Controller checks the different quarterly indicators before sending them to the ACPR, and

> that issuers fulfill criteria to obtain Covered Bond labels;

> that, in general, the *SCF/SFH/CRH* complies with the law and regulations.

The Specific Controller certifies that the *SCF/SFH/CRH* complies with the coverage ratio rules on the basis of a quarterly issuance program, and for any issue of privileged debt of an amount equal or above EUR 500 m. These coverage ratio affidavits are required to be stipulated in issuance contracts where the debt benefits from the Privilege.

The Specific Controller reports to the ACPR, attends shareholders' meetings, and may attend Board meetings. The *SCF/SFH & CRH* operate under the constant supervision of the ACPR. Its management, its Specific Controller and its Statutory Auditors should be agreed by the ACPR.

All the above-mentioned reports should be sent to the ACPR together with the annual report of the Specific Controller and the annual reports of the Statutory Auditors.

The Specific Controller issues to the ACPR an audit report on any French CB issuer CB label request.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Cover assets are segregated in the issuing specialised credit institution, or in the case of CRH, within CRH.

SCF/SFH

Pursuant to Article L.513-11 of the Code, holders of *OFs/OHs* and other privileged debts have preferred creditor status and the right to be paid prior to all other creditors who have no rights to the assets of the *SCF/SFH* up until the claims of the preferred credi tors have been fully satisfied.

CRH

Pursuant to paragraph IV and V of Article 13 of Law 85-695, holders of CRH covered bonds and other privileged debts have preferred creditor status and the right to be paid prior to all other creditors who have no rights to the assets of CRH until the claims of preferred credi tors have been fully satisfied.

Under the French legislation, the holders of covered bonds issued by the *SCF, SFH and CRH*, benefit from the legal privilege over the *SCF/SFH/CRH's* eligible assets. If the issuer becomes insolvent, the covered bonds and other privileged debts holders are paid in accordance with their payment schedule, and have priority over any of the programme's other non-privileged debts or creditors in relation to the programme's assets. All privileged debts rank *pari passu*. Until fully repayment of such privileged liabilities, no other creditors may take any action against the French CB issuers nor their cover assets.

The issuer may be subject to insolvency, but the *French legal framework* provides for a regime which derogates in many ways from the French insolvency provisions:

> **Legal Privilege / No acceleration of covered bonds as a result of insolvency of SCF, SFH and CRH**: in the event of an insolvency proceeding of the *SCF, SFH and CRH* (safeguard procedure, judicial reorganization, liquidation, or resolution), all claims benefiting from the Privilège (including interest) must be paid on their due dates and in prefer ence to all other claims. Until fully repayment of all such preferred claims, no other creditors may take any action against the privileged assets of the *SCF, SFH and CRH*;

> **No nullity during the hardening period**: the provisions allowing an administrator to render certain transactions entered into during the hardening period (*période suspecte*) null and void are not applicable for the transfer of assets entered into by a *SCF, SFH and CRH* (provided that such transactions are made in accordance with their exclusive legal purpose and without fraud);

> **Option to terminate ongoing contracts with insolvent counterparties**: in case of the opening of any insolvency procedure against the credit institution, which is acting as manager and servicer of the *SCF/SFH/CRH*, any contract may be immediately terminated by the *SCF/SFH/CRH* notwithstanding any legal provisions to the contrary;

> **No impact of the hardening period**: the common provisions of French bankruptcy law affecting certain transactions, which entered into force during the months prior the insolvency proceedings during the hardening period, are not applicable to *SCF/SFH/CRH*.

> **No extension of bankruptcy proceedings**: as an exception to the general French bankruptcy Law, bankruptcy proceedings or liquidation of a company holding share capital in a *SCF/SFH/CRH* cannot be extended to the *SCF* or the *SFH or CRH*. As a result, the *SCF/SFH/CRH* enjoys full protection from the risks of default by their parent company or the group to which it belongs.

IX. RISK-WEIGHTING AND COMPLIANCE WITH EUROPEAN LEGISLATION

The French covered bonds' legislation and regulation comply with the requirements of the EU Covered Bond Directive. All covered bonds are CRR compliant (fulfilling criteria provided in article 129(1)). *French Covered Bonds issued by SCF/SFH/CRH* which are Article 129- CRR compliant ("European Covered Bond Premium") have a 10% risk-weighting according to the Standardised Approach in the CRR if benefiting from a rating classified as Step 1.

Other Covered bonds that comply with the EU Covered Bond Directive, but not with Article 129 of CRR, can use the 'European Covered Bond' label ("Obligation garantie européenne") and would qualify for a 20% risk-weighting according to the Standardised Approach in the CRR if benefiting from a rating classified as Step 1.

Grand fathering clause: covered bonds issued before the entry into force of the Directive on 8 July 2022 would keep their initial risk-weight.

OFs/OHs and CRH covered bonds can be eligible as Level 1 assets under LCR regulation provided they respect specific criteria.

Issuers: AXA Bank Europe (SCF); BNP Paribas Public Sector (SCF); BNP Paribas Home Loan (SFH); BPCE (SFH); Banques Populaires Covered Bonds (BP CB); Caisse Française de Financement Local (CAFFIL); CIF Euromortgage; Compagnie de Financement Foncier (CFF); Crédit Agricole Public Sector (SCF); Crédit Agricole Home Loan (SFH); Crédit Mutuel – CIC Home Loan (SFH); Crédit Mutuel Arkéa Public Sector (SCF); Crédit Mutuel Arkéa Home Loans (SFH); Caisse de Refinancement de l'Habitat (CRH); HSBC (SFH); La Banque Postale Home Loan (SFH); Société Générale (SCF); Société Générale (SFH).

Covered Bond Label: AXA Bank Europe SCF (1 pool), BNP Paribas (2 pools), BPCE SFH (1 pool), Compagnie de Financement Foncier (1 pool), Crédit Mutuel – CIC Home Loan SFH (1 pool), HSBC SFH (1 pool), Société Générale (2 pool), Credit Agricole (2 pools), Caisse de Refinancement de l'Habitat (1 pool), Caisse Française de Financement Local (1 pool), Arkéa (2 pools), La Banque Postale Home Loan SFH (1 pool), CIF Euromortgage (1 pool), MMB SCF (1 pool).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the French market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.15 GERMANY

By Otmar Stöcker, Association of German Pfandbrief Banks

I. FRAMEWORK

In Germany, the legal basis for covered bond issuance is the German Pfandbrief Act (PfandBG – Pfandbriefgesetz) dated 22 May 2005 replacing the Mortgage Bank Act from 1900 and other German Pfandbrief laws.

On 15 April 2021 the Deutsche Bundestag and on 7 May 2021 the Bundesrat approved the amendments to the Pfandbrief Act, which implement the CBD into German Pfandbrief law and adapt it to the changes of Art. 129 CRR. These amendments came in force partially on 1 July 2021 and partially on 8 July 2022.

Furthermore, the statutory orders, which are based on the Pfandbrief Act, were adapted in 2022 as well.

II. STRUCTURE OF THE ISSUER

Since 2005, the issuer of Pfandbriefe is no longer required to be a specialised bank. Instead, Pfandbrief issuers are allowed to exercise all activities of a credit institution, although a special licence for Pfandbrief issuance is required.

Since the EBA outsourcing guidelines do not allow for the outsourcing of important and decision-making sections of the credit institution, the issuer is required to have its own employees. In addition, the PfandBG requires Pfandbrief banks to manage their own risk and take their credit decisions on their own.

The issuer holds the cover assets on his balance sheet. A subsequent transfer of the cover assets to another legal entity does not take place. Given that a direct legal link between single cover assets and Pfandbriefe does not exist, all obligations relating to Pfandbriefe are obligations of the issuing bank as a whole. In the case of insolvency, the cover pool is segregated by law from the general insolvency estate and is reserved for the claims of the Pfandbrief holders. Even then, Pfandbrief holders still have a claim against the general insolvency estate (dual/triple recourse).

III. COVER ASSETS

Cover assets are produced by mortgage lending, public sector lending, ship and aircraft financing activities. ABS/MBS are not eligible. A specific class of covered bonds corresponds to each of these cover asset classes: Hypothekenpfandbriefe, Öffentliche Pfandbriefe, Schiffspfandbriefe and Flugzeugpfandbriefe. The respective Pfandbrief must be fully secured by its specific cover asset class (§ 4 PfandBG).

Up to 15% of the nominal volume of Pfandbriefe outstanding may consist of money claims against the European Central Bank, central banks in the European Union or against suitable credit institutions, which fulfil the requirements of credit quality step 1 according to CRR provisions, have an external rating and do not belong to the same banking group.

The geographical scope of eligible mortgage assets is restricted to EU/EEA countries, to Switzerland, USA, Canada, Japan and explicitly widened to UK due to the Brexit. Public sector loans to these countries are eligible for the cover of Öffentliche Pfandbriefe (§ 20 PfandBG). In 2014, the mortgage asset scope was enlarged to Australia, New-Zealand and Singapore. The total volume of loans granted in non-EU countries where it is not certain that the preferential right of the Pfandbrief creditors extends to the cover assets, may not exceed 10% of the total volume of the cover loans (§§ 13 I 2, 20 III PfandBG) and 20% for ship and aircraft mortgages (§§ 22 V 2, 26b IV 2PfandBG).

Derivatives are eligible for cover pools under certain conditions (§§ 4b, 19 I PfandBG).

IV. VALUATION AND LTV CRITERIA

Property valuation is regulated in § 16 PfandBG. This provision refers to the mortgage lending value (Beleihungswert) which is, in contrast to the market value, based on sustainable aspects of the property. Details about the valuation process and the qualifications of values are regulated in a specific statutory order on the mortgage lending value (Beleihungswertermittlungsverordnung, BelWertV), § 16 IV PfandBG.

According to § 26 BelWertV both commercial and residential real estate have to be monitored at least annually. In addition, § 27 BelWertV requires a review of the underlying assumptions when the market has declined substantially; a review of property values is also necessary when the loan has defaulted.

The BelWertV requires personal and organisational independence of the valuer (internal or external valuer).

For both commercial and residential property, the LTV limit is 60% of the mortgage lending value of the property. This LTV is a relative limit, i.e. when the loan exceeds the 60% limit, the part of the loan up to 60% LTV remains eligible for the cover pool.

V. ASSET – LIABILITY MANAGEMENT

§ 4 PfandBG stipulates that the total volume of Pfandbriefe outstanding must be covered at all times by assets of at least the same amount. Thus, the nominal value of the cover assets must permanently be higher than the respective total value of the Pfandbriefe: 2% for Hypothekenpfandbriefe and Öffentliche Pfandbriefe, 5% for Schiffspfandbriefe and Flugzeugpfandbriefe.

In addition, the Pfandbrief Act requires that Pfandbriefe are covered on a net present value basis even in the event of severe interest rate changes or currency fluctuations. The issuer has to provide an npv- "overcollateralization" of at least 2% after stress tests which have to be carried out weekly. This "overcollateralization" is to be regarded as the lump sum for the potential winding-down costs after an issuer's insolvency. Therefore, cover assets that are being used for the npv-"overcollateralization" are not to be taken into account for the calculation of the nominal overcollateralisation. Both the maturity of outstanding Pfandbriefe and the fixed-interest periods of the cover assets are disclosed on a quarterly basis. Details about the calculation are regulated in a special statutory order on Net Present Value (Barwertverordnung).

Furthermore, each day Pfandbrief banks have to calculate the maximum liquidity gap within the next 180 days. This amount has to be covered by liquid assets (§ 4 Ia PfandBG), which are compliant with LCR-Regulation as well as short-term exposures to credit institutions.

Every quarter, the stress-tested NPV of outstanding Pfandbriefe, the cover pool and the overcollateralisation have to be published (§ 28 I PfandBG). The stress tests do not apply to interest rate risks only but also to foreign exchange risks.

VI. TRANSPARENCY

According to § 28 of the Pfandbrief Act (Pfandbriefgesetz, PfandBG), all Pfandbrief banks are obliged to publish detailed information about their Pfandbriefe outstanding and the pertaining cover pools on a quarterly basis.

Besides these legal requirements, the vdp member banks started the vdp Transparency Initiative in 2010. Within the scope of this initiative, transparency reports of vdp member institutions are published in a uniform format, that can be processed electronically, using a uniform understanding of the legal requirements and on one central website (www.pfandbrief.de).

Each report is available as a reading version in pdf format and, suitable for further direct processing, in xls (Excel), csv and xml-formats as well. Automatic links to investor databases are possible. The website offers sorting possibilities for the reports both by the reporting date and the bank name. All reports are published in English and German language versions. There is a data history available that goes back to 2009.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The German federal financial supervisory authority (BaFin) carries out a special supervision on Pfandbrief banks through a dedicated division. The "Pfandbriefkompetenzcenter" is responsible for all fundamental issues regarding the PfandBG and conducts cover pool audits using own staff or external auditors.

Cover audits

The cover pools are subject to a special audit conducted usually every three years by the supervisory authority (§ 3 PfandBG). Cover pool audits are performed either by the appropriate specialist section at BaFin itself or by suitable auditors, who are mandated via contract by public tender.

A cover audit is conducted in respect of individual cover pool assets, the observance of matching cover requirements in terms of the nominal and net present value calculation, the proper keeping of the cover registers, and the systems and processes in place with regard to the cover pools.

Audits of individual cover assets seek to ensure that the respective assets were included in cover in accordance with the relevant rules and regulations or that their continued inclusion is in line with requirements. A system audit entails examining all the Pfandbrief bank's main processes and systems that are directly or indirectly linked to the cover assets and the issued Pfandbriefe. In particular, process documentation, system descriptions and the proper implementation of the relevant methods are scrutinized.

Furthermore, a cover pool monitor (Treuhänder) supervises the cover pool. He is appointed by the BaFin and must possess the expertise and experience necessary to fulfil all duties. A qualification as a certified auditor suggests that the necessary expertise is provided. The monitor has to ensure that the prescribed cover for the Pfandbriefe exists at all times and that the cover assets are recorded correctly in the cover register, §§ 7, 8 PfandBG. Without his approval, no assets may be removed from the cover pool or new Pfandbriefe been issued. The BaFin has published a specific statutory order on details of the form and the contents of this cover register (Deckungsregisterverordnung – DeckRegV), § 5 III PfandBG.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

A cover register (Deckungsregister) permits the identification of the cover assets, § 5 PfandBG. The register records the cover assets being used to cover the Pfandbriefe as well as claims under derivatives (§ 5 I 1 PfandBG).

The legal effect of registration is that in the case of insolvency of the issuer, the assets which form part of the cover pool can be identified: all values contained in the register would not be part of the insolvency estate. § 30 I 1 PfandBG now calls them "insolvency-free assets".

While the bank carries out the daily administration of the cover register, it is the cover pool monitor who supervises the required cover and registration in the cover register, § 8 I, II PfandBG. Copies of the cover register shall be transmitted to the supervisory authority on a regular basis.

Asset segregation

The cover pool is part of the general estate of the bank as long as the issuer is solvent. If insolvency proceedings are launched, by operation of law, the assets recorded in the cover registers are excluded from the insolvency estate (§ 30 I 1 PfandBG). Those assets will not be affected by the launching of the insolvency proceedings (§ 30 I 2 PfandBG).

After the launching of the insolvency proceedings, a special cover pool administrator (Sachwalter) carries out the administration of the cover assets (§ 30 II 1 PfandBG). Through the appointment of the cover pool administrator by the court, on proposal of the BaFin (or by BaFin in case of urgency), the right to manage and dispose of the recorded assets will be transferred to him automatically by law (§ 30 II 2 PfandBG). Regarding cover assets and timely payment of Pfandbriefe, the cover pool administrator represents the Pfandbriefbank (§ 30 II 5 PfandBG). He is allowed to use premises and staff of the Pfandbriefbank (§31 VIII PfandBG).

Impact of insolvency proceedings on covered bonds and derivatives

Covered bonds do not automatically accelerate when the issuing institution is insolvent, but will be repaid at the time of their contractual maturity. The same applies to derivatives which are registered in the cover register and form part of the cover pool. Accordingly, the German master agreements for cover derivatives stipulate that the bankruptcy of the Pfandbrief issuer does not signify a termination event. Article 13 N° 6 DeckregV stipulates that the collateral provided by the derivative counterpart or the Pfandbrief bank has to be registered in the cover register. The consequence of such registration is that the collateral belongs to the insolvency-free assets.

The amendments to the Pfandbrief Act introduce a maturity extension as legal option only for the cover pool administrator; but the issuer itself has no discretion to use it. This applies to both Pfandbriefe outstanding at the time of the introduction into law (1 July 2021) and newly issued Pfandbriefe. The extension triggers must be described in the terms and conditions for new Pfandbriefe, outstanding Pfandbriefe are covered by Art. 30 CBD and therefore keep the privileged treatment according to Art. 129 CRR.

The cover pool administrator would be allowed to extend maturities of interest and principal within the first month after his appointment to the end of the period of one month without further requirements.

Additionally, he might extend maturities of principal by a maximum of 12 months, if (1) necessary, (2) not over-indebted and (3) subsequent solvency of the Pfandbriefbank with limited business activities can be assumed; he might do that fully or partially (pro rata) with equal treatment of Pfandbrief holders. However, the cover pool administrator might (prematurely) fulfill the Pfandbriefe within the extension period.

Sequencing will not be inverted, original maturity schedule of Pfandbriefe must be kept. However, this is limited to Pfandbriefe and not extended to new debt, which the cover pool administrator creates in form of liquidity loans or bonds; it also does not apply to derivatives in the cover pool.

During the extension period interest on Pfandbriefe must be paid according to the previous terms, if not regulated otherwise in terms and conditions.

Preferential treatment of covered bond holders

Covered bond holders enjoy preferential treatment as the law stipulates the separation of the cover assets on the one hand and the insolvency estate on the other, § 30 I PfandBG.

The satisfaction of the Pfandbrief creditors is not limited to the cover assets. On the contrary, these creditors also participate in the insolvency proceedings with respect to the Pfandbrief bank's remaining assets.

Only in the case of over-indebtedness or illiquidity of the cover pool, the BaFin may apply for a special insolvency procedure relating to the cover pool and covered bonds (§ 30 VI 2 PfandBG). Insolvency of the cover pool is the only reason, which might trigger acceleration of Pfandbriefe.

The amendments 2021 to the Pfandbrief Act introduce a new provision in § 30 VI 5 and 6 strenghtening the dual recourse of Pfandbriefe: The insolvency administrator will have to make reserves for the dual recourse claims of Pfandbrief holders during the insolvency procedure. Furthermore, the final distribution of the insolvency estate to creditors will not be allowed to take place before the amount of potential dual recourse claims of Pfandbrief holders is clarified.

Access to liquidity in case of insolvency

Through the appointment of the cover pool administrator, the right to manage and dispose of the recorded assets is transferred to him by law (§ 30 II 2 PfandBG). Thus, the cover pool administrator has first access to the cover assets and collects the cash flows according to their contractual maturity (§ 30 III 2 PfandBG).

No explicit regulation exists with respect to the insolvency remoteness of voluntary overcollateralisation (OC). However, the insolvency administrator may only demand that the overcollateralisation be surrendered to the insolvency estate, if those amounts will obviously not be necessary as cover for the respective Pfandbrief category (§ 30 IV 1 PfandBG). The burden of proof that OC will never be necessary for the timely payment of the Pfandbriefe, lays with the insolvency administrator.

The cover pool administrator is entitled to contract loans in order to obtain liquidity. According to § 30 II 5 PfandBG, the cover pool administrator may carry out legal transactions with regard to the cover pools in so far as this is necessary for an orderly settlement of the cover pools in the interest of the full and timely payments to the Pfandbrief creditors.

Pfandbriefbank with limited business activities

The amendment of the PfandBG 2010 was focused on the legal nature of cover pools in the event of a Pfandbrief bank's insolvency and on the access of a cover pool administrator to liquid funds during difficult times. A cover pool would get automatically the status of a non-insolvent part of the bank of the insolvent Pfandbrief bank.

§ 30 I 3 PfandBG uses the term 'Pfandbrief bank with limited business activities'.

Sale and transfer of mortgage assets to other issuers

According to § 32 I PfandBG, the cover pool administrator may transfer all or a part of the assets recorded in the cover register as well as liabilities from Pfandbriefe as a whole to another Pfandbrief bank. This transfer requires the written approval of the supervisory authority.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The PfandBG fully complies with Art. 129 Capital Requirements Regulation (CRR), Article 52(4) of the UCITS Directive and the CBD. Aircraft Pfandbriefe only comply with Article 52(4) of the UCITS Directive and the CBD, because Aircraft loans are not eligible cover assets according to Art. 129 CRR.

Issuers: There are currently about 80 Pfandbrief banks in Germany, including banks from all three pillars of the German banking industry (private banks, public banks and co-operative banks).

Covered Bond Label: UniCredit Bank AG (2 pools), NORD/LB Norddeutsche Landesbank Girozentrale (1 pool), Deutsche Pfandbriefbank AG (2 pools), Münchener Hypothekenbank eG (1 pool), Berlin Hyp AG (1 pool), Landesbank Baden-Württemberg (2 pools), DZ HYP AG (2 pools), Hamburg Commercial Bank (2 pools).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the German market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.16 GREECE

By Alexander Metallinos, Karatzas & Partners Law Firm

I. FRAMEWORK

In Greece, the institution of covered bonds was originally regulated by Article 91 of the now repealed Law 3601/2007, which entered into force on 1 August 2007. This was later replaced by Article 152 of Law 4261/2014, that was identical to it. These provisions were supplemented by Act nr. 2598/2.11.2007 of the Governor of the Bank of Greece, which was replaced by Act nr. 2620/28.8.2009 of the Governor of the Bank of Greece.

On 12 March 2018, the European Commission adopted a proposal for an enabling EU framework on covered bonds. The legislative proposal consisted of (a) the adoption of a directive providing inter alia a common definition of covered bonds, defining the structural features of the instrument and identifying those high quality assets that can be considered eligible in the pool backing the debt obligations, establishing a sound special public supervision for covered bonds and setting out the rules which will allow the use of the "European Covered Bonds" label; and (b) the adoption of a regulation amending the Regulation (EU) 575/2013 (the "Capital Requirements Regulation" or "CRR") with the aim of strengthening the conditions for granting preferential capital treatment to covered bonds by adding further requirements. Following this proposal, Directive (EU) 2019/2162 of the European Parliament and of the Council of 27 November 2019 on the issue of covered bonds and covered bond public supervision and amending Directives 2009/65/EC and 2014/59/EU was enacted (the "Covered Bonds Directive"). EU Member States are obliged to adopt and publish, by 8 July 2021, the laws, regulations and administrative provisions necessary to comply with the Covered Bond Directive and to apply those measures at the latest from 8 July 2022.

Law 4920/2022 (the "Covered Bond Law") transposed the Covered Bond Directive into Greek law. The Covered Bond Law enters into force on 8 July 2022. Covered bonds issued prior to such date continue in principle to be governed by article 152 law 4261/2014. The Covered Bond Law supersedes general provisions of law contained in the Civil Code, the Code of Civil Procedure and the Insolvency Code. The legislative framework in Greece is supplemented by Law 3156/2003 "On Bond Loans, Securitization of Claims and of Claims from Real Estate and Other Provisions" (the "Bond Loan and Securitization Law") and Law 4548/2018 "Reform of law on sociétés anonymes" (the "New Company Law"), to the extent that the Covered Bond Law cross-refers to these laws. Finally, the Covered Bond Law authorizes the Bank of Greece to issue rules supplementing the provisions of the Covered Bond Law.

II. STRUCTURE OF THE ISSUER

Contrary to article 152 law 4261/2014, which permitted the issuance of covered bonds in two ways, either directly by a credit institution, or indirectly by a subsidiary of a credit institution, the Covered Bond Law only allows the direct issuance of covered bonds by credit institutions. The segregation of the cover pool is achieved through a statutory pledge over the cover pool assets.

III. COVER ASSETS

The type of assets that may form part of the cover pool is regulated by article 8 of the Covered Bond Law (transposing article 6 of the Covered Bond Directive). Specifically, the Covered Bond Law provides for two categories of cover pool assets, (i) assets that are eligible pursuant to article 129(1) of the CRR and (ii) other high-quality cover assets that meet the conditions of the Covered Bond Law and in addition belong to categories of assets that are specified as eligible in a decision of the Bank of Greece. It is worth noting that article 8 of the Covered Bond Law has not transposed subparagraph (c) of article 6(1) of the Covered Bond Directive and consequently cover assets do not include assets in the form of loans to or guaranteed by public undertakings. Cover assets considered eligible according to article 129(1) of the CRR are primarily residential mortgage loans, loans secured by a mortgage on commercial properties, loans secured by a mortgage on ships and exposures to or guaranteed by state entities. The loans may be secured by mortgage prenotations instead of full mortgages (as is the practice for cost reasons in Greece). In addition, exposures to credit institutions may be included in the cover pool up to an aggregate limit of 15% of the nominal value of the outstanding covered bonds. According to article 13 of the Covered Bond Law, derivatives may also be included in the cover pool, subject to certain conditions, including the requirements that the derivative contracts are included in the cover pool exclusively for risk hedging purposes and that the derivative contracts cannot be terminated upon the insolvency or reorganisation of the issuer.

IV. VALUATION AND LTV CRITERIA

Loans secured by residential mortgages are required to have a loan-to-value (LTV) ratio of 80%, whereas loans secured by mortgages over commercial properties and ships are required to have an LTV ratio of 60%. Loans with a higher LTV ratio may be included in the cover pool, but they are taken into account for the calculation of the statutory tests described below only up to the amount indicated by the LTV ratio. Thus e.g. a loan of 900,000 Euros secured through a residential mortgage over a property valued at 1,000,000 Euros may be included in the cover pool but will be deemed for the purposes of the calculation of the statutory tests to be equal to 800,000 Euros.

The evaluation of properties must be performed by an independent valuer at or below the market value and must be repeated on a frequent basis, at least once every year in relation to commercial properties and once every three years in relation to residential properties (Article 208 of the CRR).

V. ASSET-LIABILITY MANAGEMENT

Article 17 of the Covered Bond Law provides coverage requirements that must be met for the full duration of the covered bonds. More particularly, the Covered Bond Law provides for the following coverage requirements:

(a) All liabilities of the covered bonds shall be covered by claims for payment attached to the cover assets.

(b) The nominal value of the cover assets must exceed by at least 5% the nominal value of the outstanding covered bonds.

The Covered Bond Law authorizes the Bank of Greece to issue decisions specifying and potentially rendering stricter the coverage requirements.

Article 18 of the Covered Bond Law provides that the cover pool shall include at all times a liquidity buffer composed of liquid assets available to cover the net liquidity outflow of the covered bond programme. Such cover pool liquidity buffer shall cover the maximum cumulative net liquidity outflow over the next 180 days.

VI. TRANSPARENCY

Currently, the issuer's reporting obligations (as described in detail under paragraph on reporting duties of section VII) and the disclosure of the cover pool as conducted via the summary registered with the competent pledge registry for the establishment of a statutory pledge (for more details on this issue we cross-refer to paragraph on the cover pool monitor of section VII) are the basic transparency tools provided under applicable covered bonds legislation. The label 'European Covered Bond' may be used only for covered bonds which meet the requirements of the Covered Bond Law. Furthermore, the label 'European Covered Bond (Premium)' may be used only for covered bonds which also meet the requirements of Article 129 of the CRR. So far in Greece no market or regulatory initiatives have been undertaken on the creation of a national transparency template, in line with the guidelines of the ECBC Label Initiative.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Cover pool monitor

The compliance of cover pool assets with the requirements of the Covered Bond Law and of the secondary legislation to be issued by the Bank of Greece is monitored by a cover pool monitor, that is an auditor independent from the issuer of the covered bonds and from the issuer's auditor. In case the cover pool monitor finds that the cover pool assets to not comply with the requirements of the Covered Bond Law and of the secondary legislation to be issued by the Bank of Greece, it shall immediately notify that issuer who must take action to remedy the default without delay. The secondary legislation to be issued by the Bank of Greece shall further specify the obligations of the cover pool monitor, including as to the requirement to provide reports to the Bank of Greece.

Prerequisites for the issuance of covered bonds

According to the Covered Bond Law, covered bonds may be issued by credit institutions that meet the following requirements:

> an adequate programme of operations setting out the issue of covered bonds;adequate and documented policies, processes and methodologies for the approval, amendment, renewal and refinancing of loans included in the cover pool;

> management and staff dedicated to the covered bond programme which have adequate qualifications and knowledge regarding the issue of covered bonds and the administration of the covered bond programme;

> sufficient organization and IT infrastructure for the management and monitoring of the cover pool assets, so as to meet the requirements of the Covered Bond Law and any secondary legislation issued pursuant to the Covered Bond law;

> a risk mitigation policy and appropriate mechanisms to monitor and manage risks arising from the issuance of covered bonds; and

> a detailed description of the competence of the service units and the committees involved in the issuance of covered bonds.

The prior approval of the Bank of Greece is required for the issuance of a covered bond programme.

Reporting duties of the issuer to the supervisor concerning covered bonds and cover pool

Credit institutions that issue covered bonds shall provide reports to the Bank of Greece containing information on the eligibility of assets and cover pool requirements, the segregation of cover assets, the functioning of the cover pool monitor, the coverage requirements, the cover pool liquidity buffer and the conditions for extendable maturity structures.

Banking supervision in crisis

As described in detail under section VIII of this article, article 21 of the Covered Bond Law provides that in case of insolvency or reorganization of the issuer, the Bank of Greece may appoint a special administrator to preserve the rights and interests of the covered bond investors, if the bondholders' agent does not do so.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Segregation of cover assets

The cover assets are segregated from the remaining estate of the credit institution through a pledge constituted by operation of law (statutory pledge). In case of assets governed by a foreign law (which will typically include *inter alia* claims from derivative contracts), a security interest must be created in accordance with such foreign law. The statutory pledge and the foreign law security interest secure claims of the holders of covered bonds and may also secure (in accordance with the terms of the covered bonds) other claims connected with the issuance of the covered bonds, such as derivative contracts used for hedging purposes. The statutory pledge and any foreign law security interest are held by a bondholders' agent for the account of the secured parties.

The claims constituting cover assets are identified by being listed in a document signed by the issuer and the bondholders' agent. A summary of such document is registered in the pledge registry of the seat of the issuer. Such summary document includes within its content a description of the assets that constitute the cover pool. Claims may be substituted and additional ones may be added to the cover pool through the same procedure.

Article 14 of the of the Covered Bonds Law creates an absolute priority of holders of covered bonds and other secured parties over the cover pool. Upon registration of the summary of the document listing the claims included in the cover pool, the issuance of the covered bonds, the establishment of the statutory pledge and the foreign law security interest and the entering into of all contracts connected with the issuance of the covered bonds are not affected by the commencement of any insolvency proceedings against the issuer.

It is worth noting that according to the Covered Bond Law the cover assets may not be attached. This has the indirect result that the Greek law claims constituting cover assets are no longer subject to set-off, because, according to Article 451 of the Civil Code, claims which are not subject to attachment are not subject to set-off. This is important because under generally applicable law borrowers the loans to whom become cover assets would have had a right to set-off, which would reduce the value of the cover pool, for all counterclaims (including notably deposits) predating the creation of the pledge or the transfer of the claims, as the case may be.

No specific provisions exist in relation to voluntary overcollateralisation. As a result, the segregation applies to all assets of the cover pool, even if their value exceeds the minimum required by law. The remaining creditors of the credit institution will only have access to any remaining assets of the cover pool after the holders of the covered bonds and other creditors secured by the cover pool have been satisfied in full.

Bankruptcy remoteness of and impact of insolvency proceedings on covered bonds

According to article 7 the Covered Bond Law, covered bonds do not automatically accelerate upon insolvency of the issuer.

Pursuant to article 21 of the Covered Bond Law, in case of insolvency or reorganisation of the issuer, a special administrator shall be appointed by the bondholders' agent, subject to a positive opinion of the Bank of Greece. The Bank of Greece shall appoint the special administrator, if the bondholders' agent does not do so.

Access to liquidity in case of insolvency

Article 21 of the Covered Bond Law provides that the special administrator sell and transfer the cover assets, and to use the net proceeds of such sale in order to discharge the obligations under the covered bonds and the other obligations which are secured by the legal pledge, according to the terms of the covered bond programme.

Exercise of the claims of covered bondholders against the remaining assets of the credit institution

According to article 4 of the Covered Bond Law, holders of covered bonds have dual recourse both to the cover pool as secured creditors and to the remaining assets of the credit institution ranking as unsecured and unsubordinated creditors.

Protection of depositors

The purpose of protecting depositors from an excessive encumbrance of assets is provided indirectly by Article 45 of Directive 2014/59/EU (the "Banking Recovery and Resolution Directive" or "BRRD")[1], which provides for a minimum requirement of own funds and eligible liabilities, as covered bonds and other secured liabilities are not eligible according to this provision.

1 Greece transposed the BRRD through law 4335/2015, as amended.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The risk-weighting of covered bonds (both Greek and foreign) is regulated by Article 129 of the CRR. According to this, as currently in force, bonds falling within the provisions of Article 52(4) of the UCITS Directive, as amended and in force, are eligible for preferential treatment, provided that the cover pool consists of the assets enumerated in paragraph 1 of Article 129 of the CRR and the provisions of paragraph 7 of the same article regarding the information provided to holders of covered bonds are met.

Greek covered bonds issued both under law 4261/2014 and under the Covered Bond Law comply with both the UCITS Directive, as amended and in force, and the CRR and, therefore, have the reduced risk-weighting mentioned above in Greece and should also have it in other EU member states. In relation to indirectly issued covered bonds, it must be noted that they do not fall within Article 52(4) of the UCITS Directive, as amended and in force, because they are not issued by a credit institution.

After 28 June 2023 article 129 of the CRR covered bonds as defined in point (1) of Article 3 of the Covered Bond Directive shall be eligible for the preferential treatment provided they are collateralised by assets deemed eligible pursuant to that article and meet certain requirements set out in that Article. Since, the Covered Bond Law faithfully transposes the Covered Bond Directive, covered bonds issued pursuant to it shall have the preferential treatment of article 129 CRR provided they also meet the remaining conditions set by that article.

Issuers: There are four issuers in Greece: Alpha Bank; National Bank of Greece; Eurobank and Piraeus Bank.

COVERED BOND LABEL: Alpha Bank S.A. (1 pool).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Greek market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.17 HUNGARY

By Rita Bozzai and Illés Tóth, Takarék Mortgage Bank

I. FRAMEWORK

Act No. XXX of 1997 on Mortgage Loan Companies and Mortgage Bonds (Mortgage Bank Act) contains the specific rules applicable to mortgage loans companies and mortgage bonds. Act No. CCXXXVII of 2013 on Credit Institutions and Financial Enterprises is applicable generally to the establishment, operation, supervision and liquidation of mortgage loan companies, unless otherwise provided by the Mortgage Bank Act. The Directive (EU) 2019/2162 of the European Parliament and of the Council on the Issue of Covered Bonds and Covered Bond Public Supervision and Amending Directives 2009/65/EC and 2014/59/EU will be applied from 8 July 2022[1] (hereinafter referred as the Directive). The harmonization work aiming at the implementation of the Directive in the domestic legislation has been successfully completed in 2021. Act No. LVIII of 2021 on the amendments of the Mortgage Bank Act in relevance to the implementation of the Directive was passed by the Hungarian Parliament on May 18, 2021, therefore the amendments become effective as of July 8, 2022.

II. STRUCTURE OF THE ISSUER

Mortgage Loan Companies are specialized credit institutions in Hungary whose business activity is restricted, in principle, to mortgage lending, mortgage refinancing and auxiliary financial services: mortgage loan companies grant financial loans secured by mortgages on real estate property located on the territory of Hungary and other European Economic Area (EEA) countries. Funds will be raised by way of issuing mortgage bonds. In the Hungarian banking sector only mortgage loan companies are entitled to issue mortgage bonds ("*jelzáloglevél*"). Cover assets will be held on the balance sheet of the mortgage loan company. All the mortgage bonds of a single mortgage loan company are covered by the same (one single) cover pool which is only open to changes with the prior permission of the coverage supervisor, acting in the interest of mortgage bond holders. The structure of the issuer will not change as a result of the adoption of the Directive.

III. COVER ASSETS

The Mortgage Bank Act provides that mortgage loan companies shall at all times have sufficient cover assets to ensure that all liabilities of the mortgage bonds are covered. From July 8, 2022 liabilities referred shall include the i) obligation for payment of the principal amount of outstanding mortgage bonds, ii) the obligation for payment of any interest on outstanding covered bonds, iii) the obligation attached to derivative contracts (in line with the requirements set out in the Act) and iv) the expected costs related to maintenance and administration for the winding-down of the mortgage bond program (calculated as a lump sum at a rate of 1‰ of the outstanding mortgage bond volume). The mortgage bank shall ensure the security for mortgage bonds at all times both on a nominal basis and based on present value calculation. Decree No. 40/2005. (XII.9.) of the Minister of Finance contains the detailed provisions on the present value calculation of cover assets and the methodology of stress tests to be published on a regular basis. Furthermore, mortgage loan companies shall prepare a manual of keeping the register of cover assets ("*fedezetnyilvántartás*"), which also needs the approval of the Magyar Nemzeti Bank (MNB, Hungarian Central Bank) in its capacity as financial supervisory authority and the coverage supervisor.

As a result of the legal harmonization elements of cover assets change from July 8, 2022: cover assets shall be i) ordinary assets, ii) supplementary assets, iii) liquid assets in line with the requirements of the amended Act, iv) claims derive from derivative contracts.

Ordinary cover assets can be loans secured by mortgages ("*jelzálogjog*"), independent mortgage liens ("*önálló zálogjog*"), or by mortgages and joint and several surety assumed by the Hungarian State ("*állami készfizető*

1 The requirements detailed below are the new provisions of the Mortgage Ac, which enter into force on July 8, 2022.

kezességvállalás"). The share of ordinary coverage shall at all times reach the 80% of the outstanding mortgage bonds with remaining maturity of more than 180 days.

Supplementary coverage may exclusively consist of eligible liquid assets listed in the Mortgage Bank Act and may not exceed 20% of the total coverage. Pursuant to the Mortgage Bank Act, cover assets must be entered into the register of cover. The availability and quality of cover assets are permanently monitored by the coverage supervisor, reports on availability and quality of cover assets are disclosed on a daily basis.

According to Section 14 (5) of the Mortgage Bank Act, in the case when mortgage bonds and their coverage are not denominated in the same currency, the mortgage loan company is obligated to hedge the currency exchange risk by entering into derivative transactions. Section 3 (10) of the Mortgage Bank Act provides that mortgage loan companies are entitled to conclude such transactions exclusively for hedging purposes, i.e. risk management and liquidity. The Mortgage Bank Act entitles mortgage loan companies to include derivatives concluded with the aforementioned objectives as a cover asset as well, while the NPV based balance of these liabilities cannot exceed 12% of the NPV of liabilities deriving from outstanding mortgage bonds.

Further changes take places from July 8, 2022 in line with the legal harmonization:

> At least 2% overcollaterization is prescribed for the mortgage bonds in line with Section 14 (17).

> In order to cover the net liquidity outflow, the mortgage bond program shall contain a cover pool liquidity buffer composed of liquid assets. The cover pool liquidity buffer shall cover the maximum cumulative net liquidity outflow over the next 180 days Section 14/B (1 and 2).

> According to the Section 14/C (1) of the Mortgage Act a mortgage loan company may issue mortgage bonds with extendable maturity if the requirements of the Act are satisfied. The maturity can be extended based on objective triggers specified in advance in the issue documentation and not at the discretion of the mortgage loan company. The extension of the maturity may take place only once and may not exceed 12 months.

> The label 'European Covered Bond' and 'European Covered Bond (Premium)' and its official translations also may be used if all the provisions of the Act are fulfilled. (Section 19/A (1 and 2).

IV. VALUATION AND LTV CRITERIA

Loans secured by a residential real estate can be considered as ordinary collateral to 70% of the mortgage lending value ("*hitelbiztosítéki érték*") of the property. In case of loans secured by commercial real estate the limit is 60%.

The rules of calculation of the mortgage lending value are included in the Decree of the Minister of Finance No. 25/1997 on the Calculation Methods of the Mortgage Lending Value of Real Estate not Qualifying as Agricultural Land and the Decree of the Minister of Agriculture No. 54/1997 on the Calculation Methods of the Mortgage Lending Value of Real Estate Qualifying as Agricultural Land. Both decrees prescribe the use of comparative methods, and prescribe the application of the principle of carefulness in the valuation process. Furthermore, they also determine the validity of the valuation report.

Mortgage loan companies may also provide appraisal services to determine the market value and the mortgage lending value of real properties.

Mortgage lending value calculation provisions refer to the sustainable aspects of the property. The mortgage loan company's internal regulation for determining mortgage lending value is based on methodological principles defined in the above decrees. Such internal regulations are also subject to the former approval of the MNB.

With the amendment of Decree 25/1997 PM in February 2021, the AVM (Automated Valuation Method) practice for properties has become applicable in Hungary, according to which it is possible to disburse mortgage loans on the basis of statistical valuation for certain types of properties, LTVs and geographical locations.

V. ASSET – LIABILITY MANAGEMENT

As indicated above, the Mortgage Bank Act provides that mortgage loan companies shall always possess cover surpassing the principal of outstanding mortgage bonds and the interest thereon. Mortgage loan companies shall comply with the above requirements as follows:

> The aggregate amount of the outstanding principal claims considered as coverage, reduced by the amount of any value adjustments, shall exceed 100% of the amount of the nominal value of the outstanding mortgage bonds; and

> The aggregate amount of interest accrued on the outstanding principal claims considered as coverage, reduced by the amount of any value adjustments, shall exceed 100% of the amount of interest accrued on the nominal value of the outstanding mortgage bonds (Section 14 (2) of the Mortgage Bank Act).

Under Section 14 (4) of the Mortgage Bank Act the amount of coverage for mortgage bonds shall always be calculated and published at both their nominal and present value.

In the case of currency mismatch between mortgage bonds and collateral assets, mortgage bond issuers are obliged to enter into derivative transaction to reduce currency risk with restrictions defined in the Act.

VI. TRANSPARENCY

Mortgage loan companies shall publish the amount of the nominal value and the accrued interest of the outstanding mortgage bonds as well as the value of the coverage assets in a national daily newspaper and in the Exchange Journal as of the last day of each quarter, before the last day of the next month. Such figures need to be certified by the coverage supervisor and disclosed to the MNB as well. Based on the amendment of MNB's Business Conditions of forint and foreign exchange transactions – effective from 11 November 2019 – domestic mortgage bond issuers are required to publish on their own websites the transparency report defined by the MNB at the end of each quarters with the reporting date of the end of the previous quarter, as a condition for ensuring the repo-eligibility of issued mortgage bonds at MNB. Since the MNB announced its green programmes including the Green Covered Bond Purchasing Programme, the required transparency report mentioned above is supplemented with data of green coverage and green covered bond issued. From July 8, 2022 the amended Mortgage Bank Act requires mortgage bond issuers to publish detailed (i.e.: loans by regional distribution, remaining maturity structure of cover pool loans, green covered bond, green mortgage loans etc.) information on their cover pool and covered bonds with a quarterly frequency.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The coverage supervisor (cover pool monitor) shall be appointed by the mortgage loan company and approved by MNB. According to Section 16 of the Mortgage Bank Act, a company auditor or an auditor may be appointed; however, the coverage supervisor may not be identical with the auditor of the mortgage loan company.

As a matter of fact, Hungarian mortgage loan companies have had one of the "big four" audit companies as coverage supervisor from the beginning of their operations. The coverage supervisor is responsible for monitoring and certifying, on a permanent basis. From July 8, 2022 not only public accounting firms, but natural persons also may be appointed as property supervisors. The main tasks of the property supervisors are: continually monitor:

> the existence of eligible security; and

> the registration of the eligible security in the coverage register. In accordance with Section 11 (2) (n) of the Mortgage Bank Act, a certificate from the coverage supervisor shall be attached to each mortgage bond regarding the existence of the coverage.

According to section 16 (7) of the Mortgage Bank Act, a coverage supervisor may be appointed for a fixed period of time, not exceeding five years, however, he may be re-appointed following the termination of the period of his appointment. Although the contract of appointment concluded between the mortgage loan company and the coverage supervisor is governed by civil law, it may not be lawfully terminated without the approval of the MNB. Within the scope of his coverage supervision activities, the coverage supervisor may not be instructed by the mortgage loan company.

The MNB is responsible for verifying the compliance of the credit institutions, including the mortgage loan companies, with the Credit Institutions Act and other acts e.g. the Mortgage Banks Act, and applicable banking regulations. The MNB is entitled to impose various sanctions on credit institutions, including warnings of non-compliance, withdrawing licenses and imposing fines on credit institutions and their management. Section 22 and 23 of the Mortgage Bank Act provides that the Hungarian Financial Supervisory Authority shall exercise special supervision over mortgage loan companies in addition to the provisions of the Credit Institutions Act and the provisions of the Capital Markets Act. Within the framework of such special supervision, MNB shall draw up an analysis schedule and conduct on site audits of mortgage loan companies according to the analysis schedule it compiles.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Pursuant to the Mortgage Bank Act a cover pool administrator will be delegated to the insolvent mortgage loan company to safeguard the interests of bondholders and derivative partners. The cover pool administrator cannot be identical with the insolvency administrator of the mortgage loan company. The cover pool administrator should provide for the timely satisfaction of principal and interest claims of bondholders and derivative partners in case of a possible insolvency situation. The cover pool administrator will only safeguard the interests of bondholders and derivative partners and will also have an access to the part of assets not qualifying as coverage and those not recorded in the cover register. The transfer of the portfolio or parts of it to another mortgage loan company may grant for liquidity, however, the transfer of the portfolio or parts of it requires the prior written consent of the MNB.

As a general rule, Section 20/A (4) of the Mortgage Bank Act declares that the cover pool administrator is obliged to maintain the liquidity of the pool on a constant basis, allowing transfer of the pool or parts of it to another mortgage loan company and to enter into derivative transactions. Within two years after the commencement of the liquidation procedure, both the cover pool administrator and the bondholders may request the court to complete the cover from the general insolvency estate (Section 20/A (7)). The cover pool administrator shall be entitled to receive remuneration for his work and refund of appropriate expenses. Although holders of the mortgage bonds, derivative partners or the coverage supervisor may inform MNB or the only competent Metropolitan Court Budapest on issuer default, after proving all relevant circumstances, it is only the MNB who is entitled to initiate an insolvency proceeding against the mortgage loan company.

Hungarian legal provisions also provide for a wide-range of measurements, including extraordinary measurements, to be taken by the MNB prior to any insolvency situation.

For example, the MNB is entitled to delegate a supervisory commissioner to the mortgage loan company. This extraordinary measurement may be taken by the MNB prior to the commencement of any insolvency procedure – in accordance with Section 157 (1) of the Credit Institution Act. In this case both the rights of the owners of the mortgage loan company and the rights of the management of the mortgage loan company will be restricted in order to guarantee the satisfaction of the claims of the mortgage loan company's creditors, e. g. bondholders' and derivative partners' claims. Pursuant to the Section 21 (1) in the course of execution proceedings against a mortgage loan company, Act no LIII of 1994 on Execution by Court shall be applied with the deviations set forth in subsections (2)-(3).

Moreover, pursuant to the Section 58 (1) c) of the Act XXXVII of 2014 on the further development of the system of institutions strengthening the security of the individual players of the financial intermediary system: the scope of the bail-in does not extend to mortgage covered bonds.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The legislation when taken together with the practices, processes and procedures across the industry should fall within the criteria of Article 129 of the Capital Requirements Regulation (CRR). Hungarian mortgage bonds comply with the requirements of Article 52(4) UCITS as well as with those of Article 129(1) CRR.[1]

From July 8, 2022 the amended Mortgage Bank and Mortgage Bond Act becomes effective providing full compliance with the Directive (EU) 2019/2162 of the European Parliament and of the Council on the Issue of Covered Bonds and Covered Bond Public Supervision and Amending Directives 2009/65/EC and 2014/59/EU.

Hungarian covered bonds issued in euro zone countries qualify as European Central Bank (ECB) eligible.

X. ADDITIONAL INFORMATION

The 20/2015. (VI.29.) MNB Decree introduced the Mortgage funding adequacy ratio (MFAR) from 1 April 2017. MFAR = HUF liabilities backed by household mortgage loans / net stock of residential HUF mortgage loans with a residual maturity longer than 1 year. The original minimum required level of the ratio was set at 15%, while it was raised to 20% from 1 October 2018. The ratio was increased further to 25% from 1 October 2019, and a further increase to 30% of the ratio is announced by MNB from 1 October 2023.

The MNB launched its new Green CB Purchasing Progamme in August 2021. The MNB's main goal is to contribute to the development of the domestic green mortgage bond market and encourage the sector's green mortgage loan activities, through targeted purchases. The Programme was temporary suspended in April 2022.

In September 2021 the Hungarian government decided to further extend the moratorium from November 1, 2021 to June 30, 2022 – *referred as 'Moratorium 3'*. However, the extension is not automatic anymore, as the clients must submit their Opt-in application to the bank by October 31, 2021. For those who are eligible for the Moratoria 3, the extension will be on an ongoing basis.

Based on the Government Decree No. 782/2021. (XII.24.) interest rates on floating rate mortgage loans were capped at levels based on reference rates valid as of October 27, 2021 between January 1, 2022 and June 30, 2022.

Issuers: OTP Jelzálogbank Zrt. (OTP Mortgage Bank Ltd.), Takarék (ex FHB) Jelzálogbank Nyrt. (Takarek (ex FHB) Mortgage Bank Ltd.), UniCredit Jelzálogbank Zrt. (UniCredit Mortgage Bank Ltd), Erste Jelzálogbank Zrt. (Erste Mortgage Bank Ltd.), and K&H Jelzálogbank Zrt. (K&H Mortgage Bank Ltd.).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Hungarian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): https://hypo.org/ecbc/covered-bonds/.

3.18 ICELAND

By Eiríkur Magnús Jensson and Kristín Erla Jónsdóttir Arion Bank

I. FRAMEWORK

In Iceland, the issuance of covered bonds is governed by the Icelandic Covered Bond Act, which came into force on 20 March 2008 (Lög nr. 11/2008 um sértryggð skuldabréf, hereinafter the "**ICBA**"). The ICBA supersedes the general bankruptcy law to the extent that it grants covered bond investors a priority claim on eligible cover assets (ICBA: Chapter VII). Rules of the Financial Supervisory Authority no. 528/2008 (Reglur nr. 528/2008, hereinafter the "**ICBR**") established by the Icelandic Financial Supervisory Authority (Fjármálaeftirlitið, hereinafter the "**FME**") complement the legislation. These rules define in more detail the criteria for obtaining a covered bond issuance license, the universe of eligible cover assets, valuation procedures for eligible cover assets, asset and liability management, and the form and maintenance of the cover register.

II. STRUCTURE OF THE ISSUER

The FME grants licenses for the issuance of covered bonds. Licenses to issue covered bonds can only be granted to licensed commercial banks, savings banks and credit undertakings. To qualify as an issuer, certain criteria must be met. These criteria include the submission of a financial plan, confirmed by a state authorised public accountant, proving the issuer's financial stability and that the issuance is in accordance with the ICBA. The FME has the right to withdraw the license should the issuer be in material breach of the ICBA or if the issuer has failed to issue covered bonds within one year of receiving the license (Table 1).

> Table 1: Licence needed to issue covered bonds

Requirements for issuance license

- Issuer must supply the FME with a board resolution that the board approves the application for a covered bond license.
- Description of the proposed bond issuance and how the issuer intends to keep and organise the covered bond register.
- Information about the covered bond register, e.g. how the issuer will maintain the register as well as how the register will be supervised.
- The FME can allow an issuer to convert previously issued bonds used to finance assets that are eligible under ICBA into covered bonds.
- The issuer well plan, confirmed by a public accountant, proving the issuer's financial stability for at least the next three years; a description of the proposed covered bond issuance and how the issuer intends to organise and administrate the covered bond issuance; and the covered bond register as well as written confirmation from the issuer that he and the planned bond issue comply with the ICBA and ICBR.
- The issuer must submit information about IT systems used in relation to the covered bond issuance.
- The issuer must submit any other information that is relevant for the proposed bond issuance.
- A written statement from the issuer that it and the issue fulfil the requirements made by the ICBA and the ICBR.

The cover assets represent a claim of the covered bond issuer and remain on the balance sheet. There is no subsequent transfer of cover assets to another legal entity. The covered bonds are direct, unconditional obligations on the part of the issuer. Outstanding covered bonds are backed in their entirety by the cover pool. Hence, there is no direct legal link between a single cover asset and a particular covered bond series. In the event of issuer insolvency, the cover pool is bankruptcy remote from the general insolvency estate of the issuer and exclusively available to meet outstanding claims under the issue of the covered bond investors. It should also be noted that the covered bond investors enjoy recourse to the insolvency estate of the issuer, ranking pari passu with senior unsecured investors.

III. COVER ASSETS

Eligible assets in the covered bond register are mortgage loans and public sector assets (ICBA Chapter II, Article 5). The ICBA does not require a separate cover pools for mortgage and public sector cover assets. Both asset classes can be mixed in one cover pool. Icelandic covered bond issuers have issued covered bonds where the asset register consists exclusively of residential mortgages.

Eligible assets ("**Cover Assets**") according to ICBA are:

> Mortgages secured by residential housing in member states[1];

> Mortgages secured by industrial, office or commercial property in member states;

> Mortgages secured by farms and other real estate used for agricultural purposes in member states; and

> Public sector assets defined as bonds issued by the Icelandic state or other member state, a municipality in Iceland or in another member state, or guaranteed by such public authority.

Derivative contracts

The ICBA authorise the use of derivatives for hedging interest and currency risk. The derivatives must be structured such that premature termination is not triggered by an issuer default or a demand by the counterparty. Derivative counterparties must have a rating from a rating agency approved by the FME. The minimum is a long-term rating of A3/A-/A- (Moody's/S&P/Fitch) or short-term rating of P2/A2/F2. If the counterparty's rating falls below the minimum level, the issuer of covered bonds can:

> Request additional collateral;

> Terminate the derivative contract and open a new derivative contract with a counterparty that meets the minimum rating requirement, or;

> Request that the counterparty provides a guarantee from a third party that meets the minimum rating requirement.

Substitute assets

The ICBA allows for the inclusion of the following assets as Substitute Collateral (Article 6):

> Demand deposits with a regulated financial undertaking;

> Deposits with or claims against a member state or a central bank in a member state;

> Claims against other legal entities which, the FME views as not involving greater risk than the aforementioned options.

Further, FME may approve the following as substitute collateral:

> Claims against municipalities in member states;

> Claims against a regulated financial firm other than demand deposits with a regulated financial undertaking (as referred to above), provided the final maturity of the claim is within one year of issuance;

1 Member state: a state which is a party to the Agreement on the European Economic Area.

> Claims against non-Icelandic development banks listed in rules adopted by the FME;
> Claims against other legal entities which do not involve greater risk than the substitute collateral referred to in other items of this paragraph.

It should be noted that Substitute Collateral may not comprise more than 20% of the value of the cover pool. The FME may however authorise an increase in the proportion of substitute collateral in the cover pool to as much as 30% of its value.

IV. VALUATION AND LTV CRITERIA

The ICBA defines valuation principles for the properties that are used as a Cover Assets (ICBA: Chapter III, Article 7). An assessment of the market value of real estate shall be based on the selling price in recent transactions with comparable properties. If the market value of real estate is not available, it shall be determined by a specific valuation. The valuation shall be based on generally accepted principles for market valuation of real estate. Among the data that can be used as a basis is data on real estate price developments from the Land Registry of Iceland, together with other generally accepted systematic collection of real estate price data.

If an issuer assesses the market value of real estate, the Independent Inspector (as defined below) must verify that the appraisal is based on a generally accepted methodology. The Independent Inspector may re-assess the market price of one or more properties if he/she regards the valuation as incorrect.

An appraisal of the market value of real estate must be in writing and must specify the methodology used, who carried out the appraisal and when it was made.

For the various mortgage types eligible as Cover Assets, the maximum LTV ratios apply (ICBA: Chapter III, Article 7):

> 80% of the value for real estate.
> 70% of the value for real estate intended for agricultural use (some restrictions apply).
> 60% of the value for real estate, where the property is intended for office or commercial use.

V. ASSET – LIABILITY MANAGEMENT

The ICBA requires that the nominal value of the Cover Assets at all times exceed the aggregate nominal value of claims arising from outstanding covered bonds against the issuer (ICBA: Chapter V, Article 11). In addition, the law requires that on a net present value (NPV) basis, cover assets, including derivatives, always exceed the corresponding value of the interest and principal of outstanding covered bonds, taking into account the effects of stress-test scenarios on interest and currency risk set by the FME. The FME defines the stress test for interest-rate risk as a sudden and sustained parallel shift in the reference curve by 100bps up and down. The reference curve is based on Icelandic government bonds for covered bonds in Icelandic krona but swap rate curves for other currencies. Likewise, it defines currency risk as a 10% sudden and sustained change in the relevant foreign exchange rate between the currency of covered bonds and the currency of cover assets (ICBR: Chapter 4, Article 8). The ICBA does not require a mandatory level of minimum overcollateralisation ("**OC**"). However, the issuer can adhere to a self-imposed OC level for structural enhancement, as the ICBA protects any OC in the cover pool in the event of issuer insolvency.

Finally, the issuer shall ensure that the cash flow with respect to the Cover Assets, derivatives agreements and the covered bonds are such that the issuer is always able to meet its payment obligations towards holders of covered bonds and counterparties in derivatives agreements (ICBA: Chapter V, Article 12). The issuer should be able to account for these funds separately.

VI. TRANSPARENCY

The issuers currently present information regarding their cover pool and outstanding covered bonds on a monthly or at least on quarterly basis. This information is currently available on the issuer's website.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Issuers of covered bonds fall under the supervision of the FME, which monitors the issuers' compliance with the ICBA and other related regulatory provisions (e.g. ICBR). If a covered bond issuer is in a material breach of its obligation under the legal framework, the FME can give the issuer a formal warning or revoke the issue license altogether. The FME may also revoke a license if the institution has declared that it has no intention to use the license to issue covered bonds or if the institution has not made use of the license within a year from the date of receiving the license. The revocation may be combined with an injunction against continuing the operations and with the imposition of a conditional fine. In any case, the FME must determine how the operations should be wound up (ICBA: Chapter IX, Articles 24–29).

Each issuer must appoint an independent and suitably qualified cover pool inspector (the "**Independent Inspector**" and such appointment must be validated by the FME. The duties of the Independent Inspector are to monitor the register and verify that the covered bonds, the derivatives agreements and the Cover Assets are correctly recorded. The Independent Inspector also ensures compliance with matching and market risk limits in accordance with ICBA. The institution is obliged to provide the Independent Inspector with any information requested relating to its covered bond operations. The Independent Inspector must submit a report of the inspection to the FME on an annual basis and must notify the FME as soon as he/she learns about an event deemed to be significant to the supervisory authority (ICBA: Chapter VII, Articles 21–23).

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Cover register

The issuer must keep a detailed register of Cover Assets derivative contracts and outstanding covered bonds (ICBA: Chapter VI, Section 13). The law further specifies the form and content of such a register, which must be easily accessible to the FME and the Independent Inspector. The registration legally secures covered bond holders and derivatives counterparties a priority claim on the cover pool in the event of issuer insolvency (ICBA: Chapter 7, Section 15). Prior to an issuer being declared insolvent, cash flows accruing from the Cover Assets must be accounted for separately by the issuer. In the event of issuer default, covered bond investors and derivative counterparties have the same priority claim on these funds as they have on the cover pool. Moreover, cash flow accruing from the Cover Assets following issuer insolvency must be registered in the cover pool.

Issuer insolvency

In the event of issuer insolvency, the Cover Assets and the respective covered bonds are segregated from the insolvency estate of the issuer. An issuer default does not trigger the premature termination of registered derivative contracts. Covered bond holders and registered derivative counterparties have a priority claim on the cover pool and cash that derives from the pool, ensuring timely repayment to original agreed terms, as long as the pool complies with the ICBA. It should be noted, however, that the cover pool does not constitute a separate legal estate.

Cover pool insolvency and preferential treatment

In the event that the cover pool breaches eligibility criteria, covered bonds are accelerated. Covered bond investors and derivative counterparties would have priority claim on the proceeds from the sale of the cover assets, ranking pari passu among themselves. If the proceeds are insufficient to repay all liabilities on outstanding covered bonds, covered bond investors and derivative counterparties have an ultimate recourse to the insolvency estate of the issuer, ranking pari passu with senior unsecured investors.

Survival of OC

Any OC present in the cover pool at the time of issuer insolvency is bankruptcy-remote provided it is identified in the cover pool register. Indeed, the CBIA requires full repayment of outstanding claims on covered bonds and registered derivatives before Cover Assets are available to satisfy claims on unsecured creditors. The law does not provide for the appointment of a special cover pool administrator in case of issuer insolvency. The receiver-in-bankruptcy represents the interest of both the covered bond investors and the unsecured investors. The receiver has the right to use OC to pay advance dividends to other creditors of the bankrupt issuer if the pool contains more assets than necessary. If the Cover Assets later prove to be insufficient, these advance dividend payments can be reclaimed.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The legislation when taken together with the practices, processes and procedures across the industry should fall within the criteria of Article 129 of the Capital Requirements Regulation (CRR[2]). Icelandic covered bonds comply with the criteria of Article 52(4) UCITS and with the covered bond criteria defined in Article 129(1) CRR. The ICBA explicitly lists mortgages against property for agricultural purposes and mortgages against the pledging of tenant-owner rights as eligible cover assets, while the CRR does not. In addition, issuers can impose self-restrictions to ensure that their covered bond issues comply with the CRR. Icelandic covered bonds are not eligible for repo transaction with the Icelandic Central Bank.

X. ADDITIONAL INFORMATION

Legislative covered bonds in Iceland

Arion Bank and Íslandsbanki were both granted a license to issue covered bonds under ICBA in 2011 and both followed up by issuing covered bonds denominated in Icelandic krona to domestic investors. Landsbankinn was granted a license to issue covered bonds in 2013 and issued their first covered bonds in June 2013. The banks use their covered bond programs to fund their residential mortgage portfolios.

Historically most of the mortgages in Iceland were inflation linked. In recent years there has been a general shift from inflation linked mortgages to a more traditional style fixed rate and floating rate mortgages. The market for mortgages has changed significantly recently with commercial banks being the primary providers of new mortgages replacing government owned Housing Financing Fund and domestic pension funds as primary providers of mortgages.

Issuers: There are currently three issuers in Iceland – Arion Bank, Íslandsbanki and Landsbankinn.

COVERED BOND LABEL **:** Arion Bank (1 pool).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Icelandic market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

2 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): https://hypo.org/ecbc/covered-bonds/.

3.19 IRELAND

By Group Legal Services team, Bank of Ireland and Nick Pheifer, (formerly of DEPFA BANK)

I. FRAMEWORK

Irish covered bonds benefit from the protection of specific covered bond legislation in the Irish Asset Covered Securities Acts 2001 and 2007 (the "ACS Acts") and the regulations and regulatory notices issued thereunder. The framework provides for the issuance of asset covered securities ("ACS") secured on public credits, mortgage credits (each, as defined below) and commercial mortgage credits (being obligations secured on commercial property assets). There is currently no issuer of ACS secured on commercial mortgage credits in the Irish market and consequently this chapter focuses on the framework applicable to ACS secured on public credits and mortgage credits. The ACS Acts were recently amended by the European Union (Covered Bonds) Regulations 2021 which came into operation on 8 July 2022 and give to the EU Directive (2019/2162) on the harmonization of covered bonds within the EU (the "covered bond directive" or "CBD").

II. STRUCTURE OF THE ISSUER

An issuer of ACS (an "ACS Issuer") must be an authorised credit institution and also be registered under the ACS Acts as a 'designated' credit institution. Such designated status is granted by the Central Bank of Ireland ("CBI") and an ACS Issuer will be registered as a designated public credit institution (a "DPCI") (authorised to issue public credit covered securities) and/or as a designated mortgage credit institution (a "DMCI") (authorised to issue mortgage credit covered securities). The CBD also requires an ACS Issuer to secure permission from the CBI (as the relevant authority) to operate a covered bond programme and such permissions will be published on the CBI website. The requirements for a covered bond programme include: having an adequate programme of operations; adequate policies, processes and methodologies; dedicated management and staff; and a sufficient administrative and monitoring set-up.

The ACS Issuer holds the assets backing the ACS on its balance sheet. The collection of either mortgage credit assets or public credit assets (the "cover assets") backing the issue of ACS (the "cover pool") is dynamic in the sense that the ACS Issuer may move cover assets in and out of the cover pool provided that it does so in accordance with the provisions of the ACS Acts. The ACS Issuer must maintain a register (a "cover register") of all ACS issued, all cover assets hedge contracts and the cover assets (including any substitution assets and any cover assets constituting overcollateralisation) and any amendment to the cover register can only be effected with the approval of a cover-assets monitor (the "CAM") which is an independent professional third party, or the CBI (see further section VII below).

Statutory preference

The claims of ACS holders are protected by a statutory preference under the ACS Acts. As preferred creditors, upon an ACS Issuer insolvency, ACS holders are entitled to have recourse to the cover assets included in the cover pool ahead of all other creditors of the ACS Issuer and pari passu with other preferred creditors (such as the pool hedge counterparties – see further section V below). In this way the ACS holders have protection against the general Irish insolvency laws.

Restriction on business activities

The ACS Acts provide that an ACS Issuer may not carry on a business activity other than a permitted business activity as set out in the ACS Acts. Permitted business activities comprise dealing in and holding public credit assets or mortgage credit assets (depending on the ACS Issuer's designation) and limited classes of other assets, engaging in activities connected with the financing and refinancing of such assets, entering into certain hedging contracts, holding collateral under cover assets hedge contracts (referred to in the ACS Acts as "pool hedge collateral") and engaging in other activities which are incidental or ancillary to these activities. The ACS

Acts limit the scope of non-core ACS business that an ACS Issuer can undertake by restricting its dealing in or holding of financial assets that are not otherwise eligible for inclusion in the cover pool to 10% of the total of all the ACS Issuer's assets.

III. COVER ASSETS

The classes of assets which are eligible for inclusion in a cover pool are determined by the designation of the ACS Issuer and have been recently updated by the changes imposed by the CBD.

DPCIs

The classes of asset eligible for inclusion in the cover pool of a DPCI ("public credit assets") are financial obligations (collectively, "public credits"), including obligations given as a guarantor or surety and indirect or contingent obligations, in respect of money borrowed or raised where the obligor is any one of the following:

> Central governments, central banks (each, a "Sovereign"), public sector entities, regional governments or local authorities (each, a "Sub-sovereign") in any EEA country;

> Sovereigns in Australia, Canada, Japan, New Zealand, the Swiss Confederation or the USA (each, an "Eligible Non-EEA Country");

> Sub-sovereigns in any Eligible Non-EEA Country; and

> Multilateral development banks or international organisations, as referred to in Articles 117 and 118 of the Capital Requirements Regulation ("CRR").

Risk-weighting and credit worthiness tests apply to the categories of cover assets outside the EEA countries to comply with the CRR covered bond eligibility requirements. Sovereign obligations from an Eligible Non-EEA Country must have an independent credit rating of at least step 1. Sub-sovereign obligations from an Eligible Non-EEA Country must have an independent credit rating of at least step 1 and a risk-weighting at least equal to that of an institution, central government or central bank. Sovereign and Sub-sovereign obligations from an Eligible Non-EEA Country with credit ratings below step 1 but at least step 2 may also be included in the cover pool provided that in total they do not exceed 20% of the nominal amount of outstanding ACS.

DMCIs

Those assets eligible for inclusion in the cover pool of a DMCI ("mortgage credit assets") are financial obligations (collectively, "mortgage credits"), including obligations given as a guarantor or surety and indirect or contingent obligations, in respect of money borrowed or raised that are secured by a mortgage, charge, or other security on residential or commercial property that is located in any EEA country or any eligible Non-EEA country. This is subject to a concentration limit, for mortgage credit assets secured on commercial property, of 10% of the total prudent market value of all mortgage credit assets and substitution assets in the cover pool. Non-performing mortgage credit assets may not be added to a cover pool. Furthermore, a mortgage credit asset may not be counted as part of a cover pool if a building related to that mortgage credit asset is being or is to be constructed until the building is ready for occupation as a commercial or residential property. A mortgage credit institution may also include securitised mortgage credits in its cover pool subject to certain credit quality and other criteria and a concentration limit of 10% of the aggregate value of the related outstanding ACS.

Substitution assets

Substitution assets can be included in cover pools if they comply with applicable CRR requirements and certain other restrictions. In principle, these are deposits having a minimum credit rating of step 3 and a maximum maturity of 100 days with eligible financial institutions and used to meet new liquidity buffer requirements.

IV. VALUATION AND LTV CRITERIA

DPCI

Public credit assets maintained in the cover pool of a DPCI are ascribed a prudent market value equal to 100% of the amount of the related public credit outstanding on the date of valuation.

DMCI

The maximum prudent loan to value ("LTV") levels for mortgage credit assets included in the cover pool of a mortgage credit institution are 75% for mortgage credit assets backed by residential property and 60% for those backed by commercial property. Prudent LTV levels for mortgage credit assets in the cover pool can exceed the 75% threshold, however the balance of the mortgage credit above this threshold is disregarded for valuation purposes.

A DMCI is first required to determine the market value of a property asset at the time of origination. Property valuations are conducted by independent valuers. The DMCI then calculates the prudent market value of such property asset at the time of inclusion of the asset in the cover pool and also at such intervals (at least annually) as may be specified by the CBI. In addition, a DMCI is required to calculate the prudent market value of mortgage credit assets and securitised mortgage credits included in the cover pool on a quarterly basis, or more frequently if so instructed by the CAM, for the purposes of demonstrating compliance with the asset-liability and overcollateralisation requirements of the ACS Acts. In practice, the prudent market value of relevant property assets is calculated on a quarterly basis also as this calculation forms part of the valuation process for mortgage credit assets.

For these subsequent calculations, the DMCI must apply the house price index published by Permanent TSB and/or the house price index published by the Irish Central Statistics Office (depending on the date of origination) to the valuation obtained at origination, with same being verified by the CAM on a monthly basis.

V. ASSET-LIABILITY MANAGEMENT

The ACS Acts include important asset-liability controls to minimise various market risks.

> Duration matching: The weighted average term to maturity of a cover pool cannot be less than that of the related ACS.

> Overcollateralisation: The prudent market value of the cover pool must be at least 3% greater than the total of the principal amount of the related ACS in issue (see also Overcollateralisation below).

> Interest matching: The amount of interest payable on cover assets over a 12-month period must not be less than the amount of interest payable on the related ACS over the same 12-month period.

> Currency matching: Each cover asset must be denominated, after taking into account the effect of any cover assets hedge contract, in the same currency as the related ACS.

> Interest rate risk control: The net present value changes on the balance sheet of an ACS Issuer arising from (i) 100bps upward shift, (ii) 100bps downward shift and (iii) 100bps twist, in the yield curve, must not exceed 10% of the ACS Issuer's total own funds at any time.

> A liquidity buffer in the cover pool of liquid assets available to cover net liquidity outflow accumulative for 180 days.

Hedge contracts

Hedge contracts with eligible counterparties are used in the cover pool to minimise risks on interest rates, currency exchange rates, credit or other risks that may adversely affect the ACS Issuer's business activities that relate to an ACS or cover assets. All such hedge contracts are required to be entered on the cover register by the ACS Issuer. Pool hedge counterparties rank as preferred creditors, pari passu with the ACS holders, provided they are not in default of their financial obligations under that hedge contract. Upon the insolvency of an ACS Issuer, a hedge contract will remain in place subject to its terms. Any collateral posted under a hedge contract by a pool hedge coun terparty must be recorded on a separate register maintained by the ACS Issuer.

Overcollateralisation

The ACS Acts prescribe a minimum overcollateralisation of ACS for DMCIs and DPCIs of 3% calculated on a present value basis. It has been the market practice for ACS Issuers to contractually commit to higher levels.

The CAM is responsible for monitoring the levels of legislative and contractual overcollateralisation. Upon an ACS Issuer insolvency, ACS holders will benefit from any cover assets which make up the overcollateralisation to the extent of their claims.

VI. TRANSPARENCY

Disclosure in financial statements

All ACS Issuers are required to make specific disclosures in relation to their cover assets in their annual financial statements.

DPCIs

A DPCI is required to disclose as at the date to which its financial statements are made up:

> the geographic location of its public credit assets and the volume and percentage of assets in each such location; and

> details of public credit assets secured on loans to multilateral development banks and international organisations and the volume and percentage of such assets.

DMCIs

A DMCI is required to disclose, in respect of the date to which its financial statements are made up, details of:

> the number of mortgage credit assets, broken down by amount of principal outstanding;

> volume and percentage of assets in each geographic location;

> the number and principal amounts outstanding of non-performing mortgage credit assets;

> whether or not any persons who owed money under mortgage credit assets had, during the immediately preceding financial year (if any), defaulted in making payments in respect of those assets in excess of EUR 1,000 (so as to render them non-performing for the purposes of the ACS Acts), and if so, the number of those assets that were held in the cover pool;

> the number of non-performing mortgage credit assets replaced with other assets;

> the total amount of interest in arrears in respect of mortgage credit assets that has not been written off;

> the total amounts of principal repaid and interest paid in respect of mortgage credit assets; and

> the number and the total amount of principal outstanding on mortgage credits that are secured on commercial property.

Disclosure on Issuer Website

An ACS Issuer must provide information on its website (at least on a quarterly basis) about its covered bond programme in sufficient detail to enable investors to assess the profile risks of the programme and to carry out their due diligence. The information shall include: valuations of the cover pool and outstanding ACS; a list of ISIN’s of the ACS; the information required to be disclosed in the financial statements; details in relation to market risk, interest rate risk, currency risk, credit risk and liquidity risk; maturity structure of the ACS and the assets; and the levels of overcollateralization.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

One of the key features of the ACS Acts is the rigorous monitoring role undertaken by the CAM. The CAM is appointed by the ACS Issuer and approved by the CBI.

There are strict eligibility requirements for CAMs. A CAM must be a body corporate or partnership and independent of the ACS Issuer. It must demonstrate to the CBI that it is experienced and competent in (i) financial risk management techniques, (ii) regulatory compliance reporting and (iii) capital markets, derivatives, and, as applicable, public credit business and mortgage credit business. The CAM must also demonstrate that it has sufficient resources at its disposal and sufficient academic or professional qualifications and experience in the financial services industry to satisfy firstly, the designated credit institution and secondly, the CBI, that it is capable of fulfilling this role.

The CAM is responsible for monitoring the cover pool, the ACS Issuer's compliance with specific provisions of the ACS Acts and reporting any breaches to the CBI. The CAM issues regular reports to the ACS Issuer (every 1-4 weeks) and submits a report on a quarterly basis to the CBI.

Some of the CAM's principal obligations include: ensuring that the matching requirements of the ACS Acts with respect to the cover assets and the ACS are met; ensuring that the asset eligibility requirements are met; approving any inclusion in or removal from the cover register, of a cover asset, ACS or hedge contract; checking that the level of substitution assets included in the cover pool does not exceed the prescribed percentage; and ensuring that the legislative and contractual levels of overcollateralisation are maintained.

The CBI is responsible for supervising the ACS Issuers. These responsibilities have become more prescriptive following the implementation of the CBD. In addition, the ACS Issuer must file a compliance report to the CBI on a quarterly basis. The CBI may, with the consent of the Minister for Finance, revoke the registration of an ACS Issuer and/or suspend its business if such ACS Issuer breaches any provision of the ACS Acts as well as impose pecuniary fines or withdraw the permission for a covered bond programme. In addition, the CBI has wide-ranging powers under the Irish Central Banking legislation to impose significant fines and administrative sanctions on ACS Issuers and/or their senior manage ment for contraventions of the ACS Acts.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

As noted above under section II, an ACS Issuer holds its cover assets on its balance sheet. However, the cover assets are ring-fenced from the other assets of the ACS Issuer for the benefit of ACS holders by virtue of (i) their being recorded on the cover register, and (ii) a statutory preference created by the ACS Acts.

Segregation: Cover register

Each ACS Issuer must maintain a cover register including the details of its ACS in issue, the cover assets and substitution assets backing its ACS and any cover assets hedge contracts in existence. The cover register is important as a cover asset or a cover assets hedge contract cannot be described as such unless and until it is recorded on the register. Their registration is prima facie evidence of such assets and hedge contracts being included in the cover pool, entitling the ACS holders and pool hedge counterparties to benefit from the insolvency protection specified in the ACS Acts in respect of such assets and hedge contracts. An ACS Issuer may only remove or amend a register entry with the consent of the CAM or the CBI which further safeguards the interests of ACS holders.

Preferential treatment of ACS holders

Once a cover asset has been entered in the cover register, it will remain a cover asset for the benefit of ACS holders and other preferred creditors until the CAM or the CBI has consented to its removal from the cover register and consequently, the cover pool. Cover assets included in a cover pool do not form part of the assets of the ACS Issuer for the purposes of insolvency until such time as the claims of ACS holders and other preferred creditors under the ACS Acts have been satisfied.

If the claims of the ACS holders (and other preferred creditors, including the pool hedge counterparties) are not fully satisfied from the proceeds of the disposal of the cover assets, such parties are, with respect to the unsatisfied part of their claims, to be regarded as unsecured creditors in the insolvency process.

Impact of resolution or insolvency proceedings on ACS and hedge contracts

Upon resolution or insolvency of an ACS Issuer, all ACS issued remain outstanding and all cover assets hedge contracts will continue to have effect, subject in each case, to the terms and conditions of the documents under which they were created.

The claims of ACS holders on the cover pool are protected by operation of law. Cover assets and hedge contracts that are included in a cover pool are not liable to interference by a bankruptcy custodian or similar person whether by attachment, sequestration or other form of seizure, or to set-off by any persons, that would otherwise be permitted by law so long as claims secured by the insolvency provisions of the ACS Acts remain unsatisfied. ACS holders have recourse to cover assets ahead of all other non-preferred creditors regardless of whether the claims of such other creditors are preferred under any other enactment or any rule of law and whether those claims are secured or unsecured. Under a resolution, the CBI shall ensure that the rights and interest of investors in the ACS are preserved by ensuring the continued sound management of the covered bond programme during the resolution process.

The role of the manager

The ACS Acts makes provision for the management of the asset covered securities business of an ACS Issuer upon an ACS Issuer insolvency through the services of the Irish National Treasury Management Agency ("NTMA"). If no suitable manager can be found by the CBI or the NTMA, the NTMA will attempt to locate an appropriate body corporate as a new parent entity for the ACS Issuer. Failing that, the CBI will appoint the NTMA to act as a temporary manager until a suitable manager or new parent entity is found. Upon appointment, a manager will assume control of the cover assets, the asset covered securities business and all related assets of the ACS Issuer. The manager is required to manage the ACS business of the ACS Issuer in the commercial interests of the ACS holders and the pool hedge counterparties. The manager will have such powers as may be designated to it by the CBI under its notice of appointment.

IX. RISK-WEIGHTING AND COMPLIANCE WITH EUROPEAN LEGISLATION

The ACS meet the requirements of Article 52(4) UCITS. The eligibility of cover assets set out in the ACS Acts also match the criteria for the preferential risk-weighting of covered bonds set out in the CRR[1]. The ACS Acts have been amended to take account of the CBD which came into operation on 8 July 2022. Compliance with the ACS Acts enables the ACS Issuers to use the label "European Covered Bond" and compliance with the ACS Acts and Article 129 of the CRR enables the ACS Issuer to use the label "European Covered Bond (Premium)".

Issuers: As of 8 July 2022, there are two ACS Issuers with outstanding covered bonds – Bank of Ireland Mortgage Bank and AIB Mortgage Bank.

COVERED BOND LABEL : AIB Mortgage Bank (1 pool), Bank of Ireland Mortgage Bank (1 pool).

1 For further information on the UCITS Directive and the Capital Requirements Regulation (CRR) please see: https://hypo.org/ecbc/covered-bonds/.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.
In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database). For further national information on the Irish market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.20 ITALY

By Marco Marino, Italian Banking Association

I. FRAMEWORK

The legislative decree n. 190 of 5 November 2021 (hereinafter, called the new framework) has implemented the new European framework on covered bonds.

The new primary disposals apply to covered bonds issued after the entry into force of the further implementing provisions of the Bank of Italy; covered bonds issued before, continue to be regulated by the previous Italian framework.

Until the issue of the new Bank of Italy rules, the current Italian covered bond framework is mainly regulated by:

> the Law no. 130 of 30 April 1999, which contains also disposals governing the securitisation;

> the regulation of the Minister for the Economy and Finance of 14 December 2006, which established secondary rules, mainly concerning the type of assets eligible for the cover pool, the maximum allowed ratio between covered bonds and assigned assets, the characteristics of guarantee to be provided to bondholders by the SPV;

> the supervisory regulations issued by the Bank of Italy, in relation to the requirements to be complied with by issuing banks, the criteria to be adopted to evaluate the cover assets and the relevant formalities to integrate such assets, as well as the formalities to check that the banks are complying with their obligations.

Under decree law n. 18/2016, article 13-bis, the Italian legislator had set the compliance for "Obbligazioni Bancarie Collateralizzate" (OBC). This instrument is a collateralised bond comparable with the European Secured Notes (ESN) for his structure – double recourse instrument – and since the nature of the eligible assets in the cover pool, mainly: SME loans, corporate bonds, aircraft loans and ship loans.

The new legislative decree n. 190/2021 has confirmed the OBC regulation; secondary regulation of the Minister for the Economy and Finance will specify some features such as the definition of eligible assets and the rules for the issuances.

II. STRUCTURE OF THE ISSUE OF COVERED BONDS

The new framework has confirmed the structure of a covered bond transaction already in force, as follows:

a. Bank transfers' eligible assets to a special purpose vehicle (SPV), whose sole corporate purpose is the purchase of such assets and the granting of a guarantee for the issued securities over which bondholders have a senior claim;
b. The SPV purchases the transferred assets by means of a loan granted or guaranteed to it by a bank (not necessarily the same bank transferring the assets);
c. The bank transferring the assets (or another bank) issues covered bonds;
d. The assets purchased by the SPV are applied to satisfy the rights attaching to the covered bonds and the counterparties of derivative agreements entered into for hedging the risks related to the assets, and to pay the costs of the transaction.

Bondholders hold a preferential claim on the cover assets and the covered bonds are direct, unconditional obligations of the issuer.

The national legislator has exercised the discretion of allowing the issuance of covered bonds with extendible maturity structures such as the calculation of the principal for extendable maturity structures will be based on the final maturity.

The maturity extension is subject to specific triggers and, in the event of the insolvency or resolution of the credit institution issuing the covered bonds, it does not affect the ranking of covered bond investors or invert the sequencing of the covered bond program's original maturity schedule.

III. STRUCTURE OF THE ISSUER

According to the new framework, the Bank of Italy authorizes the programme for the covered bond issuance, verifying compliance with at least the following conditions: (i) an adequate programme's definition; (ii) adequate policies, processes and methodologies aimed at investor protection for the approval, amendment, renewal and refinancing of loans included in the cover pool; (iii) staff dedicated to the administration and control of the covered bond programme covered bond have adequate qualifications and knowledge; (iv) compliance with the new framework and further implementing provisions. The Bank of Italy will issue further disposals on the requirements for the abovementioned authorization.

Under the current Bank of Italy's regulation, covered bonds can be issued by banks with the following prerequisites:

> own funds not lower than EUR 250 million;

> a total capital ratio not lower than 9%.

It is also provided that these requisites must be fulfilled by the transferring banks as well (i.e. cover pool providers) if they are not the issuers.

There are no business restrictions to the issuer's activity, hence there is no special banking principle that needs to be enforced.

Since October of 2018, anticipating the principles expressed in the new European directive, banks who are not compliant with the prerequisites above may lunch a covered bond programme prior a specific communication to the Bank of Italy, giving evidence of several requirements, accompanied by a report from the compliance function.

IV. COVER ASSETS

Under the current framework, the eligible assets as coverage for covered bonds can be:

a) Residential mortgage loans with a maximum LTV of 80% or commercial mortgage loans with a maximum LTV of 60%;

b) Claims owed by (or guaranteed by) the following entities:

   > public entities of EEA member countries and Switzerland with a maximum risk-weight of 20%;

   > public entities of non-EEA member countries with a risk weight of 0% and other entities of non-EEA member countries with a risk weight of 20% (these claims can represent up to 10% of the cover pool)

c) Notes issued under a securitisation transaction backed (for a minimum of 95%) by the claims under the abovementioned letters a) and b), with a maximum risk-weight of 20% under the Standardised approach.

As provided for by the regulation of the Minister for the Economy and Finance, assets must have at least equal liabilities, both on the nominal and NPV bases, and the revenues arising from cover assets must be sufficient to pay coupons to bondholders and to cover the cost of derivative transactions.

The supplementation of transferred assets subsequent to the initial assignment shall be carried out by way of the transfer of additional eligible assets or supplementary eligible assets, under specific requirements.

As regards the transferring of eligible assets to the SPV, the Bank of Italy sets different limits according to the different regulatory capital levels of the issuer (see Figure 1).

> Figure 1

	Regulatory capital level	Transfer limitations
Class A	Tier 1 ratio ≥ 9% and Core Equity Tier 1 ratio ≥ 8%	No limitations
Class B	Tier 1 ratio ≥ 8% and Core Equity Tier 1 ratio ≥ 7%	Eligible assets can be transferred up to 60% of the total
Class C	Tier 1 ratio ≥ 7% and Core Equity Tier 1 ratio ≥ 6%	Eligible assets can be transferred up to 25% of the total

Under the new framework, the following assets will be eligible:

(a) those pursuant to Article 129(1) of Regulation (EU) No 575/2013, if the bank issuing the covered bonds meets the requirements of paragraphs 1a to 3 of Article 129 of that Regulation;

(b) high-quality liquid assets pursuant to the delegated regulation n. 2015/61, that are not issued by the credit institution issuing the covered bonds itself, its parent undertaking, other than a public sector entity that is not a credit institution, its subsidiary or another subsidiary of its parent undertaking or by a securitisation special purpose entity with which the credit institution has close links;

(c) short-term exposures to credit institutions that qualify for credit quality step 1 or 2, or short-term deposits to credit institutions that qualify for credit quality step 1, 2 or 3, in accordance with point (c) of Article 129(1) of Regulation (EU) No 575/2013.

The Bank of Italy will issue further disposals on eligible assets.

V. ASSET-LIABILITY MANAGEMENT

With aim to allow the SPV to fulfil its obligations, issuing banks are required to adopt proper asset-liability management techniques and to perform specific controls, to ensure that the proceeds from the cover pool assets are always sufficient to pay the coupons on the covered bonds, and the overall cost of the transaction.

The new framework has confirmed specific coverage requirements to ensure investor protection and introduced the cover pool liquidity buffer which covers the maximum cumulative net liquidity outflow over the next 180 days. In this regard, the national legislator has exercised the discretion to calculate the liquidity buffer for the period which goes from 31 to 180 days later, until the overlap with the 30-day liquidity coverage requirement of the LCR rules will be removed.

The Bank of Italy could issue further disposals on this item.

VI. COVER POOL MONITOR AND BANKING SUPERVISION

As far as regulatory supervision is concerned, the Bank of Italy sets and monitors, on an ongoing basis, the abovementioned eligibility requirements for issuing banks.

Under the current Bak of Italy regulation, considering the complexity of the contractual aspects and the possible impact on the banks' financial situation, decisions regarding participation in issue programmes shall be preceded by the identification and careful assessment of the objectives pursued and the related risks, by the management body.

In particular, at least every six months and for each operation, issuers have to check: i) the quality of the cover pool; ii) compliance with the predetermined ratio between outstanding covered bonds and cover assets; iii) compliance with transfer limitations and asset integration requirements; iv) the performance of any derivative agreement entered into in order to hedge risks.

As far as information flows are concerned, it is provided that issuing/transferring banks shall acquire from all the parties involved in the structuring of the covered bonds, information relating to the possessory titles of the transferred assets and to their performance

This information is necessary to issuing/transferring banks in order to perform both the abovementioned controls in terms of cover pool monitoring and the regulatory reporting (i.e. reporting of defaulted loans to the Bank of Italy's Centrale dei Rischi).

The monitoring of the regularity of the transaction and of the integrity of the collateral securing investors is performed also by an external asset monitor (AM) appointed by the issuer. The AM must be an auditing firm possessing the professional skills required to perform such duties and must be independent from the bank engaging it (e.g. it cannot be the same firm appointed to audit the accounts of the issuing bank) and of any other person participating in the transaction. It has to report at least once a year to the Board of Directors and to the internal audit department of the bank.

Although no specific reporting to the Bank of Italy is prescribed by law, in practice the AM will report to the Supervisor any material anomaly found. It must also be considered that the AM's report is reviewed by the bank's auditor which reports regularly to the Bank of Italy. Should such report contain negative evaluations, the bank's auditor is obligated to bring the issue to the Bank of Italy's attention.

The new framework has confirmed to appoint a cover pool monitor to perform ongoing monitoring of the cover pool, which has to report the results at least once a year to the Bank of Italy.

VII. TRANSPARENCY

According to the new framework, the banks issuing covered bonds publish on their website, at least on a quarterly basis, information on their covered bond programmes, in order to allow investors to assess the profile and risks of that programme. The Bank of Italy will issue further disposals on this item.

Moreover, on this subject, some Italian covered bond (called "Obbligazioni Bancarie Garantite" (OBG)) issuers has created a transparency template, consistent with the guidelines of the ECBC Label Initiative, since 2012.

The OBG transparency template is available online on the Covered Bond Label website (https://www.coveredbondlabel.com) and each participating OBG issuer has published a completed version on its own website.

VIII. ASSET SEGREGATION AND IMPACT OF INSOLVENCY PROCEEDINGS ON COVERED BONDS AND DERIVATIVES

The SPV is a financial intermediary, registered in the "special list" provided for by article 106 of the Banking Law, and therefore subject to the Bank of Italy's supervision.

The guarantee granted by the SPV to the bondholders is irrevocable, first-demand, unconditional and independent from the issuing bank's obligations on the covered bonds. It will be callable upon non-payment and resolution or compulsory administrative liquidation of the issuing bank, and it will be limited to cover pool asset value to ensure bankruptcy remoteness of the SPV.

All the amounts obtained because of the liquidation procedure will become part of the cover pool and therefore used to satisfy the rights of covered bondholders.

In case the proceeds obtained as a result of the liquidation procedure are insufficient to meet the obligations to bondholders in full, investors would still have an unsecured claim against the issuer for the shortfall, together with unsecured creditors, including derivative counterparties

In the event of inadequacy of the SPV separate assets, the bank issuing the covered bonds is responsible, for what is still due, for the SPV obligations towards the derivative counterparties.

The redemption of the subordinated loan granted by the issuer of the covered bonds to the SPV is junior to any outstanding claims of covered bondholders, derivative counterparties, and transaction costs.

Under the new framework, the derivative contracts are considered eligible assets if specific requirements are met. Among these, they should be sufficiently documented, they have risk hedging purposes, their volume is adjusted in the case of a reduction in the hedged risk, they are removed when the hedged risk ceases to exist and they cannot be terminated upon the resolution or compulsory administrative liquidation of the bank that issued the covered bonds.

The Bank of Italy can issue further disposals, regarding in particular the eligibility level for the derivative counterparties and the documentation to be provided in relation to derivative contracts.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Under the new framework, the "Obbligazioni bancarie garantite (OBG)" can be labelled as "European OBG"; if they meet the requirements of Article 129 of Regulation (EU) No 575/2013, as amended by Regulation (EU) 2019/2160 of the European Parliament and of the Council, they can be labelled as "European OBG (Premium)". The Italian covered bonds issued before the upcoming Bank of Italy rules continue to be label as OBG.

The covered bonds issued under the current framework are compliant with the CRR and, therefore, they are admitted to its prudential treatment.

The new OBG national legislation has been set to be compliant with European regulation and it is in line to be admitted to the prudential treatment provided for this class of exposure.

Issuers: Banca Nazionale del Lavoro, Banca Popolare di Sondrio, Banco BPM, BPER Banca, Banca Carige, Credito Emiliano (CREDEM), Crédit Agricole Italia, Deutsche Bank, Intesa Sanpaolo*, Banca Monte dei Paschi di Siena, Unicredit, Banca Popolare dell'Alto Adige (SUDTIROLER VOLKSBANK) (starting 2020), Mediobanca.

* Intesa Sanpaolo acquired control of UBI Banca on August 5, 2020, and merged it by incorporation on April 12, 2021

COVERED BOND LABEL: Banca Carige S.p.A. (1 pool), BANCO BPM (1 pool), Crédit Agricole Italia S.p.A. (1 pool), Intesa Sanpaolo S.p.A. (4 pools), Banca Popolare dell'Alto Adige (SUDTIROLER VOLKSBANK) (1 pool), UniCredit S.p.A. (2 pools).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Italian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.21 JAPAN

By Atsushi Ouchiyama, SMBC and Elena Bortolotti, Barclays & Chairwoman of the ECBC RAA Working Group

I. FRAMEWORK

Sumitomo Mitsui Banking Corporation ("SMBC") issued the first ever Japanese covered bond back in November 2018 and Sumitomo Mitsui Trust Bank ("SMTB") followed in October 2020. As of today, Japan does not have a covered bond legal framework hence both SMBC and SMTB relied on Japanese and English contractual law provisions to structure their covered bond programmes following the footsteps of the UK, Canada and New Zealand, jurisdictions that issued contractual law covered bonds before a legal framework was introduced and legislative covered bonds were issued.

The Japanese banking industry had tried to establish a covered bond legislation in Japan in the early 2010's but there was no material progress at that time mainly due to two reasons: (1) demand for covered bonds from issuers was not strong because of ample liquidity in the Japanese Yen market, and (2) achieving dual recourse under the Japanese legal framework was difficult.

Since then Japanese banks have become active in foreign markets and have increased their foreign assets significantly. The expanding need for stable foreign currency funding coupled with having identified a viable structure that achieves dual recourse under the existing Japanese legal framework (see VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS) has allowed Japanese Banks to establish covered bonds programmes and successfully issue in the international markets.

On 28 September 2018, the major Japanese banks jointly submitted an initial request to their regulator to establish a covered bond legislation in Japan, the document was called "*Establishment of Japanese covered bond legislation in order to strengthen stability of foreign currency funding of Japanese banks*". The Japanese banks wanted to encourage the authorities to introduce a covered bond legislation. Currently, the Japanese Financial Services Authority ("FSA") is looking very closely at optimal covered bond structures and how best to implement a covered bond framework.

Given the lack of a Japanese covered bond legal framework the analysis of the following sections is based on SMBC's and SMTB's covered bond programmes.

II. STRUCTURE OF THE ISSUER

In the absence of a covered bond legal framework in Japan, SMBC and SMTB's covered bond programmes have been established in a way to replicate as closely as possible legislative covered bonds. The Issuer is the Bank acting as the trustee on behalf of a money trust (the "Trust Account"), which is established specifically for the issuance of covered bonds and with the scope of holding the cover pool assets. The cover pool assets consist of senior tranches of self-originated residential mortgage backed securities (RMBS). The Bank acting in its proprietary capacity will be the TRS Counterparty, the Initial Servicer as well as the Initial FX Counterparty (Figure 1).

In case of a Bank Proprietary Account bankruptcy, pursuant to the Japanese Trust Act, the Trust Account is segregated from the Bank Proprietary Account's general assets or from any other assets of the Trust. The Trust Account bears some similarities to how cover pool assets are ring-fenced on balance sheet in traditional covered bonds, as its assets do not form part of the assets available to the Bank Proprietary Account's general creditors.

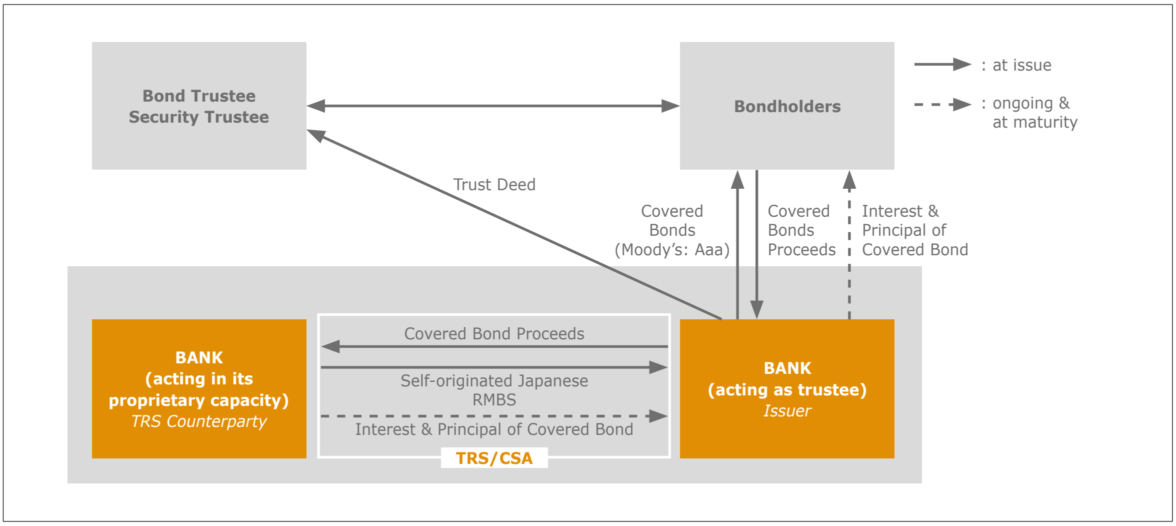
The cover pool assets are transferred from the Bank Proprietary Account to the Issuer, through the use of a total return swap ("TRS"). The Trust Account pays the cash flows generated by the cover pool assets to the Bank Proprietary Account, and the Bank Proprietary Account pays to the Trust Account the covered bonds interest and principal amounts, which are then passed to the covered bondholders.

One of the key differences between the SMBC and SMTB programmes is how entrustment of the mortgages is perfected. Under the SMBC programme entrustment of the mortgage loans from the originator to the asset trustee is perfected against third parties under the Perfection Law. While under SMTB's programme entrustment of the mortgage loans from the originator to the asset trustee is made by declaration of trust. Even though the legal construct is different the end result achieved is akin in both structures.

In case of a Bank Proprietary Account's bankruptcy, all claims and obligations between the Trust Account and the TRS Counterparty under the TRS are terminated using the close-out netting principle by applying the Japanese Netting Act. Close-out netting reduces the risk that the transfer of cover pool assets is recharacter- ised as a collat- eral transaction, and assures the segregation and bankruptcy remoteness of the assets held in the Trust Account.

Dual recourse is achieved by allowing covered bondholders to have recourse to the Bank Proprietary Account's assets available to general creditors, in addition to exclusive recourse to the assets held in the Trust Account.

FIGURE 1



Sources: SMBC and SMTB Programme Documents

III. COVER ASSETS

Eligible cover pool assets are senior self-originated RMBS tranches backed by residential loans originated by the Bank. SMBC's programme also allows for Japanese Government Bonds to be included as substitution assets but with a self-imposed cap of up to 10% of the cover pool. Cash can also be used as CSA collateral under both programmes.

The Banks were not able to transfer residential loans directly to the Trust Account, as they needed to rely on the close-out netting principle to apply the Netting Act under the TRS to guarantee segregation and bank- ruptcy remoteness of the Trust Account. One of the benefits of using RMBS as cover pool assets is the ability to conduct daily valuations of the cover pool. It is worth highlighting that if necessary, the selling agent has the option to sell the RMBS or to unwind the relevant RMBS to sell the underlying residential loans to find the highest bidder for such assets.

A TRS Default Event (defined as failure to pay under the TRS, credit support default including breach of the ACT, bankruptcy, merger without assumption) triggers the liquidation of the cover pool assets and the start of the realisation period. All series of covered bonds will be simultaneously redeemed on the Realisation Redemption Date or upon an Issuer Event of Default regardless of their scheduled maturities.

IV. VALUATION AND LTV CRITERIA

Pursuant to the Base Prospectuses, the RMBS are subject to haircuts depending on their rating: a further haircut is applied on the value attributed to the cover assets to the extent that the property value underlying the portfolio of RMBS does not meet an 80% LTV test (adjustment by the Adjusted LTV Limit Factor).

The Adjusted LTV Limit Factor is the factor which limits the LTV of the underlying assets in the portfolio of RMBS to a maximum of 80%. As a result, the value of RMBS to be taken into account for the Asset Coverage Test ("ACT") calculation is also limited accordingly.

V. ASSET - LIABILITY MANAGEMENT

SMBC and SMTB's covered bond programmes feature an ACT, an Interest & Expenses Reserve and appropriate FX mitigants.

Asset Coverage Test: The Issuer is required to hold issuer assets in respect of all covered bonds sufficient to meet the ACT which is calculated on a daily basis. In the event that the aggregate market related value of the issuer assets excluding cash in any reserve fund has fallen below the minimum OC percentage of 25%, the TRS counterparty shall, pursuant to the terms of the CSA, be required to post an amount of CSA collateral with a value at least equal to such shortfall amount. Calculations for the ACT are checked on a quarterly basis by the Asset Monitor. A breach of the ACT will trigger a TRS Default Event.

Interest & Expenses Reserve: The reserve fund which is established for the benefit of the covered bondholders will cover 9 months of interest on all covered bonds outstanding and senior expenses.

FX Mitigants: any FX risk is managed through the ACT and daily TRS collateral posting until a TRS Default Event. Following a TRS Default Event any FX risk on principal (and unpaid interest or accrued interest, if any) will be hedged through a Contingent FX Forward transaction with an eligible third-party up to the Realisation Period End Date.

VI. TRANSPARENCY

The Issuers have committed to publishing a quarterly investor report which is available on their websites. The investor reports include selected information on the underlying cover pool as well as confirming compliance with the ACT. Please find below some of cover pool characteristics which are disclosed in the investor reports:

- Property type information
- Number of mortgage loans comprising RMBS
- Concentration risks (10 largest exposures)
- Breakdown by domestic regions
- Breakdown by interest rate
- Breakdown by repayment type
- Loan seasoning
- Non-Performing Loans (NPLs)
- Loan size information
- Unindexed LTV information
- Indexed LTV

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Under each programme, an independent third-party accounting firm has been selected to act as Asset Monitor. The Asset Monitor will check and report to the transaction parties, on a quarterly basis, on the compliance or non-compliance of the ACT and the maintenance of sufficient funds in the Reserve Fund.

SMBC and SMTB are regulated banking entities in Japan supervised by the Japanese FSA.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Following a Bank Proprietary Account bankruptcy, the assets held in the Trust Account are not subject to recourse by (1) the Bank Proprietary Account's general creditors and (2) creditors of other trusts of the Bank, and do not form part of the bankruptcy estate of the Bank Proprietary Account or other trusts under the Japanese Trust Act. The use of the Japanese Trust Act and the Netting Act (as described above) allows the structure to achieve cover pool asset segregation and bankruptcy remoteness of the cover pool.

Following a TRS Default Event, a TRS Default Event notice will be served and the Realisation Period will begin. All outstanding covered bonds regardless of their scheduled maturity will have to be repaid shortly after the Realisation Period End Date. During the Realisation Period, interest on the covered bonds will continue to be paid by drawing on the interest & expense reserve. Furthermore, the Selling Agent will take necessary steps to sell the cover pool; all proceeds from the sale will be used to repay the covered bond holders. Should the proceeds from the sale of the cover pool not be sufficient to repay the covered bond holders in full, the covered bond holders will have recourse to the Bank Proprietary Account general bankruptcy estate.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Japanese covered bonds are neither Article 52(4) UCITS compliant nor Art 129 CRR compliant since Japan is not a Member State of the European Union (EU). Furthermore, the covered bonds do not benefit from preferential risk-weighting for regulatory capital purpose under EU rules due to the lack of a Japanese covered bond legal framework.

X. ADDITIONAL INFORMATION

Index Eligibility

Japanese covered bonds are eligible as "covered bonds" for the purposes of the Bloomberg Barclays Covered Bond Index and Markit iBoxx Index.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Japanese market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.22 LATVIA

By Agneta Rumpa, Lūcija Strauta, Santa Rubīna, Sorainen, Richard Kemmish, consultant and Jacek Kubas, EBRD

I. FRAMEWORK

A specific regulation for covered bond issuance in Latvia was created only on 27 May 2021 when Latvian Parliament adopted an entirely new law – the Covered Bonds Law (the **Law**). The Law entered into force on 23 June 2021. Continuing implementation of the covered bond issuance regulations, in June 2021 the Financial and Capital Market Commission (**FCMC**) adopted several related FCMC regulations on the procedures to obtain the permit for the implementation of a covered bond programme, procedures for selecting a candidate for the office of the special administrator, as well as the reporting on potential and actual violations and financial reporting.

A Historic Mortgage-Backed Covered Bonds Regulation

Until the Law entering into force only one type of covered bonds – mortgage bonds – were regulated in Latvia by the Law on Mortgage Bonds (in Latvian – *Hipotekāro ķīlu zīmju likums*), enacted 10 September 1998. In addition, the Law on Mortgage Bonds and the Law on Credit Institutions (Articles 56.[1], 139[1] and 161) jointly provided the regulation for credit institution's insolvency and bankruptcy procedure. Yet, the Law on Mortgage Bonds covered only issuing bonds based on mortgage loans or loans secured by government guarantees. Therefore, the Law on Mortgage Bonds did not cover all the other assets used to back covered bonds that are provided in the Article 129 of the Capital Requirements Regulation No 575/2013 (**CRR**). Considering that this scope is narrower than the one provided for in the EU law and also considering the continuous development of the finance sector, the need for a law particularly on covered bonds was evident and thus the Law was passed. Simultaneously with the Law entering into force, the Law on Mortgage Bonds is no longer in force.

B The Covered Bonds Law

The Law was developed by the Latvian Ministry of Finance in cooperation with the European Bank for Reconstruction and Development (EBRD) and the European Commission in order to improve and modernize the national covered bond regulation. The Law transposes the Covered Bonds Directive No. 2019/2162 (CBD) and is aligned with the amended CRR. The Law implements the so called "SPV model" where the cover assets of the covered bonds are segregated from the other assets of the credit institution issuing the bonds in a special purpose vehicle. The Law also aims to follow the best market practices of cover bonds regulation.

The Law prescribes the cover portfolio management agreement and the terms of its conclusion. The Law covers covered bonds structure; establishment, operation, liquidation and supervision of the covered bond company (the SPV); cover assets' acquisition and protection from third party claims; insolvency procedure aspects of the issuer, the credit institution transferring the claims included in the covered bond portfolio (the transferor) and the covered bond company; protection of investors and creditors of the covered bonds; public supervision of the operation of covered bond programmes; and operation of cross-border programmes.

Given that it is essential for all three Baltic States (Latvia, Lithuania and Estonia) to create a uniform covered bonds market, which requires ensuring the mutual compatibility of their local legislations, then the main elements of the legislation to the extent possible were aligned during the drafting process amongst all three jurisdictions. The Law is a step closer to create a Pan Baltic (a common Latvian-Lithuanian-Estonian covered bond market) in order to ensure cross-border covered bond issuance, and it intends to provide for the possibility to combine bank assets from all three Baltic States in the cover pool in order to ensure more favourable conditions for the issued bonds in the international market.

1 The FCMC Regulation No. 76 "On the documents to be submitted and the information to be included for the adoption of a decision regarding the authorization to implement a covered bond programme and for the examination of the notification and regarding the procedure for the examination of documents" (in Latvian - "Par iesniedzamajiem dokumentiem un tajos ietveramo informāciju lēmuma par atļauju īstenot segto obligāciju programmu pieņemšanai un paziņojuma izskatīšanai un par dokumentu izskatīšanas kārtību").

In the short period of time the Law has been in force, the covered bonds market potentials in Latvia are only being explored. Currently, there is no fast growth of covered bonds issuance in Latvia. Taking a look on the whole Pan Baltic market, the first covered bond issuance took place in Estonia on March 2020 – only two years ago.

II. STRUCTURE OF THE ISSUER

UUnder the Law, to operate a covered bond programme and to issue covered bonds, any licensed credit institution registered in Latvia or a foreign (non-EU/EEA) credit institutions' branch in Latvia may apply for the license for covered bond programme operation. If the issuer is a foreign (non-EU/EEA) credit institution' branch, the decision on the establishment of a covered bond company must be made by the foreign (non-EU/EEA) credit institution as a legal person. The license is issued by the FMCM.

The FMCM issues the license for the operation of covered bond programme to the credit institution if it and the proposed covered bond programme fulfils regulatory requirements. For example, the Law expressly lists such criteria as:

(1) the issuer's obligations to investors and creditors of covered bonds must be secured by a guarantee of the covered bond company (the SPV);

(2) appropriate accounting procedures and technical arrangements are used ensure the separation of cover assets;

(3) the issuer has developed and implemented an appropriate, comprehensive, reasonable and effective set of policies, procedures and methodologies for the operation of the covered bond programme, taking into account the type, scope and complexity, including the continuity plan, for the covered bond programme;

(4) the issuer has ensured that the implementation of the covered bond programme is performed by persons with sufficient qualifications;

(5) the issuer has implemented and complies with the provisions which provide that the cover assets – tangible property – are adequately insured against losses;

(6) the results of the stress testing performed by the issuer indicate the observance of the coverage requirements and the required levels of overcollateralisation.

The more detailed procedural aspects on how to apply for the license for covered bond programme operation are laid down by the FCMC regulations, which were adopted for assessing the ability of the issuer to implement the covered bond programme.

The Law also provides for the requirements for establishing and operation of a covered bond company (the SPV). The issuer – a credit institution – may establish the covered bond company. The issuer and the covered bond company must be registered in the same EU member state. The issuer must be a shareholder of a covered bond company. The covered bond company must be established in a form of a limited liability company (in Latvian – *sabiedrība ar ierobežotu atbildību*) or a stock company (in Latvian – *akciju sabiedrība*). The operation of a covered bond company is limited to ensuring its own operation and the fulfilment of the covered bond programme. The covered bond company must be liquidated if the covered bond programme is completed or the covered bond company no longer has cover assets and rights to new cover assets in accordance with the cover pool management agreement. The reorganization, transfer of undertaking or any other action in respect of the covered bond company, if this action would prevent or prejudice the ability of the covered bond company to fulfil its obligations under the provided surety is prohibited, unless it can be shown that such action would not harm the interests of the covered bonds' creditors and investors.

III. COVER ASSETS

The following types of cover assets must be included in the cover pool:

(1) financial assets that the issuer lends to the covered bonds company (SPV) for the acquisition of primary assets and substitution assets;

(2) primary assets and substitution assets;

(3) transaction values of the derivative contracts;

(4) financial assets which have been acquired from the assets referred to in precious points 2 and 3.

At least 85% of the required cover assets value must consist of primary assets. The Law provides that primary assets consist only of the high quality assets from these particular classes:

(1) public sector assets indicated in Article 129(1)(a) and (b) of the CRR;

(2) residential mortgage assets as provided for in Article 129(1)(d) of the CRR;

(3) commercial mortgage assets as provided for in Article 129(1)(f) of the CRR;

(4) loans covered by liens on ships as provided for in Article 129(1)(g) of the CRR;

(5) assets which are loans (credits) to capital companies controlled by a public person or, in cases where the law allows such capital companies to issue loans (credits) or provide guarantees themselves, loans (credits) guaranteed by such capital companies.

Whereas the substitution assets may consist of assets in the form of exposures as per Article 129(1)(c) and (1a)(a),(b),(c) and (d) of the CRR.

In order to ensure the compliance of the cover pool with the requirements specified by law, assets with payments that are overdue for more than 90 days cannot be included in the cover pool. The Law sets out the procedure for determining the value of cover assets related to an outstanding loan in the event of default, i.e. if the debtor delays the repayment of the loan.

IV. VALUATION AND LTV CRITERIA

The issuer must value the underlying assets in accordance with the Commission's requirements for credit risk management, including the applicable valuation standards, and the requirements for the persons entitled to value the assets. The valuation of cover assets must be adjusted in accordance with the indexation of the assets' market value.

For the primary assets that are residential mortgage assets, the LTV (the loan amount ratio to the coverage value) cannot exceed 70%. For the primary assets that are commercial mortgage assets and loans covered by liens on ships, the said ratio cannot exceed 60%. The ratio must be determined for the cover asset on the day when it is included in the cover pool for the first time.

The valuation must be performed at least once a calendar year, unless the terms of the covered bond programme provide for a more frequent valuation or it is required by the Commission, or the cover pool monitor. The methods to be used in the valuation of cover assets and the indexation procedure for the valuation of cover assets must be determined in the terms of the covered bond programme.

V. ASSET – LIABILITY MANAGEMENT

The Law stipulates the conditions for the use of derivative contracts in the cover pool and provides for the obligation to ensure liquidity reserves and stress testing. To ensure that the issuer is able to fulfil its obligations to investors, the issuer is required to replenish the cover pool with new cover assets in the event the stress test result shows that the applicable stress testing scenario does not comply with the required level of overcollateralisation.

The Law stipulates that the issuer performs stress testing at various levels of the financial turmoil at least quarterly to determine whether the underlying assets are sufficient to cover the total outstanding nominal value of the covered bonds. Stress testing must cover all risks that may significantly affect the covered bonds' risk profile.

VI. TRANSPARENCY

The Law obligates the issuer to disclose information to the investors and creditors, and to the Commission. Additionally, the Commission ensures availability of general information about issuers and cover bond programmes on its webpage.

Under the Law, the issuer must inform the investors on quarterly basis about the results of a covered bond programme, so that investors can assess its profile and risks and evaluate their own investment. The information for investors must be published on the issuer's webpage, and it must be made available for at least five years. The following information must be published: the value of the cover pool and outstanding covered bonds; the list of international securities identification numbers (ISIN) of all the covered bonds; the geographical division of cover assets; detailed information about market risk; levels of coverage and overcollateralisation; share of loans in case of delayed payments as per Article 178 of CRR, and the amount of liquidity reserves.

Additionally, the covered bond company (the SPV) must publish the annual report together with a sworn auditor's report on its website or indicate another appropriate medium where this information is made public.

The Commission in supervising the implementation of the covered bond programme is entitled to request the issuer, the covered bond company (the SPV) and the cover pool monitor to disclose information and other related documents for public.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The Law provides an obligation for the issuer to appoint a cover pool monitor that ensures constant monitoring of the cover pool. A cover pool monitor may be a sworn auditor or a sworn auditor company. Additionally, the cover pool monitor must be independent from the issuer and issuer's internal auditor. The person who was auditor of the issuer during last two years cannot take a position of cover pool monitor. The cover pool monitor's duties include, but are not limited to:

(1) the examination of the compliance with the regulatory requirements of cover assets management agreement and the cover assets structure at least once a year;

(2) the verification of the accuracy of the entries in the cover asset records; and

(3) the verification on whether the covered bond company (the SPV) and the issuer complies with the legal requirements and duly perform their obligations regarding cover asset management agreement, stress testing, information provision to investors and cooperation with the Commission.

The cover pool monitor performs on-going supervision of the cover pool. The Law does not prescribe the regularity of inspections. The frequency of inspections must be determined for each particular situation. By way of example, the explanation to the Law indicates that the accuracy of the underlying asset records plays an important role in protecting the interests of investors and presumably it would not be appropriate to check this aspect only once a year. The Law allows the issuer, the cover pool monitor and the Commission to determine the frequency of monitoring of each of the aspects.

The Law obligates the cover pool monitor to provide the Commission with an annual report on the compliance of the covered bond programme with the requirements of the Law which have been described above. The cover pool monitor cooperates with the Commission. The cover pool monitor must immediately inform the Commission, as well as the covered bond company (the SPV) and the trustee (if such is appointed), of any violations identified.

The cover pool monitor is liable to investors for losses incurred by them due to gross negligence or malicious intent of the cover pool monitor. The liability period for the claims of damages is three years.

The Commission performs public supervisory functions of the covered bond programmes, including, the emission of covered bonds. The Commission has the duty and the powers to take necessary actions to prevent or remedy issues in the operation of the issuer, the transferor and the covered bonds company (the SPV) which may threaten the stability of the financial system or create significant losses for the economy. Including, the Commission may adopt the necessary sanctions in respect of the entities or natural persons responsible for non-compliance, which include fines to up to 10% of the annual revenue of the entity, revocation of the licence for cover bonds programme, temporal prohibition for the natural person liable for the non-compliance to fulfil his duties, etc

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

The Law contains the principle that the claims of investors and creditors of covered bonds against the issuer and the covered bond company rank *pari pasu*, i.e. the claims of the investors do not have any preference over the claims of the creditors. However, in respect of other creditors, cover assets may not be subject to enforcement in respect of the issuer, the transferor of claims included in the covered bond portfolio, the covered bond company (the SPV) or the manager of the cover pool. This rule does not restrict the possibility to enforce the claims against the debtor or the security provider of the assets underlying the covered bonds. Enforcement may be taken in respect of such cover assets that remain after the fulfilment of the claims of the investors and creditors of the covered bonds.

According to the Law, in case of the insolvency proceedings of the issuer, the amount of investors' and creditors' claims against the covered bond company is limited by the cover assets owned by the covered bond company. If the cover assets cannot cover the claims of all investors and creditors, these claims are satisfied according to principle of proportionality.

In case insolvency proceedings of an issuer have been declared as set by the Insolvency Law, the Commission appoints a special administrator. The special administrator acts in the interests of all investors and creditors of the covered bonds, with the aim of achieving the proper performance of all covered bond claims from the coverage and the income generated by the covered bonds.

The special administrator upon appointment or at the request of the Commission must immediately evaluate the cover assets. The special administrator also approves and submits to the issuer's insolvency administrator a list of investors and creditors of the covered bonds. The issuer's insolvency proceedings cannot be completed until the covered bond company is sold to another issuer, or the covered bond claims are fully satisfied, or the sale of all covered assets is completed.

IX. COMPLIANCE WITH EUROPEAN LEGISLATION

The Law is in compliance with the following European legislation that sets out requirements regarding covered bonds:

(1) the Covered Bonds Directive – the Directive No 2019/2162 of the European Parliament and of the Council of 27 November 2019 on the issue of covered bonds and covered bond public supervision and amending Directives 2009/65/EC and 2014/59/EU;

(2) the CRR[1] – the Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): https://hypo.org/ecbc/covered-bonds/.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Latvian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.23 LITHUANIA

By Tomas Kontautas and Dalia Augaitė, law firm Sorainen

I. LEGAL FRAMEWORK

The Lithuanian Ministry of Finance, with the technical assistance of the European Bank for Reconstruction and Development (EBRD) and with the support of the European Commission, has initiated a legal reform to establish new securitisation and improved covered bond regulation. As a result, the Introduction of a Covered Bond and Securitisation Legal and Regulatory Framework in Lithuania was published in 2017, followed by the drafting of the Law on Securitisation and Covered Bonds (the Draft Law) presented for public discussion on 18 July 2018.

In addition, in November 2017, the Ministries of Finance of Lithuania, Latvia, and Estonia signed a Memorandum of Understanding with a view to creating a pan-Baltic covered bond framework to enable the local banks to combine the assets from one, two or all three of the Baltic States under one issue (programme). It would be the first time in the covered bond market that laws of different jurisdictions would be aligned and a regional covered bond could be issued with underlying assets from three countries.

During 2020 governmental priorities were devoted to limit the impact of COVID-19 for Lithuanian economy, however, focus is back and the Draft Law is expected to be approved by the Parliament before the end of June 2022.

Current drafting involves revising Draft Law provisions (described in more detail in Sections II-VII below) to make them compatible with the Directive (EU) 2019/2162 of the European Parliament and of the Council of 27 November 2019 on the issue of covered bonds and covered bond public supervision.

II. STRUCTURE OF THE ISSUER

Covered bonds can be issued by an authorised credit institution. However, the credit institution has to obtain an additional authorisation from the Bank of Lithuania which is the Lithuanian financial supervisory authority (the Lithuanian FSA). A prospective issuer applying for the authorisation has to prove that it will comply with the requirements imposed upon the issuers by this law. For example, a prospective issuer is required to have technology and systems, control mechanisms and a risk management system necessary for the administration of the cover pool. Moreover, it has to have a contingency plan.

Lithuania has chosen and adopted the SPV model for covered bonds. As a result, the assets included in the cover pool are transferred to an SPV under the *true sale* principle and the investors are granted the *dual recourse* right. Therefore, the credit institution, as the issuer, has a direct responsibility for redemption, but the cover pool is *ring-fenced* in the SPV and the issuer's creditors do not have any claim rights against it.

The day-to-day supervision of covered bond programmes shall be undertaken by a cover pool monitor. In specific, the cover pool monitor will inspect the compliance of the issuer with the requirements of the Draft Law, in particular whether the asset pool is, during the whole period of validity of the regulated covered bond, capable of covering claims attaching to the bond and sums required for the maintenance, administration and winding up of the asset pool (operational expenses) and for the transfer of the asset pool to a third-party servicer; whether the cover pool is of sufficient quality to give investors the confidence that in the event of the failure of the issuer there will be a low risk of default in the timely payment by the covered bond entity of claims attaching to the bond; whether the eligible property in the cover pool of a single asset class bond consists only of eligible property of the same class as the eligible property included in the asset pool of the regulated covered bond when registered and/or liquid assets and/or derivatives, etc.

III. COVER POOL

Cover assets shall mean an "asset pool" comprised of the following:

(1) primary cover assets:

a. public sector assets indicated in Article 129(1)(a) and (b) of the Capital Requirements Regulation (CRR), except for exposures that are eligible for credit quality category 2 as referred to in part (b) thereof;
b. residential mortgage assets – loans covered by non-commercial real estate as provided for in Article 129(1)(d)(i),(e) of the CRR;
c. commercial mortgage assets – loans covered by commercial real estate as provided for in Article 129(1)(f)(i) of the CRR;
d. loans covered by liens on ships as provided for in Article 129(1)(g) of the CRR;
e. other high-quality assets classified as eligible assets by the Lithuanian FSA in accordance with Article 129 of the CRR.

(2) cash from the assets that are part of the asset pool;

(3) eligible derivatives (for hedging purposes only);

(4) liquid debt securities issued by an EEA country, regional government or local authority of an EEA country.

Nevertheless, only the performing credits could be included in the cover pool as primary cover assets. The primary cover assets shall constitute no less than 80 % (eighty per cent) of collateral assets under relevant bonds issue. The substitution assets shall not exceed 20 % (twenty per cent) while the assets as provided for in Article 129 (1)(c) shall not exceed 15 % (fifteen per cent) of collateral assets under relevant bonds issue. The statutory over-collateralisation level should be no less than 5% (five per cent) of the total principal amounts outstanding in relation to the bonds which the asset pool relates to.

It should be emphasised that if the issuer would like to label the cover bond issue as *mortgage covered bond*, the primary cover asset must consist of residential mortgage assets only, i.e. the issuer's claims that arise from credits granted to natural persons against a mortgage of residential property situated in the territory of a European Economic Area (hereinafter EAA) country.

IV. VALUATION AND LTV CRITERIA

The Draft Law provides that the LTV criteria for the property given as collateral for the credits linked to the real estate assets of the issuer must abide by the following maximum percentages: residential mortgages – 70% (seventy per cent) of the value of property valuation and commercial mortgages – 60% (sixty per cent) of the value of property valuation.

Market value indexation should be performed at least once a year, i.e. the loan-to-asset value ratio should be adjusted on an annual basis, unless higher indexation is provided in the covered bond programme or more frequent indexation is required by the cover pool monitor or the Lithuanian FSA.

The Draft Law entitles the Lithuanian FSA to elaborate on the criteria for assessing the eligibility of loans to be included in the cover pool and for the valuation of the underlying assets.

V. ASSET AND LIABILITY MANAGEMENT

The issuer has an obligation to perform a stress test on the covered bond portfolio and assess the impact of the main risk factors to which the asset portfolio is exposed in relation to the sufficiency requirement. The stress test should cover at least the interest rate, currency, credit, liquidity, set-off, commingling risks and other risks as indicated by the Lithuanian FSA. When carrying out the stress tests, the relevant risk-mitigating factors such as derivative contracts and other agreements entered into for the purpose of risk mitigation must be taken into account. Stress testing must be done at least once a quarter.

Such stress tests must be carried out by the issuer according to its own approved methodology based on consistent, documented and verifiable criteria, assumptions and procedures. The managers of the issuer are responsible for ensuring the performance of stress tests.

The Draft Law grants the Lithuanian FSA the right to establish more detailed requirements for the procedure and methodology of stress testing of covered bond portfolios.

Regarding the liquidity requirement, the cover pool must contain liquid assets in an amount equivalent to the issuer's related commitments secured by the cover pool and falling due in the next 180 days.

VI. TRANSPARENCY

In addition to the disclosure obligation arising from other legislation, an issuer must disclose information about covered bond portfolios on a quarterly basis. The following information is required to be disclosed to the holders of regulated covered bonds:

(1) information on the credit, market, currency, interest and liquidity risks associated with the cover assets and the covered bonds;

(2) the total nominal value of the outstanding covered bonds;

(3) the total value and composition of the cover assets and the geographical distribution of the cover assets;

(4) the ratio between the total value of the cover assets and the total nominal value of the outstanding covered bonds, over-collateralisation, including voluntary over-collateralisation;

(5) information about a liquidity buffer;

(6) information on the structure of the covered bonds, including the maturity profile of both the cover assets and the outstanding covered bonds;

(7) the methodology used to calculate LTVs for mortgage assets;

(8) the percentage of the cover assets with payments past due by more than ninety days;

(9) information on the counterparties and the SPV,

(10) information on stress testing scenarios and its results;

(11) other relevant information for the investor, as established by the Lithuanian FSA.

The information stated in the first paragraph is to be provided in sufficient detail to enable the regulated covered bond-holders to carry out an adequate risk analysis.

The Lithuanian FSA may establish more specific disclosure requirements, including approval of their standardised formats.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The cover assets owned by the SPV must be supervised by a cover pool monitor. The issuer of the covered bond must appoint and dismiss the cover pool monitor. The cover pool monitor may not be a person who was an external auditor of the issuer within the previous three years.

The cover pool monitor must perform the following functions:

(1) inspect the compliance of the asset pool with the requirements set out in the Draft Law (for example, the existence of a sufficient cover pool and its compliance with the requirements, as well as the accuracy of the records kept in relation to each asset in the asset pool);

(2) inspect the compliance of the issuer with the requirements related to derivatives, stress testing, liquidity buffers and transparency;

(3) prepare a report in accordance with the guidance issued by the Lithuanian FSA on the quality of the assets in the cover pool;

(4) perform other instructions of the Lithuanian FSA.

The cover pool monitor must submit the report to the SPV, the issuer, and the Lithuanian FSA. In addition, the cover pool monitor must immediately inform the management of the SPV, the issuer, the Lithuanian FSA and, as the case may be, the representative of the investors about any irregularities and inaccuracies discovered during the performance of the cover pool monitor's duties.

VIII. SEGREGATION OF THE COVER POOL AND BANKRUPTCY REMOTENESS OF COVERED BONDS

As pointed out above, Lithuania has chosen and adopted the SPV model for covered bonds. As a result, the assets included in the cover pool are transferred to an SPV under the *true sale* principle and the cover pool is *ring fenced* in the SPV, and therefore the issuer's creditors do not have any claim rights against the cover pool. Moreover, the Draft Law imposes the obligation to ensure that the SPV is independent from the issuer and is not consolidated with the issuer upon its insolvency.

In the event that the issuer is declared insolvent, the cover pool will be considered to be separated from the other assets of the issuer under the Draft Law and will not be part of the issuer's insolvency estate. Upon the issuer's insolvency, the Lithuanian FSA must appoint a special administrator to take over the management of the cover pool and covered bond programme. The special administrator must manage covered bond portfolios with the necessary diligence and in a manner ensuring that the liabilities arising from the covered bonds and from the derivative instruments are met in the best possible way.

Covered bond holders enjoy preferential treatment as the Draft Law stipulates the *ring fencing* of the cover assets in the case of the issuer's insolvency. Bond holders have the first access rights to the cash flows generated by the assets included in the cover pool, and it is forbidden to challenge the asset transfer to the cover pool.

IX. COMPLIANCE WITH EUROPEAN LEGISLATION

The Draft Law is in compliance with the following European legislation that sets out requirements regarding covered bonds:

(1) Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS);

(2) Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012;

(3) Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council Text with EEA relevance;

(4) Directive (EU) 2019/2162 of the European Parliament and of the Council of 27 November 2019 on the issue of covered bonds and covered bond public supervision and amending Directives 2009/65/EC and 2014/59/EU.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Lithuanian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.24 LUXEMBOURG

By Frederik Kunze, NORD/LB and Frank Will, HSBC & Chairman of the ECBC EU Legislation Working Group

I. FRAMEWORK

The legal framework for covered bonds under Luxembourg has changed significantly recently. On 8 December 2021, the new Luxembourg Law on covered bonds has been approved by parliament. The amendments that are implementing the Directive (EU) 2019/2162 of 27 November 2019 as well as the amendments of Regulation (EU) 575/2013, Regulation (EU) 2019/2160 also from 27 November 2019, will enter into force on 08 July 2022. This new covered bond law is applicable for covered bond issued from 08 July 2022. Based on grandfathering conditions the former legal framework may also be applicable. Under the old framework the issuance of Lettres de Gage is regulated by Articles 12-1 to 12-12 of the Financial Sector Act of 5 April 1993 (the Financial Sector Act). These articles were introduced by the Act of 21 November 1997 for banks issuing mortgage bonds and amended by the Act of 22 June 2000, by the Act of 24 October 2008, by the Act of 27 June 2013 and by the Act of 21 June 2018. The Lettres de Gage regulations are supplemented by the *Commission de Surveillance du Secteur Financier* (CSSF) Circular 01/42 which lays down the rules for the appraisal of real estate and Circulars 18/705-707. The CSSF is the supervisory authority in Luxembourg irrespective of the date of issue and applicable legal framework.

Under the new legal framework the sic categories of covered bonds may be issued. The new law introduces Obligations Garanties Européennes (European Covered Bonds) as well as Obligations Garanties Européennes Lettres de Gage du Qualité Supérieur (High-quality European Covered Bons) which may be issuer in addition to Lettres de Gage Hypothécaires, Lettres de Gage Publiques, Lettres de Gage Énergies Renouvelables andf Lettres de Gage Mobilières, Lettres de Gage Mutuelles are not part of the new legal framework.

The amendments introduced in June 2013 included: (i) a broadening of the geographical scope to assets acquired globally but with certain rating requirements for countries outside the European Union (EU), the European Economic Area (EEA) and the Organisation for Economic Co-operation and Development (OECD);

(i) the introduction of Lettres de Gage Mutuelles which are backed by a system of institutional guarantee;

(ii) change of the rating requirements of eligible securitisations which now refer to the list of rating agencies established by the European Securities and Markets Authority (ESMA) rather than S&P, Moody's and Fitch;

(iii) an explicit definition of public enterprise; (v) a clarification that the cover assets have to be the property of the bank and (vi) a legal obligation for the issuers to publish information on the cover pools, the Lettres de Gage and the issuers.

The bankruptcy regulations have also been completely revised. If the court declares open one of the procedures provided for in the law on the financial sector, i.e. suspension of payments or compulsory liquidation, this decision entails the separation of the bank into the cover pools and additional activities. The cover pools with their corresponding bonds and their corresponding reserve with the central bank continue as proprietary compartments of a mortgage bank with limited activity. This bank still holds a banking licence. The court can also open a procedure of suspension of payments or compulsory liquidation for a cover pool, but this does not affect the other cover pools.

The CSSF is no longer administrator of cover pools in the case of bankruptcy of the Lettres de Gage bank but one or several administrators nominated by the court. This has not changed in the course of the approval of the new covered bond law.

In June 2018 already, Luxembourg amended its covered bond law, introducing Lettres de Gage Énergies Renouvela bles as a fifth covered bond type in Luxembourg making it possible to use projects generating renewable energy as collateral for cover pools. To our understanding the Lettre de Gage Énergies Renouvelables is the first covered bond framework that makes use of these type of assets as collateral for covered bonds. Furthermore, a 180-liquidity buffer was introduced to minimize the liquidity risk that could arise in a covered bond programme – using highly liquid assets that are available at any time during a specified period of time.

In December 2018, the CSSF published 3 Circulars supplementing the Financial Sector Act. Circular 18/705 lays down the rules for the appraisal of renewable energy assets, Circular 18/706 lays down the transparency requirements based on Article 12-6(2) and Circular 18/707 defines the minimum requirements for the maintenance and control of the cover register and the liquidity requirements for the cover pool.

In December 2021, Luxembourg amended its covered bond law, in the sense that in addition to credit institutions approved by the CSSF as covered bonds bank (banques d'émission de lettre de gage) starting from 08 July 2022 all credit institutions incorporated in Luxembourg as well as covered bonds banks may be allowed to issue covered bonds. The relevant changes to Article 2 of the new law also specify a limit for the cover pools. These credit institutions cover pools are limited to 20% of the total liabilities. Furthermore, the new law introduces the two types of covered bonds specified by the EU Directive: "European covered bonds" (obligations garanties européennes) as well as "(high-quality) European covered bonds" (obligations garanties européennes (de qualité supérieure)), whereas the latter meet the requirements of article 129 of the capital requirements directive (CRR).

II. STRUCTURE OF THE ISSUER

The covered bond issuers are not restricted anymore to credit institutions with a specialist bank license. Credit institutions that are incorporated in Luxembourg may also issue covered bonds based on the fulfillment of certain criteria (i.e. 20% cover asset limit based on total liabilities). The business activities of covered bonds banks are restricted. These issuers may only engage in other banking and financial activities if these activities are accessory and aux- iliary to their main business. In the past, the bank's principal activities were limited to mortgage lending, and public sector financing which were primarily funded by issuing Lettres de Gage Hypothécaires and Lettres de Gage Publiques. Lettres de Gage Mobilières were introduced in October 2008 and are backed by loans guaranteed by movable assets. Since 2013, the Luxembourg issuers are also allowed to issue Lettres de Gage backed by institutional guarantees (Lettres de Gage Mutuelles). These bonds are collateralised by loans to credit institutions in the EU, the EEA and the OECD or loans that are guaranteed by them as cover pool collateral, assuming that these credit institutions belong to a system of institutional guarantee. This system has to be recognised by a supervisory authority and guarantee to support its members in the case of economic difficulties. In 2018, Lettres de Gage Énergies Renouvelables focusing on renewable energy have been added and since June 2018, 'renewable energy' assets also qualify as cover pool collateral. Under the new legal framework the asset classes and corresponding cover pools are given by the covered bond types Lettres de Gage Hypothécaires, Lettres de Gage Publiques. Lettres de Gage Mobilières as well as European covered bonds and (high-quality) European covered bonds. The covered bond issuer holds the cover assets on its balance sheet in separate registers. Each class of covered bonds has its own register. They are not transferred to another legal entity (special purpose vehicle) like in a securitisation. All obligations arising from Luxembourg covered bonds are direct, unconditional obligations of the issuer. In the case of issuer insolvency, the cover pools are segregated by law from the general insolvency estate and are reserved for the claims of the bond holders. There is no direct legal link between a single asset in the cover pool and an outstanding bonds. Interest and principal payments of the various types of bonds (including any derivatives benefitting from the preferential treatment) are backed by the assets in the respective cover pools.

The issuers have to be banks and according to the Financial Sector Act they need to have sound administrative and accounting procedures, control and safeguard arrangements for electronic data processing and adequate internal control mechanisms, which restrict the extent of outsourcing legally possible. In addition, the way of permitted outsourcing is described in detail in different CSSF Circulars.

III. COVER ASSETS

Under the old law, the eligible cover pool assets are defined in Article 12-1 of the Financial Sector Act of 5 April 1993. Since the amendments of the covered bond legislation in June 2018, there are five asset classes: (i) mortgage assets, (ii) public sector exposures, (iii) movable assets, i.e. mortgage loans on ships, aircrafts, trains or other classes of movable assets, (iv) assets issued by credit institutions that are backed by a system of institutional guarantee and (v) lending for renewable energy asset/projects. The cover assets including substitution assets have to be principally established in the EU, the EEA or the OECD. However, the cover pools can contain up to 50% assets from outside the EU, the EEA and the OECD, if a rating agency registered on the ESMA list has assigned sovereign ratings of credit quality step 1 to the respective countries, and up to 10%, if the sovereign ratings are credit quality step 2.

In each of the various cover pools the assets may be replaced by up to 20% of the nominal value of the outstanding Lettres de Gage by substitution assets, for example cash, assets with central banks or with credit institutions or bonds satisfying the conditions set out in Article 43 (4) of the law of 17 December 2010 concerning undertakings for collective investments.

It is also possible to hold the cover assets indirectly through a third-party bank.

The Lettres de Gage Mobilières are backed by movable assets, i.e. mortgage loans on ships, aircrafts, trains or other classes of movable assets. In order to be cover pool eligible, the movable assets and the charges on the property of those assets need to be registered in a public register.

Lettres de Gage Énergies Renouvelables are backed by lending to projects generating renewable energy. That includes all necessary equipment for the generation, storage, and transmission of such energy, including electricity storage facilities, transformers, and power lines, whether under construction or finalised. To be cover pool eligible, production equipment must be used exclusively to produce renewable energy, while storage and transmission equipment needs to be used more than 50% in connection with renewable energy.

In addition, securitised assets are cover pool eligible if they comply with the eligibility criteria laid down for the various types of Lettres de Gage. The amount of securitised assets that are not cover pool eligible per se will be limited to 10% of the collateral pool. This can be achieved in two ways: one option would be that at least 90% of the assets of each securitisation (vehicle) are cover pool eligible. The other option would be that at least 50% of the assets of each securitisation (vehicle) are cover pool eligible. In that case, the percentage of securitisation assets shall not exceed 20% of the total collateral pool. The issuer can choose one of the two options for each type of Lettre de Gage but cannot combine the two options. Moreover, the securitisation tranches should have a rating of the first credit quality step by a rating agency that is registered on the list by ESMA. The law allows only true sale transactions and synthetic securitisations are explicitly excluded.

Any kind of obligation from public sector institutions including public-private partnerships (providing a controlling public sector stake or claims for payment against the public sector) are cover pool eligible. There is no limitation on the volume and the types of derivatives used as long as they are employed as hedging instruments. The cover pools are dynamic. Assets can be included, excluded and exchanged as long as the requirements of the law are not breached.

There is an explicit transparency requirement. The issuers have to publish information on the composition of the cover pool, the bonds and the issuers. The details are defined by the CSSF in Circular 18/706.

Under the new law, article 8 specifies the cover assets for Lettres de Gage Hypothécaires, Lettres de Gage Mobilières and Lettres de Gage Énergies Renouvelables as well as European covered bonds and (high-quality) European covered bonds. As regards European covered bonds a public register recording the ownership of and claims to such assets, or an alternative form of certification is required for physical assets. In the case of assets in the form of risk positions, the safety and soundness of the relevant counterparty for public entities is derived either from tax collection powers or from ongoing public oversight of the operational soundness and solvency of the counterparty. European covered bonds may also be covered by assets in the form of loans granted to public companies where the public enterprises provide essential public services on the basis of a license, concession contract or other form of entrustment by a public authority. Additionally, public undertakings are subject to public oversight and the public undertakings have powers that enable the generation of sufficient revenues.

IV. VALUATION AND LTV CRITERIA

Article 8 of the new law defines that the LTV limit for European covered bonds and (high-quality) European covered bonds is 70%. The physical assets pledged as collateral referred to in Article 4(2)(1) that secure assets referred to in Article 4(1)(2) do not have to comply with the 70% limit or the limits set out in Article 129(1) of Regulation (EU) No 575/2013. Beyond these bonds defined the LTV limit for residential property is 80% of the estimated realisation value. The LTV ratio is 60% for all other immovable and movable properties including commercial real estate loans. The actual loan, however, can exceed the 60% limit (or 80% limit in case of residential mortgages). In those cases, only the 60% (80%, respectively) of the mortgage lending value is eligible for the cover pool. The LTV ratio for 'renewable energy' loans is limited by law to 50%. The limit might, however, be increased to up to 80% if certain conditions (such as a regulated fixed remuneration regime or free of charge renewable energy sources) are met.

V. ASSET – LIABILITY MANAGEMENT

Under the old law, there is a minimum overcollateralisation level of 2% on a nominal basis as well as on a net present value basis. Mismatches in terms of currency or interest rate risk can be hedged and the respective hedge instruments have to be included in the collateral pool. The cover assets of the relevant cover pool must provide total interest revenue at least equal to the amount of interest of the covered bonds of the same category in circulation. The amendments of the Lettre de Gage law in June 2018 also included the introduction of a liquidity buffer of 180 days. The liquid buffer assets can consist of ECB eligible assets as well as assets qualifying as Level 1 or Level 2A assets under the European LCR rules (excluding own-use covered bonds). In addition, there are the requirements imposed by the rating agencies. The new covered bond law of Luxembourg specifies the requirements regarding the liquidity buffer in article 9, whereas in article 10 maturity extensions are ruled out for covered bonds in Luxembourg.

Article 6 of the new law specifies the coverage requirements for covered bonds issued under Luxembourg law. The issuer has to ensure that the present value of the cover assets is at all times equal to or higher than the present value of the liabilities arising from the outstanding bonds. In addition to that, nominal coverage is required. For Lettres de Gage Hypothécaires, Lettres de Gage Mobilières and Lettres de Gage Énergies Renouvelables as well as European covered bonds minimum OC is given by minimum of 5%. The CSSF may, in accordance with the covered bond directive, lower the OC requirement in accordance with in accordance with Article 129 CRR For, Lettres de Gage Publiques, Lettres article 6 defines a minimum OC of 10%.

The special auditor has to ensure that there is always sufficient collateral in the pool. This has to be certified by the special auditor when Lettres de Gage are issued. Cover assets may only be removed from the cover pool when the prior written consent of the special auditor has been received and provided that the remaining cover assets are sufficient to guarantee the legally protected cover.

The calculation of the nominal value and of the net present value of the collateral pool as well of the outstanding Lettres de Gage volume must be reported to the supervisory authority on a monthly basis.

The new law specifies in Article 10 that the issuer may not issue covered bonds in the form of soft bullets; i.e. maturity extension is ruled out by law.

VI. TRANSPARENCY

There is an explicit transparency requirement laid down in Article 12-6(2) and supplemented by CSSF Circular 18/706. The issuers have to publish information on the composition of the cover pool, the Lettres de Gage and the issuer. This is in line with the ECBC Covered Bond Label Initiative. Based on the new law, issuers' duties regarding the provision of information for investors include at least quarterly reports. The required details described in article 18 of the law, include, amongst others, the amount of outstanding bonds and the corresponding amount of cover assets, a list of ISINs, geographical distribution and types of cover assets, amount of loans and the valuation methods.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The supervisory authority of covered bond issuers is the CSSF, as already mentioned above. The CSSF has a specialised department which is responsible for supervising the covered bond issuers. It is entitled to demand relevant reports and intercede if liquidity problems have been identified at a bank.

The CSSF is also responsible for the approval of the various types of covered bonds secured by movable assets. Definitions, the details on which types of movable assets qualify and other practical issues will be clarified in a separate CSSF Circular. Based on the new law, the CSSF is also required to disclose information regarding covered bond issuers, relevant laws, regulations and CSSF circulars in the context of covered bonds on its website. The information include a list of institutes with the permission to issue covered bonds, a list of bonds which may be labelled as European covered bonds and a list of (high-quality) European covered bonds as well as a list of all other covered bonds including a classification of covered bond type.

For the independent control of the cover pool a special auditor which is recommended by the Lettres de Gage issuer has to be approved by the supervisory authority. Only auditing firms which satisfy the conditions set forth in the law of 2009 *regarding réviseurs d'entreprises* (independent auditors) can be appointed as special auditors. The issuer communicates the names of the partners of these auditing firms who will fulfil the function to CSSF. The special auditor must have a suitable qualification and must be able to call upon the experience and technical expertise of a recognised international auditing firm.

The special auditor is continuously responsible for monitoring the collateral pool and the outstanding Lettres de Gage. The auditor must ensure that there are sufficient assets in the collateral pool to service the obligations resulting from the outstanding Lettres de Gage up to the final maturity of the last outstanding bond. The auditor is obliged to inform the supervisory authority immediately, should any of the prudential limits be violated. The Lettres de Gage issuer is also obliged to immediately inform the supervisory authority of the violation of any limits.

Rating agencies do not play any mandatory role in the monitoring process. The issuers comply with the rating agencies' requirements on a voluntary basis.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

The cover registers for mortgage, public sector, moveable assets, assets backed by a system of institutional guarantee and renewable energy assets include all necessary data to identify the assets and the derivatives included. As soon as an asset or derivative product is registered in the official cover register it forms part of the collateral pool.

The cover register is managed by the issuer but regularly monitored by the special auditor. The special auditor is obliged to inform the CSSF of any irregularities and provide an annual report.

Asset segregation

In the case that a procedure of suspension of payments or compulsory liquidation is opened for a Lettres de Gage issuer, the assets and derivatives in the collateral pool are separated from the other assets and liabilities of the bank. The respective collateral pools remain unchanged and continue with their corresponding Lettres de Gage and their corresponding reserve at the Luxembourgish Central Bank as proprietary compartments of a Lettres de Gage bank with limited activity. The cover pools do not become separate legal entities. The legal entity of the bank remains unchanged. The banking license continues for the bank with limited activity in order to achieve the purpose of administering the cover pool up to the final maturity of the last outstanding Lettre de Gage. The court nominates one or several administrators for the cover pools. This administrator is different from the general bankruptcy administrator. If a procedure of suspension of payments or compulsory liquidation is opened for one cover pool, the other pools are not affected by this decision and continue.

Impact of insolvency proceedings on covered bonds and derivatives

Covered bonds do not automatically become due when a procedure of suspension of payments or compulsory liquidation is opened for the issuing bank. Interest and principal are paid as per their original due dates. The same applies to derivatives registered in the cover register which are part of the cover pool. The net present value of the derivatives after netting ranks pari passu with the claims of the Lettres de Gage holders.

Preferential treatment of covered bond holders

Covered bond holders benefit from a preferential treatment in case of an issuer insolvency. The registration of the cover assets in the cover register provides the covered bond holders with a preferential right, above all other rights, preferences and priorities of any nature whatsoever, including those of the Treasury. But the salary of the administrator and the other fees that are necessary for continuing the bank with limited activity rank first before the claims of the covered bond holders and the derivative counterparties, which rank *pari passu*. The general bankruptcy administrator has no direct access to the assets in the collateral pool.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Referring to the old law, the Luxembourg covered bond legislation fulfils the criteria of Article 52 (4) of the UCITS Directive (Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS)). In its old format, the covered bond legislation did not fulfil the requirements set out in Article 129 of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, the Capital Requirements Regulation (CRR), together with Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC, the Capital Requirements Directive (CRD), implementing the Basel III rules into European law.[1] The last two amendments of the Luxembourg covered bond legislation did not make the Lettres de Gage legislation CRR-compliant. However, it should be possible for issuers to make their outstanding Lettres de Gage "CRR compliant" by limiting their cover pool exposure.

Lettres de Gage are principally eligible for repo transactions with the European Central Bank (ECB). However, on 28 November 2012, the ECB announced amendments of its eligibility criteria for its repo transactions. The changes entered into force on 3 January 2013. Covered bonds with external, non-intra group securitisations in the cover pool are no longer eligible as collateral for repo transactions as of 31 March 2013. This means

1 Please click on the following link for further information on the UCITS Directive and the CRR: https://hypo.org/ecbc/covered-bonds/.

that following the end of the grandfathering period in 2014, new and outstanding covered bonds with external RMBS or other ABS (both group-internal or external) in the cover pool are no longer repo eligible.

With regard to the new law, there have not been any changes leading to a different regulatory treatment of Lettre de Gages. European covered bonds, which have been introduced as a covered bond type in the new legislation, are also not CRR-compliament, whereas covered bonds which fulfill the requirements to be classified as (high-quality) European covered bonds are by definition CRR-compliant.

Issuers: Commerzbank Finance & Covered Bond, NORD/LB Luxembourg Covered Bond Bank.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Luxembourgish market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.25 THE NETHERLANDS

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I. FRAMEWORK

The Dutch regulatory framework for the issuance of covered bonds initially came into force on 1 July 2008. In order to strengthen the supervisory regime with respect to covered bonds, the Financial Supervision Act was amended in 2014, raising the legal framework for covered bonds to the level of law.

The Dutch regulatory framework has since been amended following the national transposition of the Covered Bond Directive in 2022. The applicable legislation is listed in Table 1 below. The transposition included various amendments made to existing regulations but the main provisions have been moved to a separate, self-contained Implementation Decree. The new regulatory regime came into force on 8 July 2022.

> Table 1: Overview Dutch covered bond legislation

2022
Implementation Act Covered Bonds of 15 December 2021, published on 20 January 2022[1]
Implementation Decree Covered Bonds of 24 May 2022, published on 13 June 2022[2]

II. STRUCTURE OF THE ISSUER

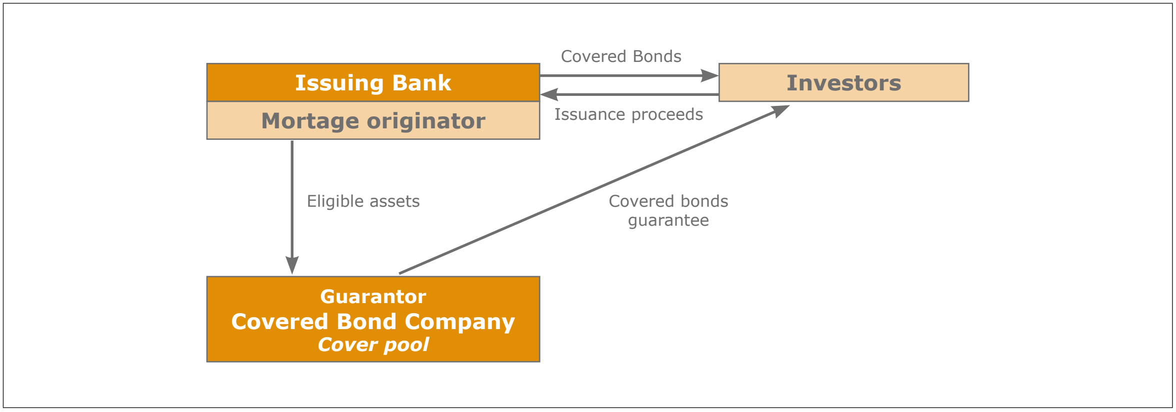
Dutch covered bonds can be issued by licensed banks that are located in the Netherlands, upon permission by the Dutch Central Bank (De Nederlandsche Bank, DNB). To obtain permission the bank has to prove, among other things, that in the case of a default or resolution of the issuer, covered bondholders and derivative counterparties have a priority claim against the principal and any accrued and future interest on the cover assets securing the liabilities related to the covered bonds. These liabilities encompass the principal and interest payment obligations on the outstanding covered bonds, the payment obligations on derivative contracts in the cover pool, and the expected costs related to the maintenance and administration for the winding-down of the covered bond programme.

The cover assets are secured in favour of the secured creditors via the transfer to a separate legal entity, the Covered Bond Company (CBC). The Covered Bond Company is established exclusively to isolate the cover assets from the other assets of the bank and to perform the necessary activities on behalf of the covered bond programme. The Covered Bond Company can also enter into agreements for the administration and management of the cover assets, as well as for liquidity and risk management purposes. These include derivative contracts, servicer agreements, asset monitor agreements and management agreements.

1 Implementatiewet richtlijn gedekte obligaties, Staatsblad 2022, nr 22.

2 Implementatiebesluit richtlijn gedekte obligaties, Staatsblad 2022, nr 223.

> FIGURE 1: STRUCTURAL OVERVIEW



III. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

The assets are transferred to the Covered Bond Company, by means of a guarantee support agreement. Under this agreement, the mortgage originator passes on eligible receivables to the Covered Bond Company via an undisclosed or silent assignment. The legal ownership of the mortgage loans is transferred to the Covered Bond Company via a deed of sale and assignment, without notifying the borrowers. The Covered Bond Company guarantees in return to pay interest and principal on the covered bonds to the investors if the issuer defaults (covered bond guarantee). The obligations of the Covered Bond Company are unsubordinated and unguaranteed obligations backed by eligible receivables.

If the issuer defaults on his obligations, a Security Trustee (not shown in the structural overview) may serve an issuer acceleration notice to the issuer and a notice to pay to the Covered Bond Company in line with the guarantee. As such the covered bonds do not accelerate against the Covered Bond Company if the issuer defaults, while the bondholders have full recourse to the assets of the Covered Bond Company. If the Covered Bond Company defaults on its payment obligations the covered bonds may accelerate (hard and soft bullet covered bonds) or may become pass-through, which is conditional on pool sales being unsuccessful and a breach of the amortisation test (conditional pass-through covered bonds).

To ensure bankruptcy remoteness, the bank, or any related group entity, cannot hold shares in the Covered Bond Company and has no policy-determining control, nor any other ownership interests towards this legal entity. Furthermore, the bank should always be able to identify the cover assets, to assure that it can determine at all times which assets have been transferred to the Covered Bond Company, and are available in the event of a bankruptcy of the bank. Moreover, the Dutch covered bond rules assure that neither a bankruptcy nor a resolution of the bank issuing covered bonds, would result in a change in the rights of the covered bondholders with respect to a third party in relation to the covered bonds.

IV. REGISTRATION REQUIREMENTS AND COVER ASSETS

At the time of registration of a covered bond programme at the Dutch Central Bank, the issuing entity has to provide a wealth of information to the supervisor, including on the specific features of the covered bond programme. The required information is extensive and includes, amongst others, the maximum size of the programme, the rights and obligations of the Covered Bond Company, the agreements with various parties, the type and composition of cover assets, the country exposure of the cover assets as well as the law by which they are regulated, valuation of the cover assets, the extension period and criteria that trigger extension, as well as various risk management and reporting procedures. Essentially, all information necessary to verify the programme meets the legal requirements needs to be provided to the DNB. The most noteworthy programme features are:

> The specific nature of the cover pool assets. At least 80% of the cover pool shall include one of the cover assets set out in CRR Article 129(1)(a)-(g) as primary assets. Up to 20% of the cover pool may include one or more of the other cover assets set out in CRR article 129 (1)(a)-(g) as substitute assets. Currently, all Dutch covered bond programmes solely use Dutch residential mortgages as primary assets.

> The redemption profile of the covered bonds, i.e., whether the covered bonds have a hard-bullet, soft-bullet, or (conditional) pass-through structure and the criteria for triggering an extension. Prior to the transposition of the Covered Bond Directive, the Dutch law explicitly allowed issuance from a single programme of covered bonds with a hard-bullet as well as soft-bullet structure with an extension period up to 24 months. In contrast, conditional pass-through covered bonds needed to be issued from a separate programme. As of 8 July 2022, there is no longer such an explicit separation required in the regulatory framework. However, the different maturity structures mean that in practice programmes have to be separated anyways. The covered bond programmes of ABN AMRO Bank and ING Bank contain mainly soft-bullet issuances. A few covered bonds from these two issuers that have been privately placed (including some denominated in foreign currencies) still have hard-bullet structures. Meanwhile, Rabobank and de Volksbank only have soft-bullet covered bonds outstanding. Following NN Bank's conversion of its outstanding conditional pass-through covered bonds to the soft-bullet format in 2022, they only have soft-bullet covered bonds outstanding. Aegon Bank, Achmea Bank, NIBC Bank and Van Lanschot Kempen all have both conditional pass-through covered bonds and soft-bullet covered bonds outstanding following the establishment of soft-bullet programmes in the past few years.

> **Primary cover assets**

The cover assets should meet the CRR article 129 requirements, meaning that the following assets are eligible:

> Exposures to or guaranteed by central governments, the European System of Central Banks (ESCB) central banks, public sector entities, regional governments or local authorities in the Union as referred to in CRR Article 129, paragraph 1(a);

> Exposures to or guaranteed by third country central governments, third-country central banks, multilateral development banks, international organisations that qualify for the credit quality step 1 and exposures to or guaranteed by third-country public sector entities, third-country regional governments or third-country local authorities that meet certain requirements as referred to in CRR Article 129, paragraph 1(b);

> Exposures to credit institutions that qualify for credit quality step 1 or credit quality step 2, or exposures to credit institutions that qualify for credit quality step 3 where those exposures are in the form of certain short-term deposits and derivative contracts as referred to in CRR Article 129, paragraph 1(c);

> Residential mortgages up to an 80% LTV ratio as referred to in CRR Article 129, paragraph 1(d) and residential loans fully guaranteed by an eligible protection provider as referred to in 1(e);

> Commercial mortgages up to a 60% LTV ratio, though with the possibility for the LTV ratio to rise to 70% as referred to in CRR Article 129, paragraph 1(f);

> Ship loans up to a 60% LTV ratio as referred to in CRR Article 129, paragraph 1(g).

By transposing only point (a) of Article 6(1) of the Directive, it is ensured that all Dutch covered bonds meet the CRR Article 129 asset eligibility requirements and can be labelled European Covered Bonds (Premium). Assets other than those listed in CRR Article 129 paragraph 1(a)-(g) are not eligible as cover assets. However, the Implementation Decree contains the possibility for assets listed in Article 6(1) (b) and (c) of the Directive to be made eligible by way of Ministerial Regulation.

The new Dutch Covered Bond Legislation requires that at least 80% of the cover pool shall consist of one type of the primary cover assets as set out in CRR Article 129, paragraph 1(a)-(g). To avoid confusion, Dutch mortgage loans carrying a guarantee from the government-sponsored Nationale Hypotheek Garantie (NHG) scheme, are treated as normal residential mortgages in all current Dutch covered bond programmes, subject to an 80% LTV cut-off for certain asset coverage requirement purposes.

Substitute cover assets

The Dutch Covered Bond Law also allows for substitution assets to be included as cover assets. However, the inclusion of these type of assets is restricted to a maximum of 20% of the total nominal value of the cover pool assets. Eligible as substitution assets are the cover assets described above, which are those as referred to in CRR Article 129, paragraph 1(a)-(g).

Country exposure of cover asset

The law notes that the debtor of the cover asset as well as the collateral related to the cover assets need to be located in the EU or the European Economic Area. Currently, primary assets backing Dutch covered bond programmes exclusively consist of Dutch residential mortgage loans.

V. VALUATION AND LTV CRITERIA

The Dutch covered bond law requires that loans backed by immovable property, such as residential and commercial mortgages, and ships should meet the (monitoring and valuation) requirements set out in CRR article 208. Article 208 specifically concerns requirements for immovable property and includes, among others, legal enforceability as well as sound underwriting criteria. Moreover, the article requires the monitoring of commercial and ship loan property values every year and of residential mortgage loans every three years. However, CRR Article 129(3) states that monitoring of property values needs to be carried out frequently and at least on an annual basis for all immovable property and ship collateral. The Dutch law does not explicitly reference Article 129(3). However, an explanatory note to the Decree states that the collateral underlying residential mortgages should be valued not every three years but at least annually (which was already the practice under the old Dutch law), making reference to Article 129(3).

Finally, in case of significant changes in market conditions more frequent monitoring might be required, issuers can also use statistical methods to monitor property values in order to comply with the requirements.

The Dutch covered bond law requires assets to be valued at or below the market value or the mortgage lending value. The value can be the initial valuation at the moment of mortgage origination but also any subsequent valuation or revaluation as part of the monitoring requirements. For any appraisal by a valuation agent, the law imposes certain requirements. For instance, the valuation agent needs to possess the necessary qualifications, ability and experience, and must be independent from the credit decision process.

In practice, the value of Dutch property is based on the market value. Most covered bond issuers take a prudent approach when monitoring and adjusting the value of the properties that are included in cover pools. For example: all issuers fully take into account any house price decreases, while most issuers adjust for house price increases only partially. Indexation takes place on a monthly basis by means of the house price average in the Netherlands according to the Land Registry house price index or other recognised methods.

In order to comply with the CRR requirements, residential mortgages with an LTV higher than 80% will only be recognised up to an 80% LTV. In a situation where mortgages with an LTV of higher than 80% are included in the cover pool, this mortgage loan will only count for a maximum of 80% in the asset cover test. The difference between the actual (higher) LTV and the 80% maximum will serve as additional credit enhancement.

No Loan-to-Income (LTI) thresholds are applicable in the Dutch covered bond regulation or programmes, but since 2013, all new Dutch mortgages have been subject to strict statutory LTI maximums at origination.

VI. ASSET – LIABILITY MANAGEMENT

The Dutch covered bond law includes several requirements and options related to asset-liability management. These include requirements related to over-collateralisation(OC), liquidity coverage, derivative contracts and covered bonds with extendable maturities.

Regarding OC, the Dutch Covered Bond Law provides for the following asset coverage requirements:

> The total nominal value of the payment claims arising from the cover assets belonging to the cover pool is at least equal to the total nominal value of the liabilities (which includes payment obligations stemming from principal and interest payments of outstanding covered bonds, payment obligations related to derivative contracts in the cover pool and expected costs related to maintenance and management for the potential run-off of the covered bond programme).

> The total nominal value of the cover assets has to be equal to at least 100% of the total nominal value of the outstanding registered covered bonds (the so-called 'nominal principle'). Furthermore, the total nominal value of the cover assets needs to be at least 5% higher than the total amount of outstanding registered covered bonds. When calculating the second – 105% requirement – Article 129 (1) a-g has to be taken into account, which means that the 80% LTV cut-off will need to be applied.

Uncollateralised claims where a default is considered to have occurred pursuant to Article 178 of Regulation (EU) No 575/2013 do not contribute to coverage.

Liquidity coverage requirements

Issuers, furthermore, need to ensure that the cover pool always includes a liquidity buffer composed of sufficient liquid assets to cover the net liquidity outflow of the covered bond programme. It should cover the cumulative net liquidity outflows for the next 180 days (i.e., coupon and redemption obligations and payments related to derivate contracts minus all income stemming from assets included in the cover pool). The liquidity buffer requirement with respect to redemption payments is not applicable for covered bonds with extendable maturities (soft-bullet or conditional pass-through), for which the extended maturity date will be taken into account.

The liquid assets allowed remain limited to those assets qualifying as level 1, level 2A and level 2B of the LCR Regulation (valued in accordance with that delegated regulation and not issued by the issuer itself, its parent company, its subsidiary, another subsidiary of its parent company, or by a securitisation SPV with close links to the issuing bank) as well as short-term exposures to credit institutions that qualify for credit quality step 1 and 2 (i.e. a minimum credit rating of A-) or short-term deposits to credit institutions that qualify for credit quality steps 1,2, or 3, in accordance with CRR article 129 (1), point c.

Extendable maturity structures

In order to mitigate liquidity risks, banks may issue covered bonds with an extendable maturity if, prior to the first issuance of the covered bond program, the contractual terms of that program provide that extension of the maturity may not be made at the discretion of the bank and shall occur only if:

1. There is a breach of contract or default of payment by the bank or any act to that effect, there is a liquidation, dissolution or restructuring of debts of the bank or an arrangement with creditors, or a resolution measure as referred to in Article 3A:1 of the Act has been applied to the bank or the bank has been declared bankrupt; and
2. The legal entity to which the cover assets have been transferred has insufficient funds on the maturity date of the covered bonds to repay the principal amount of that covered bond, that legal entity cannot meet

any of the coverage requirements referred to in Article 40g(1) and (2) of the Decree, or that legal entity cannot meet any other contractually agreed requirement with respect to securing the coverage.

The law does not stipulate details about the length of extensions and neither specifies the role of covered bond holders and/or the CBC. Banks can determine this contractually.

A bank that issues a covered bond whose maturity may be extended shall, upon issuance of the covered bond, provide information about 1) the conditions for extending the maturity 2) the impact of a bankruptcy or resolution of the bank on the extension of the maturity and 3) the role of DNB with respect to the extension of the maturity. In fact, DNB checks whether all the conditions of the law, including the requirements related to maturity extensions, have been met when granting permission for a covered bond programme. However, once a covered bond programme has been approved by DNB and a maturity extension is triggered, DNB has no role as supervisor, although it must be informed in a timely manner.

Other conditions are that a bank that issues a covered bond shall ensure that the maturity date of that covered bond can be determined at all times, while a maturity extension shall not affect the order in which covered bond holders may recover their claims and shall not reverse the order of the original maturity schedule of the covered bond programme if the bank has been subject to a resolution measure or has been declared bankrupt. A maturity extension shall also not affect the dual recourse and bankruptcy remoteness principles.

Use of derivative contracts

The Covered Bond Company can only enter into derivative contracts (such as currency swaps, interest rate swaps and total return swaps) if these support the risk management of the programme in favour of the registered covered bondholders. A derivative contract may only be entered into if the contract is sufficiently documented, while the counterparty to these agreements should not have the right to terminate the contract or to suspend its obligations under the contract if the creditworthiness of the issuing bank deteriorates. Furthermore, the contract should be concluded with a financial institution that is subject to supervision. Finally, if the counterparty itself no longer meets the minimum creditworthiness requirements, it should provide for sufficient collateral or replace itself.

Another requirement is that the volume of a derivative contract shall be adjusted if there is a reduction in the risk to which the derivative contract relates. A derivative contract shall be removed from the cover pool if the risk to the holders of covered bonds ceases to exist.

As a result of changes in especially the regulatory landscape, the use of derivative contracts to mitigate (interest rate) risks associated with the registered covered bonds has diminished in importance in recent years. Instead, several issuers decided to introduce interest reserve requirements, minimum mortgage interest rate requirements and/or to pledge additional collateral.

VII. TRANSPARENCY

Before registration of its programme, the covered bond issuer already needs to report a lot of detailed information to the supervisor on the specific features of the covered bond programme (see paragraph III). After registration, the law stipulates that the issuing entity needs to continue to provide information to DNB on a regular basis (see more details in paragraph VIII).

The Dutch law also requires issuers to provide investors with information stipulated in Article 14 of the Directive at least on a quarterly basis, which will also be published on their websites. This includes information about the value of the cover pool and outstanding covered bonds; a list of ISINs for all covered bonds issued; the geographical distribution of and type of cover assets, their size and valuation method; details related to all kinds of risk metrics (market risk, interest rate risk, currency risk, credit and liquidity risk); maturity structure of the cover assets and covered bonds; levels of required and available coverage, and levels of statutory, contractual and voluntary OC; the percentage of loans in default.

All Dutch registered covered bond issuers currently publish investor reports on a monthly basis. These reports can be found on their websites, while there is also a link on the website of the Dutch Association of Covered Bond Issuers (www.dacb.nl) to these reports and via the national information pages on the Covered Bond Label website. The Dutch issuers have also implemented the Harmonised Transparency Template (HTT). Finally, DNB keeps a public register of approved Dutch covered bond programmes.

VIII. COVER POOL MONITOR AND BANKING SUPERVISION

Cover pool monitor

The issuer has to appoint an internal or external **cover pool monitor** before the first issuance under a covered bond programme. The cover pool monitor has to check, ahead of issuance and at least annually thereafter, that the regulatory requirements on the structural features of the covered bonds are met (e.g., asset segregation, cover assets, derivative contracts, maturity extension, asset coverage and liquidity coverage). The functions of a cover pool monitor can be assigned to different internal and external parties, but the asset coverage and liquidity coverage requirements have to be checked by an external accountant.

An external cover pool monitor is fully independent and has no links with the bank or the external accountant of the bank. An internal cover pool monitor can have ties with the issuing bank, including the external accountant of the bank, but has to be independent from the credit decision process of the bank. The internal cover pool monitor has direct access to the supervisory board of the bank, and cannot be removed from its function as cover pool monitor without prior approval of the supervisory board (or a comparable body). The internal cover pool monitor provisions are in line with the existing Dutch practice. The bank's internal processes and controls ensure that the legal requirements related to the issuance of covered bonds are met, while the external accountant of the bank checks the compliance with the asset coverage and liquidity coverage requirements.

In both cases, the bank that issues covered bonds has to ensure that the checks of the asset coverage and liquidity coverage requirements will continue to take place in the event of a resolution or bankruptcy of the bank. The bank will report annually to the Dutch Central Bank on the outcome of the checks on the asset coverage and liquidity coverage requirements. Besides, the cover pool monitor should be granted access to all information necessary for the performance of its duties.

Special supervision

Dutch covered bond programmes are also subject to **special supervision** of the Dutch Central Bank, which has to grant permission to a bank that wants to issue covered bonds. Permission will only be granted, if all regulatory requirements related to the issuance of covered bonds are met. To obtain permission the bank has to prove that it has:

> An adequate programme of operations setting out the issuance of covered bonds;

> Adequate policies, processes and methodologies for the approval, amendment, renewal and refinancing of assets included in the cover pool;

> Management and staff dedicated to the covered bond programme which have adequate qualifications and knowledge regarding the issuance of covered bonds and the administration of the covered bond programme; and

> An adequate administrative set-up of the cover pool and the monitoring thereof.

To this purpose, the bank must provide the Dutch Central Bank with an independent legal opinion, allowing the supervisor to verify that the asset segregation requirements are met. The agreements of the Covered Bond Company with its manager, and the agreement with the cover pool monitor or accountant also have to be made available. Besides, the issuing bank must deliver a written statement by the manager of the bank that all regulatory requirements are met, needed for permission to issue covered bonds, to secure the payment obligations related to the covered bonds, and on the regular provision of information to the covered bond investors and supervisory authority. Such a written statement not only has to be delivered to the Dutch Central Bank upon the request for permission, but also on an annual basis thereafter.

A bank permitted to issue covered bonds will immediately notify the Dutch Central Bank of any changes in the agreements related to the established Covered Bond Company or the appointment of the cover pool monitor. Furthermore, the Dutch Central Bank has to be notified upfront if the bank intends to make significant changes to the terms and conditions applicable to the covered bonds.

The issuing bank also has to meet the regular reporting requirements towards the Dutch Central Bank, allowing the central bank to assess that the issuing bank meets the regulatory requirements for the issuance of covered bonds. This includes information related to:

> The coverage requirements, including a) the composition of the cover pool by at least 80% primary assets, and maximum 20% substitution assets, and b) the 100% nominal coverage requirement of all payment obligations and 105% nominal coverage requirement of the outstanding covered bonds;

> The monitoring of property values and property valuation, property insurance and the geographical location of the debtor of the cover assets;

> Derivative contracts included in the cover pool;

> The 180 days liquidity buffer;

> Extendable maturities;

> Other information required by the Dutch Central Bank to assess that the regulatory requirements for the issuance of covered bonds are met;

The data regarding the asset coverage requirements and liquidity coverage requirements have to be provided at the start of the covered bond programme and quarterly thereafter. The data regarding the property valuation, insurance and location, derivative contracts, extendable maturities and other required information have to be provided at the start of the programme, and only thereafter if the information has changed or upon request of the Dutch Central Bank.

Penalties

The Dutch Central Bank is allowed to (partially) revoke, change or attach further requirements to the permission to issue covered bonds if the bank a) would make an application thereto, b) has provided incorrect or incomplete information upon the request for permission, or c) concealed circumstances that would have led to a denial of such permission, or d) would no longer comply with the regulatory conditions for permission to issue covered bonds.

In the event of a breach of the regulatory provisions for covered bond issuance, the Dutch Central Bank can also issue a public warning, if necessary, stating the considerations that led to such a warning. Besides, the supervisor can oblige the issuer, by means of an order, to take a certain course of action regarding the points indicated in the order, within a reasonable time.

The supervisory authority is also allowed to impose an administrative fine in the event of a breach of the covered bond rules. Financial fines can for instance be imposed if a credit institution issues covered bonds without obtaining permission from the Dutch Central Bank, or if the covered bond issuer fails to comply with the regulatory requirements on asset coverage, transparency, asset segregation, cover pool composition, asset eligibility, derivative contracts in the cover pool, cover pool liquidity buffer, documentation, extendable maturity structures, cover pool monitor or labelling.

When determining an administrative fine, the supervisor will take certain circumstances into account, such as the gravity and duration of the breach, the advantages gained by the breach, the losses caused to third parties, the consequences to the financial system, the degree to which the issuer is responsible for the breach and any previous breaches, the cooperation of the issuer with the supervisor and the measures taken after a breach to prevent it from happening again.

Post issuer insolvency or resolution

The Dutch covered bond legislation does not provide for the appointment of a special administrator in the event of issuer insolvency or resolution. However, the Dutch law requires co-operation and exchange of data and intelligence between the Dutch supervisor with European authorities, if necessary for the performance of their duties. This would also apply in the situation of a resolution of a credit institution issuing covered bonds.

Disclosures by the supervisor

The Dutch Central Bank has to publish on its website:

> The text of the Dutch national laws, regulations, administrative rules and general guidance adopted in relation to the issue of covered bonds;

> An up-to-date list of credit institutions permitted by the Dutch Central Bank to issue covered bonds in relation to a covered bond programme;

> An up-to-date list of covered bonds entitles to use the label European Covered Bond, and an up-to-date list of covered bonds entitled to use the label European Covered Bond (Premium). In practice, solely the label European Covered Bond (Premium) can be used by covered bonds meeting the amended Dutch legal requirements effective per 8 July 2022.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The Dutch covered bond law only allows covered bonds that comply with the CBD as well as with CRR Article 129. As such (and as stated above), solely the label European Covered Bond (Premium) can be used once issuers have aligned their covered bond programmes with the Dutch covered bond law effective per 8 July 2022. This also implies that Dutch covered bonds can be eligible for a 10% preferential risk weight treatment under the Standardized Approach. The bonds are also Solvency II and ECBC Label compliant. Furthermore, the they fall within the Level 1 category of the LCR.

Dutch covered bonds issued until 7 July 2022 benefit from the transition measures that have been implemented. These include that Articles 3:33a(1) to (3) and 3:33b(1) and (2) of the Financial Supervision Act will not apply to them. Instead, they need to comply with the Articles 3:33a that were applied prior to the entry into force of new Act, while they also need to comply with the reporting requirements outlined in Article 14 of the Directive. Meanwhile, the Dutch law also allows for tap issuance of covered bonds issued until 7 July 2022. This reflects Article 30(2) of the Directive and taps are only allowed until 7 July 2024. The fact that outstanding covered bonds can be grandfathered implies that they will benefit from a similar preferential treatment (while it is likely that they will also comply with the new CBD and CRR after issuers have updated their covered bond programmes).

X. ADDITIONAL INFORMATION

More information on Dutch covered bonds can be found on the website of the Dutch Association of Covered Bond Issuers (www.dacb.nl), which was established in 2011 and has the following objectives:

> To represent the interests of the Dutch issuers in discussions with legislative and regulatory authorities;

> To provide investors with information about the Dutch covered bond market;

> To participate on behalf of the Dutch issuers in international covered bond organisations like the ECBC;

> To continuously improve the quality of the Dutch covered bond product offering.

Issuers: ABN AMRO Bank, Achmea Bank, Aegon Bank, Van Lanschot Kempen, ING Bank, NIBC Bank, NN Bank, Rabobank, de Volksbank.

COVERED BOND LABEL: ING Bank N.V. (2 pools), ABN AMRO Bank N.V. (1 pool), de Volksbank N.V. (1 pool), NIBC Bank N.V. (2 pools), Van Lanschot Kempen N.V. (2 pools), Aegon Bank N.V. (2 pools), Coöperatieve Rabobank U.A. (1 pool), Nationale-Nederlanden Bank N.V. (1 pool), Achmea Bank N.V. (2 pools).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Dutch market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.26 NEW ZEALAND

By Frank Will, HSBC & Chairman of the EU Legislation Working Group

SUMMARY

The first covered bond was issued out of New Zealand in June 2010. At that time, New Zealand did not have a legislative covered bond framework and the domestic issuers used the well-tested general law-based covered bond approach following in the footsteps of the UK, France, and Canada. Since then, the regulatory authorities in New Zealand have developed dedicated covered bond legislation to support further growth of this market segment. In May 2012, the Minister of Finance introduced the Reserve Bank of New Zealand (Covered Bonds) Amendment Bill (Amendment Bill) into Parliament. Following a lengthy consultation process with the House of Representatives, the law on covered bonds came into force in December 2013, by virtue of the Reserve Bank of New Zealand (Covered Bonds) Amendment Act 2013.

Since the amendment act has come into effect and following a 9-month transition period, banks are only allowed to issue covered bonds under registered programmes. During the transition period, all issuers registered their covered bond programmes that existed before the legislation came into effect with the Reserve Bank of New Zealand. Once the programmes were registered, the previous issued covered bonds also received the benefit of the new legislation.

I. FRAMEWORK

No covered bond regulation was in place in June 2010 when New Zealand covered bonds were first issued and issuance of covered bonds was neither prohibited nor limited by any prudential requirements or other regulation.

In October 2010, the central bank released a consultation paper on proposals for a regulatory framework to provide additional certainty to investors, and to improve the disclosure requirements in order to support the development of the covered bond market in New Zealand.

In January 2011, the Reserve Bank of New Zealand (RBNZ) introduced a regulatory issuance limit for the issuance of covered bonds by New Zealand banks (which came into force in April 2011). The regulation limits the value of assets encumbered for the benefit of covered bondholders to 10% of total assets of the issuing bank. At that time the RBNZ said that this was an initial limit and that its appropriateness would be reviewed by the Central Bank, taking into account the developments within the covered bond market in New Zealand.

In December 2011, the RBNZ conducted another public consultation. The final paper was in essence aligned with the earlier consultation paper. Following approval by Cabinet in April 2012, the Reserve Bank released a Cabinet paper and Regulatory Impact Statement confirming policy positions relating to the matters discussed in the Reserve Bank's December 2011 consultation paper on covered bonds.

In May 2012, the first reading on the Amendment Bill took place. Following its first reading, the Bill was referred to the Finance and Expenditure Select Committee. In February 2013 the second reading took place. Following a third and final reading, the Amendment Bill was passed by the Parliament and received Royal Assent in December 2013. It came into force on 10 December 2013.

The New Zealand covered bond legislation gave existing covered bond issuers nine months to register their covered bond programme with the RBNZ. Each issuance under the programme is also proposed to be registered with the RBNZ. All NZ issuers have registered their old programmes which means that all outstanding NZ covered bonds receive now the benefit of the legislation.

II. STRUCTURE OF THE ISSUER

As of August 2022, issuers from five New Zealand banking groups have issued covered bonds, being ANZ Bank New Zealand Limited (ANZ), ASB Bank Limited (ASB), Bank of New Zealand (BNZ), Westpac New Zealand Limited (Westpac) and Kiwibank Limited (Kiwibank). With the exemption of Kiwibank, all issuers are ultimately owned by Australian parent banks. However, the Australian parent companies ANZ, CBA, NAB and Westpac do not guarantee the covered bonds. Typically, NZD denominated bonds have been issued directly by the New Zealand banks, while non-NZD bonds have been issued through the London branches of their respective subsidiaries and are guaranteed by the New Zealand parent company. The RBNZ emphasised from the outset that it is supportive of the covered bond product. Banks can issue bonds backed by a dynamic pool of assets, and the covered bonds rank pari passu to each other. The covered bonds are irrevocably guaranteed by the covered bond guarantor (CB guarantor) under the covered bond guarantee. The CB guarantor will only make payments under the bonds when (a) an issuer event of default has occurred, and a notice to pay is served on the CB guarantor or, (b) a CB guarantor event of default has occurred and a covered bond guarantee acceleration notice is served on the CB guarantor and the issuer.

Under the covered bond law, issuers are required to register their programmes with the RBNZ.

III. COVER ASSETS

The covered bond law does not restrict the type of cover assets. The Reserve Bank stated on its website that the assets eligible to be included in the cover pool do not need to be prescribed by legislation because banks specify asset eligibility in programme documentation. In the Reserve Bank's opinion, legislative restrictions on cover pool assets may unnecessarily restrict an issuer's ability to develop covered bond programmes.

The existing covered bond programmes are backed by a dynamic pool of residential mortgage loans originated in New Zealand. The common eligibility criteria for these mortgage loans across the programmes are listed below:

- Denominated and repayable only in New Zealand Dollars (NZD);
- Secured by first ranking residential mortgages in New Zealand;
- Mortgage loans with a term not exceeding 30 years;
- Outstanding principal balance of no more than NZD 1.5mn (Westpac)/NZD 2.0mn (ANZ, ASB, Kiwibank)/ NZD 2.5mn (BNZ); and,
- Not in arrears/have not been in default for more than 30 days.

Some of the issuers have additional features beyond these requirements. Moreover, issuers are also allowed to hold liquid substitution assets. These assets are subject to an overall limit of 10%-15% of the cover portfolio depending on the issuer (Westpac and BNZ 15%, ANZ, ASB and Kiwibank 10%), with the exception of cash that has no limit.

IV. VALUATION AND LTV CRITERIA

In New Zealand, every property is typically valued during the underwriting process. All five existing covered bond programmes do not restrict the LTV limit for mortgage loans in the cover pool. However, in the case of ASB and Westpac, the Asset Coverage Test (ACT) caps the valuation of the property at 75%. In case of ANZ, BNZ and Kiwibank this cap is set at 80%. In effect, this means the maximum amount of a loan that can count in the ACT test is 75% or 80% of the property value respectively.

V. ASSET-LIABILITY MANAGEMENT

Issuance limit: As mentioned above, there is a regulatory issuance threshold which limits the value of assets encumbered for the benefit of covered bond holders to 10% of the total assets of the issuing bank. The RBNZ highlights that this is an initial limit and its appropriateness will be reviewed taking into consideration the development of the covered bond market. The RBNZ stated that the 10% limit is "similar to the limit set in Australia" of 8%. However, the limit is "specified differently" from Australia's. "The New Zealand limit applies at all times, whereas the Australian limit applies only at the time of issuance. In addition, if an Australian bank holds cover pool assets in excess of the limit, it must deduct the value of the excess amount from its capital in calculating its regulatory capital adequacy ratios: if a New Zealand bank breaches its cover pool limit, it is in breach of its conditions of registration."

Currency and interest hedging: The underlying mortgage loans are denominated in NZD. However, covered bonds can be issued in other currency denominations, which introduces currency risk for the issuer. Moreover, the interest payable for the covered bonds will not exactly match the interest received on the mortgage loans in the collateral pool. Under the existing covered bond programmes, the issuers are required to hedge the interest and currency risks.

Soft vs hard bullet structures: The existing issuers (ANZ, ASB, BNZ, Kiwibank and Westpac) can issue hard bullet covered bonds, or covered bonds with extendable maturity of one year ("soft bullet" bonds). Hard bullet covered bonds will be subject to a 12-month pre-maturity test giving the CB guarantor 12 months to raise liquidity by selling assets of the pool.

Overcollateralisation (OC): The issuers have committed to various OC levels under the prospectuses and to the rating agencies. The covered bond law only requires that the value of the cover pool assets is at least equal to the principal amount outstanding on the covered bonds.

VI. COVER POOL MONITOR AND BANKING SUPERVISON

The law stipulates that registered covered bond issuers must appoint an independent asset monitor. The asset monitor must either be a licensed auditor or an auditing firm (or a person/firm that has been approved by the RBNZ). In this context independent means independent from both the issuer and any associated person of the issuer, whereby a person's appointment as auditor does not affect his, her, or its independence.

The existing issuers provide investor reports on a monthly or quarterly basis. In addition, monthly or quarterly reports are prepared for the rating agencies. The agencies re-calculate the required asset percentage used in the ACT on a regular basis and prior to each issuance under the respective covered bond programme. On an annual basis the asset monitor checks the arithmetic accuracy of the calculations performed by the calculation manager (usually the issuer), with respect to the asset coverage test or amortisation test (as applicable).

The law introduces the requirement for an asset register to be maintained. The asset monitor also carries out an annual check that the asset register has been updated accurately and in a timely manner.

If the issuer rating of the calculation manager is downgraded below a certain trigger level, the asset monitor will check the arithmetic accuracy of the calculations performed by the calculation manager on a monthly basis. Moreover, (1) if the asset monitor identifies any errors in the calculations performed by the calculation manager which result in a failure in the asset coverage test, or (2) if the adjusted aggregate mortgage loan amount or the amortisation test aggregate mortgage loan amount is misstated by the calculation manager by an amount exceeding 1%, or (3) if the asset register has not been maintained as required, then the asset monitor will be required to carry out the applicable check on a monthly basis until the asset monitor is satisfied that no further inaccuracies exist.

VII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

The covered bonds are direct, unsecured, unsubordinated and unconditional obligations of the relevant issuer. In addition, the CB guarantor guarantees the payments of interest and principal of the covered bonds. The issuer provides a subordinated loan to the CB guarantor which allows the CB guarantor to acquire a mortgage loan portfolio. The portfolio includes mortgage loans and the related security sold by the seller in accordance with the terms of the mortgage sale agreement.

The mandatory registration required by the new covered bond law involves the recognition of a covered bond issued with the effect that the cover assets would be explicitly protected from the insolvency or statutory management of the issuer. The RBNZ must keep a public register of registered covered bond programmes and issuances under each programme. Moreover, the covered bond law requires that the cover pool assets are held by a Special Purpose Vehicle (SPV), which is a separate legal entity from the issuer.

Under the existing covered bond programmes, the sale of the loans and their underlying security by the seller to the CB Guarantor is in the form of equitable assignment of the seller's rights, title, interest and benefit in and to the loans, their related security and the other assets which are being sold. The equitable assignment requires neither a notice to the borrowers nor a registration in the land registry. As a result, the legal title to the mortgage loans remains with the seller until legal assignment is delivered to the CB guarantor and notice of perfection of legal title is given to the borrowers. The perfection of title of the mortgage security to the CB guarantor will be triggered by certain trigger events including the notice to pay on the CB guarantor, downgrade of the issuer to sub-investment grade or insolvency of the issuer. The equitable assignment is a well-known procedure in the UK and is usually used by the covered bond issuers in the UK.

VIII. RISK-WEIGHTING AND COMPLIANCE WITH EUROPEAN LEGISLATION

The RBNZ accepts NZD denominated AAA rated covered bonds for its Domestic Markets Operations. For maturities of less than three years the haircut is 5% while covered bonds with a maturity of three years or longer are subject to a higher haircut of 8%. This includes covered bonds issued by New Zealand banks.

The covered bonds issued directly by financial institutions with registered offices in New Zealand are neither CRR nor UCITS compliant as both frameworks require the issuer to be based in the EU. The New Zealand covered bonds, therefore, do not benefit from the lower risk weighting for bank treasuries in the EU.

Issuers: ANZ Bank New Zealand, ASB Bank, BNZ, Kiwibank, Westpac Securities NZ.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the New Zealander market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.27 NORWAY

By Michael H. Cook, Finance Norway

I. FRAMEWORK

The Norwegian Covered Bond Legislation came into force on 1 June 2007. Since then, both the new Norwegian Act on Financial Institutions (hereafter "the Act") and the corresponding Regulation (hereafter "the Regulation") have been introduced. The Act, which became effective from 1 January 2016, has amended the covered bond framework so that covered bond issuers are treated the same as banks in the event of insolvency, i.e. cannot be declared bankrupt but will rather be placed under public administration. In addition, it enabled the Ministry of Finance (MoF) to set a legal minimum overcollateralisation requirement (a 2% requirement was introduced in March 2017). The Regulation concerning financial institutions came into force on 1 January 2017 but did not represent any fundamental changes to the regulatory framework concerning covered bonds (merely making it more user-friendly). The legislation provides investors very strong protection on their investments and is closely linked to corresponding EU directives and regulation.

Issuance of Norwegian covered bonds started with an issuance denominated in euro in the second half of 2007. The covered bonds market in Norway was barely untested before the global financial crisis hit the following year. Norwegian banks did not experience any substantial increase in losses during the crisis, but the liquidity shortage triggered by the turmoil in international financial markets also spread to Norwegian markets.

In order to provide liquidity to the market, the authorities offered to swap treasury bills for covered bonds from Norwegian issuers. During 2008 and 2009 a total of 230 bn kroner (about EUR 23 bn euros) of Norwegian covered bonds were exchanged in swap agreements with the government. A high demand for covered bonds in the following years gave a smooth phase out of the swap agreement. In June 2014, the final bonds used in the swap agreement came to maturity.

A proposal on Norwegian implementation of the EU-framework on covered bonds has been prepared by the Supervisory Authority and was sent on public consultation by the Ministry of Finance in 2020. The authorities have pointed to the fact that there is little need for major changes in Norwegian legislation when implementing the framework. The Ministry of Finance has also expressed its intention to establish a harmonised framework in line with other European jurisdictions. It has been stated that the new legislation will enter into force in Norway in line with the EU (i.e. 8 July 2022).

II. STRUCTURE OF THE ISSUER

According to Norwegian legislation, covered bonds may only be issued by specialised credit institutions. Today there are 24 such institutions in Norway. A majority are subsidiaries of individual parent banks, while a few issuers are owned by groups of banks. The institutions are subject to the same type of regulations as other Norwegian financial institutions, for example capital adequacy requirements, liquidity management requirements etc. The issuers are subject to a supervisory regime that involves both an independent inspector and a public supervisor, the Financial Supervisory Authority of Norway ("Finanstilsynet"). The smallest issuers only issue bonds in local currency (NOK) in the domestic market, while the largest issuers are on a regular basis present in international capital markets.

Cover pools are dominated by residential mortgages, and majority of issuers are specialised residential mortgage institutions (cf. the name "Boligkreditt"). Only a small number of issuers are specialised in commercial real estate or in public sector loans. Covered bonds from such issuers constitute just below 2% of the total outstanding volume.

A licensed credit institution may raise loans by issuing covered bonds where the object of the institution, as laid down in the articles of association, is to grant or acquire residential or commercial mortgages, public sector loans and loans secured by other registered assets. In addition, the company should finance its lending business primarily by issuing covered bonds. The articles of association of the institution shall state which types of loans that shall be granted or acquired by the institution. The scope of the business will therefore be restricted, and institutions will have a very narrow mandate, which ensures transparency.

III. COVER ASSETS

Under the Act the cover pool may only consist of the following assets:

> Residential mortgages;

> Commercial mortgages;

> Loans secured by other registered assets;

> Public sector loans;

> Assets in form of derivative agreements (in accordance with regulation);

> Substitute assets (in accordance with regulation).

Mortgages have to be collateralised with real estate or other eligible assets within the EEA or OECD, and the same geographical requirement applies to the location of the public sector loan borrowers. The Regulation adds rating requirements on the national government of the country where the mortgaged property or the borrower has its location.

IV. VALUATION AND LTV CRITERIA

LTV

The maximum loan-to-value ratio (LTV) is fixed by the Regulation. For residential mortgages the LTV limit is set to 75%, while the limit is 60% for mortgages concerning holiday/leisure properties and commercial mortgages. The mortgage credit institution shall monitor the development of the LTV of the individual asset as well as the market of the underlying assets.

Valuation

Upon inclusion of loans in the cover pool, a prudent market value shall be set. The valuation shall be documented. The valuation of residential properties may, be based on general price levels if justifiable by market development. For holiday/leisure properties the value may only be based on general price levels after the inclusion in the cover pool.

The credit institution shall establish systems for monitoring subsequent price developments. Should the property prices decline, the part of a mortgage that exceeds the relevant LTV limit is still part of the cover pool and protects the holders of preferential claims. However, it will not be taken into account when calculating the overcollateralisation in the cover pool. The same principle applies to loans that are in default, i.e. more than 90 days in arrears.

There are four main sources of market values: sales prices, real estate agent appraisals, surveyor values and Automated Valuation Model (AVM).

In Norway, most real property is sold through authorized real estate agents. They have undergone special training to operate as an estate agent and are subject to strict authorisation rules and control routines on part of the authorities.

There is one marketplace, "Finn.no", where most residential properties are put up for sale. This makes it easy to do proper marketing for properties for sale, and both seller and buyer are acting knowledgeably. Properties sold through Finn.no are sold as an open auction.

Valuation is part of the real estate agent education in Norway. Most market value appraisals applicable to mortgages are compiled in a system called Etakst. Etakst is a digitalised system developed by the Norwegian mortgage industry and contains two parts:

1. Valuation software for the real estate agent;
2. Documentation of market values for the banks.

Etakst provides a standardised approach for real estate agents to compute market values. The agents will always provide data on key features (pictures, market value based on similar dwellings in the same area etc.) for the mortgage bank.

The bank is granted access to the data when the applicant or the real estate agent provides a unique reference number to the mortgage bank. Etakst is compliant with international valuation standards such as European Valuation Standards (EVS) and International Valuation Standards (IVS).

Most Norwegian banks make extensive use of Eiendomsverdi as an AVM (automated valuation model) provider, for estimating market values of residential real estate and updating the values in accordance to subsequent development in the residential real estate market. The market value estimates are based on a complex valuation model and is performed on a property-by-property basis. The model is used both at origination, as a benchmark for physical valuations, and for updating market values on banks mortgage portfolios.

Most Norwegian covered bond issuers update the valuations on the properties in the portfolio on a quarterly basis. These updates are based on Eiendomsverdi's AVM. For each property, market value estimates are calculated using information on the specific property, comparable sales, and other attributes relevant for the housing market. Due to the richness and granularity in Eiendomsverdi's database (all residential property sales in Norway are recorded daily into the database), the estimates from Eiendomsverdi's AVM are perceived as robust, and will adapt to changes in market conditions on a daily basis. Eiendomsverdi is a member of the European AVM Alliance (EAA) and comply with the "European Standards for Statistical Valuation Methods".

V. ASSET – LIABILITY MANAGEMENT

The Norwegian covered bond legislation has traditionally imposed a strict balance principle, implying that the value of the cover pool always shall exceed the value of the covered bonds. On the 29 March 2017, the MoF announced that an OC-requirement, in addition to the strict balance principle, was set at 2% with immediate effect.

The Regulation establishes a mark-to-market principle of both assets and liabilities. Only the value of mortgages within the LTV limits is taken into account in this context. The Act caps the maximum exposure to one single borrower at 5% of the cover pool when calculating the overcollateralisation.

All voluntary OC are part of the cover pool and some issuers have committed themselves to a certain level of OC. Equally, the credit institution shall ensure that the payment flows from the cover pool enable the institution to honour its payment obligations towards holders of covered bonds and derivative counterparties at all times. It shall establish a liquidity reserve to be included in the cover pool as substitute assets in addition to carrying out periodically stress tests to ensure satisfactory liquidity management.

A covered bond issuer shall not assume greater risk than what is prudent at all times. It is obliged to establish a limit on the interest rate risk in relation to its own funds and potential losses. This shall be based on a parallel shift of 1 percentage point in all interest rate curves as well as non-parallel shifts in the same curves. Furthermore, a covered bond issuer shall not be exposed to any substantial foreign exchange risk and is thus obliged to establish limits on such risks. For the largest issuers, the issuance is often denominated in EUR with a fixed rate, whereas the mortgages are typically in NOK and with a floating rate. Consequently, Norwegian issuers are dependent on using derivatives to remove FX- and interest rate risk and to satisfy regulatory requirements.

If a derivative agreement has a positive mark to market value, the amount will be a part of the cover pool. If the value is negative, the counterparties in the derivative agreement will have a preferential claim in the pool, ranking pari passu with the holders of covered bonds. As a corollary to this, the counterparties in the derivative agreements will be subject to the same restrictions with respect to the declaration of default as the bondholders.

VI. TRANSPARENCY

Finance Norway and the Norwegian Covered Bond Council have recommended that all Norwegian issuers use the Harmonised Transparency Template (HTT) to increase transparency and comparability. In this relation, a "Norwegian version" of the HTT has been developed based on some common standards from the previously developed national template.

The HTT is only mandatory for issuers with a "label" from the Covered Bond Label Foundation. Norwegian issuers with such label are DNB Boligkreditt, Eika Boligkreditt, Nordea Eiendomskreditt, SpareBank1 Boligkreditt, Møre Boligkreditt, Sparebanken Sør Boligkreditt, Sparebanken Vest Boligkreditt and SR-Boligkreditt.

The HTT for Norwegian issuers can be found on Finance Norway's webpage:
https://www.finansnorge.no/en/covered-bonds/.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Norwegian issuers are subject to a supervisory regime involving both an independent inspector ("cover pool monitor") and the public supervisor, the FSA.

The institution shall notify the FSA no later than 30 days prior to the initial issuance of covered bonds. No further approvals from the authorities are needed when issuing covered bonds with an exception should the financial strength of the institution gives rise to concern. However, the issuer needs to apply to the FSA before establishing the setup for OMF standard (European Covered Bond) or OMF premium (European Covered Bond Premium).

The mortgage institution shall maintain a register of issued covered bonds, and of the cover assets assigned thereto, including derivative agreements. To oversee that the register is correctly maintained, an independent inspector shall be appointed by the FSA. The inspector shall regularly review compliance with legislative requirements and report to the FSA.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

The term "covered bonds", (in Norwegian "obligasjoner med fortrinnsrett" or "OMF") is protected by law and may only be applied under the rules of covered bonds. The same applies for the new European covered bonds or OMF standard and European covered bonds premium or OMF premium.

Covered bond issuers cannot be declared bankrupt but have to be placed under public administration if facing solvency or liquidity problems. This gives the authorities more flexibility to deal with covered bond companies, while maintaining the rights of covered bond holders. The liquidator shall ensure proper management of the cover pool and ensure that holders of covered bonds and derivative counterparties receive agreed and timely payments. Public administration or insolvency does not in itself give holders of covered bonds and derivative counterparties the right to accelerate their claims. Should it not be possible to make contractual payments when claims fall due, and an imminent change is unlikely, the liquidator shall introduce a halt to payments.

The covered bond owners and derivative counterparties have an exclusive, equal and proportionate preferential claim over the cover pool, and the administrator is bound to assure timely payment, provided the pool gives full coverage to the said claim.

The preferential claim also applies to payments that accrue to the institution from the cover pool. As long as they receive timely payments, the creditors do not have the right to declare that the issuer must be placed under public administration. Details about this issue may be reflected in the individual agreements between the issuer and (the trustee of) the bondholders. These provisions will also apply to any netting agreements between the institution and its counterparties in derivative transactions.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The legislation fulfils and is in compliance with the relevant EU legislation, i.e. the Capital Requirements Regulation (CRR) and Article 52 (4) UCITS.[1] Hence, Norwegian covered bonds are eligible for reduced (10%) risk-weighting under the standard method for capital adequacy requirement. They are also eligible as collateral in the ECB and qualify as liquid assets under the Liquidity Coverage Ratio (LCR) given fulfilment of the specific criteria defined in the Delegated Act.

The issuers are licensed credit institutions under supervision of the Norwegian FSA, and as such they are bound to comply with all relevant single market directives and regulations applicable to European credit institutions.

X. ADDITIONAL INFORMATION

Legislation supplementing the covered bond legislation

The legal framework regulating the housing market provide legal certainty and foreseeability for both consumers as borrowers and owners of housing, and for credit institutions as lenders and creditors. This includes specific consumer protection legislation, a centralised electronic registry system for the ownership of and rights (mortgage, etc.) regarding real estate, and an effective and expedient forced sale procedure.

The Act on Financial Contracts and Financial Assignments (The Financial Contracts Act – Act 1999-06-25 no. 46) regulates the contractual conditions in respect of a loan agreement between financial institutions and their customers, both consumers and corporate clients. The act applies in principle to all types of loans, whether it is secured or not. The act is invariable in respect of consumer contracts, i.e. it cannot be dispended by an agreement that is disadvantageous to the customer.

The Mortgage Act (Act of 8 February 1980 no.2) regulates mortgages secured by real property. Ownership and special rights in real property may be mortgaged under the provisions set out in Chapter 2 of the Act, cf. section 2-1. Unless otherwise agreed, real property mortgage comprises the land, houses and building that the mortgagor owns and accessories and rights as set out in law, cf. section 2-2. A mortgage may also be established on a lease of land or an owner section in a building/freehold apartment, cf. section 2-3 and section 2-4. Mortgage rights acquire legal protection by registration in the Land Registry/Register of Deeds.

The Forced Sales Act (Act of 26 June 1992 no.86) provides for an effective and expedient forced sale procedure. A lender may, if a loan is accelerated and the borrower fails to pay any due amount, file an application before the county court for a forced sale of the property that backs the mortgage loan, cf. section 4-4 of the Forced Sales Act. The registered mortgage contract will itself constitute the basis for such application, cf. section 11-2 and 12-2. There is no need for additional judgment by the court to provide such basis for a forced sale.

Temporary mortgage regulation extended

Due to the authorities concern regarding housing prices and its correlation with household debt, the Ministry of Finance introduced a regulation on requirements for new residential mortgage loans in 2015. The goal of the regulation is to ensure a sustainable development in household debt. The regulation is temporary and have been assessed on several occasions since its introduction. In December 2020 the MoF announced that the mortgage regulation will be merged with similar requirements on unsecured debt. The joint regulation applies until 31. Dec 2024 but will be re-assessed in the autumn 2022. For mortgages the following apply:

> Loan-to-value (LTV) requirement of maximum 85%

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): https://hypo.org/ecbc/covered-bonds/.

> Stress test: Households must be able to service their debt in the event of a five percentage points increase in mortgage rates
> Maximum debt-to-income (DTI) ratio requirement of five times gross annual income
> A minimum principal payment requirement (2.5%) if the LTV ratio exceed 60%
> Interest-only periods on mortgages and home equity lines of credit may only be granted when LTV is below 60%
> Flexibility quota: Up to 10% of the value of new loans can deviate from one or more of the requirements in each quarter
> For mortgages located in Oslo, the deviation limit is set to 8% of the value of new loans each quarter. In addition, there is an LTV requirement of maximum 60% for secondary homes in Oslo.

Register on unsecured debt

In 2019 the Debt Information Act entered into force. The Act requires that banks and other financing companies report information on consumer loans and credit card debt to central debt registers. Banks can now access these registers and receive updated information on a borrowers' consumer debt, and hence receive a complete picture of a borrowers' debt situations.

Market overview and additional information

According to Finance Norway's covered bond figures, a total of approximately EUR 21 bn. of covered bonds was issued in 2021. The total level of outstanding bonds is close to EUR 132 bn. 47% of the outstanding bonds are denominated in NOK, 47% in EUR, and the remaining 6% in other foreign currencies.

Since the start of 2018 a total of 12 Norwegian issuers have issued green covered bonds based on residential mortgages. Issuances have been done in NOK, SEK and EUR with a total outstanding volume of approximately 11 bn. EUR at year-end 2021.

More information and additional data are available on Finance Norway's webpage:
www.finansnorge.no/en/

Issuers: Bustadkreditt Sogn og Fjordane AS, DNB Boligkreditt AS, Eiendomskreditt AS, Eika Boligkreditt AS, Fana Sparebank Boligkreditt AS, Gjensidige Bank Boligkreditt AS, Helgeland Boligkreditt AS, KLP Boligkreditt AS, KLP Kommunekreditt AS, Landkreditt Boligkreditt AS, Møre Boligkreditt AS, Nordea Eiendomskreditt AS, OBOS Boligkreditt AS, Sandnes Sparebank Boligkreditt AS, Sbanken Boligkreditt AS, SpareBank 1 Boligkreditt AS, SpareBank 1 Næringskreditt AS, Sparebanken Sør Boligkreditt AS, Sparebanken Vest Boligkreditt AS, Sparebanken Øst Boligkreditt AS, SR-Boligkreditt AS, Storebrand Boligkreditt AS, Toten Sparebank Boligkreditt AS, Verd Boligkreditt AS.

Covered Bond Label: DNB Boligkreditt AS (1 pool), Nordea Eiendomskreditt AS (1 pool), SpareBank 1 Boligkreditt (1 pool), Eika Boligkreditt AS (1 pool), SR-Boligkreditt (1 pool), Møre Boligkreditt AS (1 pool), Sparebanken Sør Boligkreditt AS (1 pool), Sparebanken Vest Boligkreditt (1 pool).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Norwegian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.28 PANAMA

By Frank Will, HSBC & Chairman of the EU Legislation Working Group

I. FRAMEWORK

In September 2012, Global Bank became the first issuer of covered bonds out of Panama. It was also Latin America's inaugural covered bond. The USD 200mn deal was issued under Global Bank's USD 500mn Residential Mortgage Loans Covered Bond Programme and was later increased by USD 100mn. Following a partial buyback in September 2016, the bond matured in October 2017.

The second Panamanian covered bond issuer is Banco La Hipotecaria which issued its first USD 11mn covered bond in December 2018. Two more covered bonds with a total size of USD 41mn were issued in 2019.

Panama currently does not have a specific legal framework for covered bonds. Thus, Panamanian covered bonds are based on contractual agreements and the programme characteristics are self-imposed. Similar to the structures used in other markets without a specific covered bond law, many programme features are derived from securitisation techniques. Please note that our country analysis is based on the only available covered bond programmes in Panama to date, i.e. the ones from Global Bank and Banco La Hipotecaria.

II. STRUCTURE OF THE ISSUER

In the absence of a specific covered bond law in Panama, the Panamanian issuers used certain securitisation techniques and contractual law to replicate the key features of specific law based covered bonds and to ensure that the cover pool is isolated in the event of issuer insolvency. The covered bonds represent direct unconditional and unsubordinated obligations of the issuer and rank pari passu among themselves. The covered bond programmes foresee a separate cover pool of Panamanian residential mortgage assets that is transferred to a guaranty trust. The covered bond holders have a priority claim on these assets.

III. COVER ASSETS

Given the lack of a Panamanian covered bond law, we focus below on the asset requirements of the covered bond programmes of the two banks which bear a strong resemblance but differ in the detail.

Under Global Bank's covered bond programme, the covered bonds are backed by a dynamic pool of first-ranking residential mortgage loans originated in Panama, subject to the following eligibility criteria:

> The loans must be denominated in USD;

> The mortgage borrowers must be individuals resident in Panama;

> Each loan is secured by a valid and enforceable mortgage or by a guaranty trust, in accordance with Panamanian Law over a fully completed residential property located in Panama;

> With respect to any loan, there are no other loans secured by mortgages or by a guaranty trust ranking pari passu or senior with the mortgage or guaranty trust securing such loan (if there are other loans secured by mortgages or by a guaranty trust and ranking pari passu or senior with the mortgage or guaranty trust securing such loan, such loans have also been originated by the issuer and are included in the portfolio);

> No loan has a current principal balance of more than USD 500,000;

> Each loan has a remaining term of no longer than 30 years; and,

> No loan that has been transferred to the guarantee trust has been more than 90 days in arrears during the calendar year preceding the transfer date.

The aggregate principal amount of substitution assets (and/or authorised investments) may not at any time exceed 20% of the aggregate principal balance of the Guaranty Trust Assets.

The cover pool assets of the Banco La Hipotecaria are subject to the following eligibility criteria:

> The mortgage loans must be for purchases of owner occupied homes, with debtors being residents of Panama;

> Mortgage payments of the debtor have to be less than 35% of the gross family income and the complete debt service less than 55% of the income;

> The principal balance is more than USD 2,000 and less than USD 150,000;

> The property has to be insured against fire or other damages, with the insurance covering at least 80% of the property value; and,

> The debtor has to have a life insurance covering the principal balance.

The issuer has the right to replace the mortgage loans in the cover pool as long as the cover asset requirements are met.

IV. VALUATION AND LTV CRITERIA

In Global Bank's covered bond programme, the maximum permitted LTV is 100%. For non-preferential first lien mortgages the LTV caps are lower (95% for employed borrowers, 85% for self-employed and 70% for foreign borrowers). The Asset Coverage Test does not give any credit to mortgage loans more than 90 days past due. The maximum asset percentage is set at 84.4%.

For Banco La Hipotecaria, the maximum permitted LTV is 98% of the original purchase price for a new acquisition and 85% for the refinancing of existing mortgage loans. Mortgage loans issued by Banco La Hipotecaria itself may have an LTV up to 99%, but only under certain restrictive conditions.

V. ASSET – LIABILITY MANAGEMENT

Global Bank's covered bond features several tests including an Asset Coverage Test, an Interest Shortfall Test, a Yield Shortfall Test and an Amortisation Test.

> **Asset Coverage Test:** The Asset Coverage Test is breached if, on any calculation date prior to the occurrence of an issuer event of default and the service of a notice to pay on the guaranty trustee, the adjusted aggregate loan amount is less than the aggregate principal amount outstanding of the covered bonds.

> **Interest Shortfall Test:** The Interest Shortfall Test is breached when, on any calculation date prior to the occurrence of an issuer event of default and service of a notice to pay on the guaranty trustee, the income received with respect to the guaranty trust assets (including interest received or amounts received on hedging instruments) during the calculation period plus other available amounts (representing interest) is less than the interest amounts expected to accrue under the covered bonds during the next succeeding guaranty trust payment period.

> **Yield Shortfall Test:** The Yield Shortfall Test is breached when, on any calculation date following an issuer event of default and service of a notice to pay on the guaranty trustee, interest amounts under the loans and other amounts (representing interest) received by the guaranty trustee in respect of the guaranty trust assets during the calculation period cease to give a yield on the loans at least equal to the weighted average interest rate on the outstanding series of covered bonds.

> **Amortisation Test:** The Amortisation Test is breached if, for so long as any covered bonds remain outstanding upon the occurrence of an issuer event of default and on any calculation date following the occurrence of an issuer event of default and the service of a notice to pay on the guaranty trustee (but prior to the service of a guaranty trust acceleration notice), the amortisation test aggregate loan amount is less than the aggregate principal amount outstanding of the covered bonds as at the determination date.

The issuer can issue covered bonds in hard-bullet or soft-bullet format. In case of soft-bullet bonds, the outstanding covered bonds' maturity will automatically be extended by up to 12 months if the issuer fails to fully redeem a series.

The programme of Banco La Hipotecaria has the following key requirements:

> The Coverage Ratio is greater than or equal to 125%;

> The Liquidation Coverage Ratio is greater than or equal to 100%;

> The Gross Weighted Average Interest Rate Ratio is greater than or equal to the sum of (i) the Outstanding Covered Bonds Weighted Average Interest Rate and (ii) 0.5%;

> The Net Weighted Average Interest Rate Ratio is greater than or equal to the greater of (i) the Outstanding Covered Bonds Weighted Average Interest Rate minus 3.5% and (ii) 1.0%;

> The Percentage of Preferential Interest Rate Mortgages Ratio is less than or equal to 80%;

> The Weighted Average Loan to Value Ratio is less than or equal to 88%;

> The Weighted Average Maturity Ratio is less than 342 months;

> The Weighted Average Seasoning Ratio is greater than or equal to 18 months; and,

> No mortgage loan is in default more than 90 days.

VI. TRANSPARENCY

Global Bank's prospectus requires the bank to prepare a monthly investor report listing selected statistical information in relation to the underlying portfolio and the characteristics of the portfolio as well as confirming compliance with the Asset Coverage Test. The issuer provides comprehensive information on the borrowers (income brackets, employment type, life insurance), delinquency rates, fire & earthquake insurance of the properties, loan-to-value ratios by brackets and charged interest rates. The Banco La Hipotecaria publishes monthly servicer and pool data reports covering the same information, which are validated by the asset monitor with respect to all pool ratio requirements.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

In the absence of a legal framework defining the monitoring requirements for the cover assets, both covered bond issuers defined their own monitoring frameworks. Both issuers appoint an "asset monitor" that monitors the loans in the cover pool and validates the information and periodic reports published by the issuer with regards to the tests and criteria that are described above, as well as arithmetic accuracy. Failure to pass the tests or to satisfy the requirements leads to the issuer being obligated to immediately transfer substitute assets or other remedial means until compliance is established again. Failure to do so would lead to a prohibition of the issuing of further covered bonds or even an issuer event of default.

VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The covered bonds are neither Article 52(4) UCITS-compliant nor Article 129 CRR-compliant as Panama is not a Member State of the European Union (EU). In addition, Panama does not have national covered bond legislation. Therefore, the covered bonds do not benefit from a preferred risk-weighting for regulatory capital purposes under EU rules. Under the Standardised Approach, they are treated similarly to senior unsecured bank debt.

As Panama is neither a European Economic Area (EEA) country nor a G10 country, Panamanian covered bonds are not eligible for the ECB repo operations regardless of their currency and their rating.

Issuers: Global Bank Corp (Panama), Banco La Hipotecaria

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Panamanian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.29 POLAND

By Agnieszka Tułodziecka, Polish Mortgage Credit Foundation, Krzysztof Dubejko, mBank Hipoteczny and Daniel Goska, PKO Bank Hipoteczny

I. FRAMEWORK

The legal framework for covered bonds (Listy Zastawne, also LZ) is mainly determined by:

> The Act on Covered Bonds and Mortgage Banks (*Ustawa o listach zastawnych i bankach hipotecznych*) of August 29, 1997; (The List Zastawny Act – hereafter: The LZ Act).

> The Bankruptcy Law (*Prawo upadłościowe*) of February 28, 2003, Chapter II – Bankruptcy proceedings for mortgage banks, Article 442–450.

In 2014, key under-law regulations for mortgage banks were amended:

> Recommendation F – the standards for determining mortgage-lending value were eased.

> Recommendation K – the rules on keeping and managing cover registers were actualised.

Both recommendations were to be implemented by 1 January 2015.

In 2015 the LZ Act has been thoroughly updated in order to increase the safety of the covered bonds and their availability to investors with new provisions coming into force as of 1 January 2016. Among the key modifications were: introduction of statutory overcollateralisation and liquidity buffer and increase of funding limit for residential loans as well as implementation of soft bullet and conditional pass through structure upon insolvency.

In 2015, new *Regulation of the Minister of Finance of 30 December 2015 on conducting the collateralisation review and coverage and liquidity tests* were issued.

Additionally, in 2015, further amendments were introduced to Recommendation K.

II. STRUCTURE OF THE ISSUER

The issuer is a specialised credit institution (mortgage bank) with the supervision of Polish Financial Supervision Authority (*Komisja Nadzoru Finansowego*, KNF). It is required by law that the mortgage bank is a joint stock company with a legal personality (not a branch) with two licenses: a banking license and consent to start operating activity, both granted by the KNF.

The additional covered bond issuer is Poland's only state-owned bank, Bank Gospodarstwa Krajowego (BGK), which may issue covered bonds to finance in particular government programmes. However, there have been no issues of BGK so far.

According to the LZ Act, a mortgage bank is limited in its range of business activities, i.e. it may only engage in activities specified in a closed catalogue. The operations of a mortgage bank can be divided into two groups: core and non-core, and may be also executed in foreign currencies.

The core operations which may be performed by mortgage banks include:

> Granting loans secured with mortgages;

> Granting loans where the borrower, guarantor or underwriter of a loan repayment is the National Bank of Poland, European Central Bank (ECB), governments or central banks of the European Union (EU) member states, Organisation for Economic Cooperation and Development (OECD), or where a guarantee or security is granted by the State Treasury;

> Acquisition of other banks' receivables on account of loans granted by them;

> Issuing mortgage covered bonds;

> Issuing public sector covered bonds.

Apart from core operations, mortgage bank's approved activities comprise: taking credits and loans, issuing bonds, securities safekeeping, providing consulting and advice with respect to the property market, managing receivables of a mortgage bank and other banks arising from mortgage-backed loans, as well as granting such loans on behalf of other banks on the basis of relevant cooperation agreements.

A mortgage bank is not authorised to perform any other activities apart from the operations listed above. Particularly, it cannot accept deposits. Such limitations facilitate maintaining a more simplified and clearer activity structure and the specialisation of the loan division as well as the improvement of credit risk assessment methods in the field of real estate financing. Furthermore, funds obtained from covered bond issues shall be used mainly for funding the lending activity of a mortgage bank.

III. COVER ASSETS

Mortgage banks in Poland focus on mortgage or public sector lending. The loans are held on the balance sheet of the issuer and registered in two separate cover registers, which form two separate cover pools.

There are two specific classes of covered bonds which correspond to each of the cover assets:

> hipoteczne listy zastawne (mortgage covered bonds) and

> publiczne listy zastawne (public sector covered bonds).

Both mortgage and public sector covered bonds are direct and unconditional obligations of the issuer and must be fully secured by cover assets of the respective class. Upon the issuer's default, covered bondholders have a dual recourse to a segregated cover pool of assets and, if the cover pool proves to be not sufficient, an unsecured claim against the issuer. Furthermore, the covered bondholders benefit from a statutory priority claim over all the assets in the cover pool. There is no time subordination: all covered bonds are ranked *pari passu*.

Pursuant to the LZ Act, the substitution assets can be included in the cover pool i.e. they may consist of the bank's funds invested in the securities issued or guaranteed by the National Bank of Poland, ECB, governments or central banks of the EU Member States, OECD (with the exclusion of states which are, or were, restructuring their foreign debt in the last 5 years), and the State Treasury, deposited at the National Bank of Poland or kept in cash. However, the total nominal amounts of the mortgage bank's claims secured with a mortgage or based on the public sector claims, constituting a basis for the issue of mortgage covered bonds, may not be less than 85% of the total amount of nominal value of outstanding covered bonds.

All hedging derivatives are eligible for the cover pool (the bank can conclude only hedging derivatives). Settlement amounts due under such contracts and included into the cover pool rank pari passu with claims of covered bondholders.

In addition, receivables secured by mortgages established on buildings, which are in the construction process, may not in total exceed 10% of the overall value of mortgage-secured receivables in the cover pool. Within this limit, the receivables secured by mortgages on construction lots in compliance with the land-use plan may not exceed 10.

IV. VALUATION AND LTV CRITERIA

The property valuation in a mortgage bank is conducted under the rules stipulated in the LZ Act. According to the Polish covered bond legislation, establishing the mortgage lending value of the property shall be performed with due care and diligence on the basis of an expert's opinion. It shall be prepared by the mortgage bank or other entities with appropriate real estate appraisal qualifications commissioned by the mortgage bank. The mortgage lending value cannot be higher than the market value of the property.

Apart from the assumptions laid down in the LZ Act concerning property valuation in a mortgage bank, there are special banking supervisory regulations (Recommendation F), which stipulate in detail the establishment of the mortgage lending value and impose a duty on a bank to have a database for real estate prices.

The funding limit – related to a single loan – is established at the level of 60% of the mortgage lending value of the commercial property and of 80% in the case of residential property (Article 14 LZ Act). In the part above 60% of the mortgage lending value of the property, the total amount of receivables from granting credits secured with mortgages or receivables purchased from other banks arising from their mortgage-secured credits, may not exceed 30% of the total amount of the mortgage bank's receivables secured with mortgages (absolute portfolio limit, Article 13.1 LZ Act).

Apart from funding limit, there is also lending limit, according to Article 13.2 LZ Act, stipulating that single loans granted or purchased by a mortgage bank cannot exceed the mortgage lending value of the property.

V. ASSET-LIABILITY MANAGEMENT

According to the LZ Act (Article 18), the total nominal value of all outstanding covered bonds (which should be calculated separately for each class) shall not exceed the sum of nominal amounts of (either mortgage or public sector) covered assets, which form the basis for the covered bond issue. Since January 2016, the ongoing cover principle is more prudent, including 10% mandatory overcollateralisation. That would apply to both public and mortgage covered bonds, the overcollateralisation is calculated on nominal basis regarding the capital amount of outstanding covered bonds. Additionally, part of the cover pool would be compulsory composed of liquid assets (e.g. central bank eligible bonds), in order to ensure preparation of liquidity buffer, not being a base for the covered bond issue. It is assumed that the value of these liquid assets (liquidity buffer) would ensure full and timely payment of the interest on the covered bond due in the upcoming 6 months.

Thus, the nominal value of respective covered assets shall permanently be higher than the total nominal value of the respective covered bonds. In addition, the mortgage bank's income from interest on its respective cover assets may not be lower than the amount of bank's payable interest on its respective outstanding covered bonds.

VI. TRANSPARENCY

Cover pool transparency reports for individual banks are available at their respective websites (see below). All four Polish mortgage banks are holding the Covered Bond Label and publish their reports following the Harmonized Transparency Template.

The majority of Polish covered bonds (public sector and mortgage covered bonds, the latter denominated in PLN as well as in EUR) are listed on the Catalyst, a local bond market operated by WSE and BondSpot. Covered bonds denominated in EUR are also listed on the Luxembourg Stock Exchange.

Both markets are supervised by the Polish Financial Services Authority and are approved as regulated markets by the European Securities and Markets Authority (http://registers.esma.europa.eu/publication/searchRegister?core=esma_registers_mifid_rma).

Issuers, whose securities are listed on the regulated market, are legally bound to provide actual and potential investors with all and any information about their company's economic situation and events which may have an effect on investment risk. Consequently, mortgage banks are obliged to submit disclosures in the form of current and periodic reports, including information on subscription, assigned rating or interest payment dates of covered bonds.

Issuance documents such as Base Prospectus and Supplements for individual series comprising detailed information on the covered bonds as well as the issuer can be found on the issuers' websites:
mBank Hipoteczny: http://mhipoteczny.pl/en/investor-relations/
Pekao Bank Hipoteczny: http://www.pekaobh.pl/
PKO BP Bank Hipoteczny: https://www.pkobh.pl/en/
ING Bank Hipoteczny: https://en.inghipoteczny.pl/inghipoteczny-en/investor-relations

VII. COVER POOL MONITOR AND BANKING SUPERVISION

One of the key features of Polish covered bond legislation (Article 31 LZ Act) is the monitoring role undertaken by the covered pool monitor (*powiernik*) who is appointed by KNF at the request of the mortgage bank's supervisory board. The cover pool monitor is independent and shall not be bound by instructions of the appointing body.

The cover pool monitor is responsible for an ongoing control of the appropriateness of the cover pool management. Its main tasks comprise monitoring of the cover pool (i.e. confirming the accuracy of the inclusion in or removal from the cover register of the cover assets, ensuring that the asset eligibility requirements are met, verifying the correctness of the value registered in the cover pool, etc.) as well as the issuer's compliance with specific provisions of the LZ Act and reporting any breaches of them to the KNF.

The cover pool monitor is required to perform above mentioned tasks not only on an ongoing basis, but also prior to every issuance of a mortgage bank in order to ensure that a mortgage bank provides an appropriate cover for the planned issue. The issuer is obliged to provide full cooperation to the cover pool monitor and shall give the cover pool monitor the right to review the register, loan documents, accounting books or other bank's documents at its request.

Apart from cover pool's management monitoring performed by the cover pool monitor, mortgage banks fall under the oversight of the KNF which carries out general assessment of Polish banks, including mortgage banks as a part of general banking supervision.

The KNF may commission an independent expert at the expense of the inspected mortgage bank to inspection of the appropriateness of the mortgage bank's entries to the mortgage cover register. This would also include establishing the mortgage lending value of the property was in compliance with the rules referred to in Article 22, paragraph 5 LZ Act.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Pursuant to the LZ Act and the Bankruptcy Law (which is complementary to the former in terms of the insolvency issues, containing a separate chapter: Chapter II – Bankruptcy proceedings for mortgage banks – Articles 442-450), in case of bankruptcy of a mortgage bank the receivables, claims and means entered in the cover register shall constitute a separate bankruptcy estate which may be used exclusively to satisfy claims of covered bondholders. Moreover, initiation of the insolvency proceedings does not affect *listy zastawne*, i.e. they do not automatically accelerate when the issuer becomes insolvent.

After declaring a bankruptcy of the mortgage bank, the court appoints the curator (*kurator*) who represents the rights of covered bondholders in the bankruptcy proceedings and notifies the total nominal value of outstanding covered bonds together with accrued interest to the bankruptcy estate. In order to perform these duties, the curator has the right to review the accounting books and other documents of the mortgage bank as well as to obtain all the necessary information from the receiver (*syndyk*), court supervisor (*nadzorca sądowy*) and administrator (*zarządca*).

The curator participates in the liquidation of a separate bankruptcy estate, performed by the receiver. If possible, the items of such estate may be sold to another mortgage bank. While maturities of covered bond principal are postponed automatically by 1 year further, during this period all interest payments are executed pursuant to the terms and conditions of the L.Z. The aim of that solution is to support the timely payment of covered bonds, if a mortgage bank goes insolvent. Additional amendments to the law on bankruptcy include the introduction of the asset coverage test, which verifies whether the separate insolvency estate is sufficient to fully satisfy the claims of the bondholders, as well as the liquidity test, which verifies whether the separate insolvency estate is sufficient to fully satisfy the claims of the covered bondholders on the extended redemption dates. These tests are conducted also during regular activity of the mortgage bank.

With a separate bankruptcy estate, the following categories should be satisfied successively:

> Liquidation costs of the separate bankruptcy estate, which also include the remuneration of the curator, as well as interest and other covered bonds receivables;

> Covered bonds as per their nominal value.

The Polish model, introduced in January 2016, stipulates a statutory soft-bullet-structure in case of a mortgage bank insolvency, conditional pass-through payments, as well as detailed regulated scenario for insolvency procedure with clear competences and precise legal tools for action including over-indebtedness and liquidity tests. Transition into both soft bullet and conditional pass-through structures can only be triggered by legally specified events (insolvency and failed coverage tests) with limited decision rights in this respect granted to covered bond holders (possible resolution of covered bondholders with 2/3 majority to sell the separate bankruptcy asset pool to another bank).

After satisfying the covered bondholders the surplus of the cover assets deriving from the separate estate shall be allocated to the general bankruptcy estate. In case that the separate bankruptcy estate does not fully satisfy the cover bondholders, the remaining amount shall be satisfied from the whole bankruptcy estate funds. In that case, the remaining amount shall be transferred from the bankruptcy estate funds to the separate bankruptcy estate funds. It indicates that the covered bondholders are given preference over other creditors.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

In order to apply a preferential risk-weighting for covered bonds, the instrument needs to meet the criteria laid down in the UCITS Directive and the CRR.

Polish covered bonds (*list zastawny*) already meet the criteria of Article 52(4) UCITS: in December 2008 list zastawny was notified by the European Commission (EC) as a European "eligible bond" (covered bond), i.e. the instrument with a qualified collateral and can be found on the EC's website at present (http://ec.europa. eu/finance/investment/legal_texts/index_en.htm).

Polish covered bonds also fall under the criteria of Article 129(1) of the CRR[1]:

> Substitution assets, including liquidity buffer, comply with Article 129(1)(a-b) CRR;

> Derivatives included in the cover pool may comply with Article 129(1)(c) CRR, at issuer's discretion depending of credit quality of chosen counterparty;

> Residential real estate loans comply with Article 129(1)(d) CRR, LTV limit of 80%;

> Commercial real estate loans comply with Article 129(1)(f) CRR, LTV limit of 60%;

> Portfolio information is publicly available at least on semi-annual basis.

Following recent amendment of the LZ Act, foreign investors (both private and corporate) are exempt from withholding tax both in relation to coupons and principal amount.

PLN denominated *listy zastawne* are approved by the National Bank of Poland as the instruments eligible for intraday and lombard credit as well as repo transactions. As of May 2021, the haircut levels:

> for repo using *listy zastawne* as collateral are 18% (up to 7 years) – 46,5% (above 15 years)

> for intraday and lombard credit are 13,5% (up to 3 years) – 33% (above 15 years)

based on notional value and time remaining to maturity. Haircuts are the same as for corporate and municipal debt.

1 For further information on the UCITS Directive and the Capital Requirements Regulation (CRR) please see: https://hypo.org/ecbc/covered-bonds/.

EUR denominated listy zastawne issued under international covered bond programmes, which are eligible for Eurosystem credit operations, but are not eligible for the CBPP.

Polish investment regulations pertaining to investment limits for covered bonds are as follows:

> Banks and insurance companies – no statutory limits, internal concentration limits apply, high-quality liquid asset status depending on outstanding issue amount and rating;

> Insurance companies – aggregate limit up to 40% (publicly traded) or up to 10% (not admitted to trading) of technical-insurance reserves;

> Open ended investment funds – 25% of assets under management (AuM) limit for covered bonds per issuer, 35% of AuM limit for total exposure per mortgage bank (including unsecured debt and OTC derivatives), 80% of AuM limit for all covered bonds in portfolio;

> Closed ended funds – 25% of assets under management (AuM) limit for covered bonds per issuer;

> Pension funds up to 40% of AuM, 5% per one issuer or issuer's group.

Issuers: mBank Hipoteczny S.A., Pekao Bank Hipoteczny S.A., PKO Bank Hipoteczny S.A., and ING Bank Hipoteczny S.A.

Covered Bond · LABEL · : PKO Bank Hipoteczny Spółka Akcyjna (1 pool), mBank Hipoteczny S.A. (1 pool), Pekao Bank Hipoteczny SA (2 pools).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Polish market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.30 PORTUGAL

By Cláudio Domingues, Millennium bcp

I. FRAMEWORK

The new Portuguese covered bond legislation[1] transposing the Covered Bond Directive[2] (the "*Regime Jurídico de Obrigações Cobertas*" or "RJOC") came into effect on the 1st of July 2022, under which covered bonds are now designated as "obrigações cobertas". The RJOC incorporates transitory provisions whereby the former Portuguese covered bond legislation[3] will continue to apply to mortgages and public sector covered bonds issued until the 8th of July 2022, formerly known as "*obrigações hipotecárias*" ("OH") and "*obrigações sobre o sector público*" ("OSP"), respectively, until each of the relevant maturities[4]. Notwithstanding, they can be designated as "*obrigações cobertas*", as and when their respective programmes are adjusted and approved in accordance with the RJOC.

These transitory provisions also apply to tap issues of OHs or OSPs issued until the 8th July 2022 ("cut-off"), if the following cumulative conditions are verified: (i) the tap issue is made during the 24 months following that cut-off date, (ii) maturity occurs no later than the 8th of July 2027, (iii) the total amount of tap issues made after 8th July 2022 does not exceed twice the total issue size of covered bonds outstanding on that date, (iv) the total nominal amount of covered bonds does not exceed EUR 6 billion at the maturity date, and (v) the underlying collateral assets are located in Portugal.

Issuers can either create new programmes or adapt those established under the former Portuguese covered bond legislation, for the issue of covered bonds under the RJOC. Either of these are subject to authorisation by the CMVM, the national capital markets regulator, with the adapted programmes and all covered bonds thereunder becoming subject to RJOC from the date of such authorisation. RJOC establishes that regulation issued under the former Portuguese covered bond legislation continues to apply until replaced by new CMVM regulation, which was yet to be published at the time of writing. The CMVM have indicated that they are working on a new regulation that is expected to enter into force by the end of 2022.

Issuers can also choose to keep both their existing OH and OSP programmes pursuant to the old regime live and set up a new programme pursuant to the new RJOC.

II. STRUCTURE OF THE ISSUER

Portuguese covered bonds can only be issued by Portuguese credit institutions.

The RJOC allows for, and sets the terms of, the use of intragroup pooled covered bond structures, under which covered bonds issued by a credit institution ("internally issued covered bonds") are used as cover assets for the issue of covered bonds by another credit institution of the same group ("externally issued covered bonds").

III. COVER ASSETS

Eligible cover assets are firstly those listed in Article 129 of Regulation (EU) 575/2013 ("Article 129" or "CRR")[5], in the terms set out therein. By reference to Article 129, the RJOC limits the use of the label "*Obrigação Coberta Europeia (Premium)*" ("OCE Premium") to covered bonds backed by primary assets listed thereunder, in particular:

1 Decree-law n.º 31/2022 of 6th May 2022

2 Directive (EU) 2019/2162

3 Decree-law n.º 59/2006 and regulation of the Bank of Portugal (in particular, Aviso n.º 5/2006, Aviso n.º 6/2006, Aviso n.º 8/2006 and Instrução n.º 13/2006)

4 Provided they comply with the requirements laid down in Article 52(4) of "The Undertakings for Collective Investment in Transferable Securities Directive" (UCITS), the Directive 2009/65/EC, as applicable on the date of their issue, as set our locally in n.º 6 of article 176.º of "Regime Geral dos Organismos de Investimento Coletivo", approved as Annex to Law n.º 16/2015

5 As amended by Regulation 2019/2160, which together with Directive 2019/2162 forms the new European covered bond regulatory framework

> exposures to certain public sector entities and authorities, central banks, subject to certain minimum ratings in the case of either of them being located outside the EU;

> loans secured by residential or commercial mortgages, with a maximum loan-to-value ratio ("LTV") of 80% and 60%[6], respectively; or

> loans secured by maritime liens on ships, subject to a maximum LTV of 60%.

Credit institutions with programmes issuing bonds labelled "*Obrigação Coberta Europeia*" ("OCE") are not bound by Article 129 and the following primary assets that are outside of the scope of Article 129 can be included in the relevant cover pools:

i) high-quality cover assets in the form a first mortgage, charge, or lien over EEA-based physical assets for which there are generally accepted valuation standards and a public register of ownership and claims over such physical assets; such physical assets cover outstanding OCEs up to the lesser of the principal amount of the liens (combined with any prior liens) and 70% of the value of physical assets[7]; or

ii) assets in the form of credits to, or guaranteed by, public enterprises, provided the respective covered bonds are subject to a minimum overcollateralisation of 10%, as well as that such public enterprises are subject to public supervision and have sufficient revenue generating powers that ensure their financial soundness and solvability.

Junior claims are allowed in the cover pool (other than junior claims in respect of the assets listed in limb ii) above) provided all associated senior claims over the same assets are included in the same cover pool.

Regarding composition and homogeneity cover pools can only have one single class of primary assets, with residential and commercial mortgages jointly considered as one, in which case their relative ratio within the cover pool should not vary significantly over time.

Substitution assets, meaning eligible assets other than primary assets contributing to coverage requirements, can include: i) deposits with the Bank of Portugal of either cash or securities eligible for Eurosystem credit operations, ii) deposits in EEA-based credit institutions not part of the issuer's group or companies, and iii) other EEA-based, low-risk and high-quality assets. In the case of OCE Premium bonds, exposures to credit institutions are subject to Article 129 and therefore to certain minimum counterparty ratings.

The RJOC allows derivative contracts to be part of the cover pool, subject to certain structural requirements (see "V" below), and exclusively for risk hedging purposes.

The cover pool is proactively managed. If homogeneity, coverage, or liquidity buffer requirements are breached, the issuer must remedy such breaches by removing, or allocating new, primary or substitution assets, repurchasing outstanding covered bonds, or allocating new liquid assets to the liquidity buffer. Notwithstanding, credits turned delinquent after being assigned to the cover pool can be retained so long as delinquency does not exceed 90 days.

Without prejudice to asset eligibility criteria and segregation principles, Portuguese covered bonds can be backed by credits lawfully acquired from another credit institution, subject to the conditions established under the RJOC for credit transfer between credit institutions.

IV. VALUATION AND LTV CRITERIA

The RJOC determines that the methodology and process of valuation of physical assets securing cover pool assets must follow certain guiding principles. Upon assignment of cover assets to the cover pool, the underly-

6 Commercial mortgages with 70% LTV are allowed in certain circumstances

7 Physical assets need to be adequately insured against risk of losses and damages

ing physical assets must have a current valuation amount no greater than the physical asset's market value or mortgage lending value. Valuation shall be conducted by qualified and experienced valuers, who are independent of the credit decision-making process, who ignore speculative elements in their appraisal, and document the valuation in a transparent and clear manner. At the time or writing, the CMVM had yet to publish secondary legislation on this matter. The RJOC dictates that for as long as no such replacing secondary legislation is published, regulation issued under former covered bond legislation, namely by the Bank of Portugal and which contains these same guiding principles, continues to apply.

As a result, mortgage lending value shall be the property's commercial value determined on a prudent basis, considering fundamental property characteristics, normal local market conditions, based on both current and possible alternative uses. The property valuation should follow established and adequate methodologies, namely the "cost" method, the "income (yield)" method, and the "market comparison" method. The valuation should take the form of a written report including all methodological elements and necessary conclusions.

Property values must be verified at least every three years, in case of residential properties, or annually, in case of commercial properties. This can be done using established indexation methodologies once approved by the regulator. Property values should then be reviewed by a property valuation expert whenever there is indication of considerable depreciation. In the case of mortgage loan amounts greater than EUR 500,000, if backed by residential property, or greater than EUR 1 mln, if backed by commercial property, the property value must be reviewed by independent valuation experts at least every three years.

Valuation experts are deemed independent if they are not susceptible to be affected in their otherwise unbiased assessment. Namely, they must have no specific interest in the property in question or any relationship, commercial or personal, with the borrower. Further, valuation will not be regarded as independent if compensation payable to the valuation expert is somehow linked to the properties' valuation amounts. Valuation experts may however belong to the issuer's organisation, provided their action is fully independent from the credit underwriting process.

Lastly, credit institutions should ensure proper diversification and rotation of property valuers. They must keep an updated list of selected valuers, together with the criteria justifying such selection, as well as the properties valued by such valuers. This list must be reported annually to the regulator until the end of January each year, with reference to 31 December, indicating any changes from the last report.

V. ASSET – LIABILITY MANAGEMENT

RJOC deals with risks associated with asset-liability mismatch by imposing coverage requirements. Payment shortfall and refinancing risks are covered by the obligation of maintaining a liquidity buffer, whereas interest rate risk or foreign exchange risk can be addressed using derivative contracts.

Coverage Requirements and Overcollateralisation

All covered bond programme liabilities must be covered by claims over eligible cover assets. Liabilities include payment obligations on covered bonds and derivative contracts, as well as programme wind down, maintenance and administration costs, which can be estimated as a lump sum. Cover assets comprise primary assets, substitution assets, liquid assets held under the liquidity buffer requirement (see below) and amounts receivable under derivative contracts. Unsecured credits where a default is deemed to have occurred[8] do not count towards this coverage.

The aggregate principal amount of all cover assets shall be equal to, or exceed, the aggregate principal amount of outstanding covered bonds ("nominal principle"). Coverage can be calculated on a net present value basis

8 As per Article 178 of the CRR

(including stress scenarios) or by applying a prudent market value approach provided that does not result in a higher coverage ratio. Assets and liabilities must be valued using the same methodology.

Notwithstanding the nominal principle, issuers are legally bound by minimum overcollateralisation ("OC") requirements. Specifically, any programme issuing OCE Premium bonds needs to maintain a minimum OC of 5%, for as long as any such bonds are outstanding; programmes issuing OCE Premium bonds backed by commercial mortgages with LTVs above 70% need to maintain a minimum OC of 10%; programmes issuing OCE bonds backed by credits to, or guaranteed by, public enterprises as primary assets and in the terms of the RJOC, need to maintain a minimum OC of 10%.

Liquidity Buffer

The risk of payment shortfall is addressed by the requirement of a liquidity buffer composed of liquid assets available to cover the programme's maximum cumulative net liquidity outflow over the following 180 days. Such assets are part of the cover pool and thus subject to segregation.

The liquidity buffer can comprise: i) assets qualifying as level 1, level 2A or level 2B assets[9], not issued by the covered bond issuer, by its parent company (unless such parent company is a public sector entity that is not a credit institution), by a subsidiary of the same group of companies, or by a securitisation special purpose entity with which the covered bond issuer has close links; or ii) short-term exposures to credit institutions with credit rating "A-" or better, or short-term exposures (including deposits) to credit institutions with credit rating "BBB-" or better, in accordance with point (c) of Article 129 (1) of the CRR.

Unsecured credits where a default is deemed to have occurred[10] cannot contribute to the cover pool liquidity buffer. For covered bonds with extendable maturity, calculation of the programme's maximum cumulative net liquidity outflow considers the final (extended) maturity date for principal outflow, as set by the applicable contractual terms and conditions.

Derivative Contracts

Issuers can use eligible derivative contracts for risk hedging purposes only. Their volume needs to be adjusted in the event of a reduction in the risk covered, and any such contracts included in the cover pool shall terminate once the hedged risk ceases to exist, be sufficiently documented, be subject to the segregation principle described in "VIII" below, and not be terminated upon issuer insolvency or resolution. Furthermore, the cover pool can only include derivatives which comply with the criteria set out in the RJOC in respect of the eligibility of hedging counterparties (including, without limitation, derivate instruments traded in a regulated market or multilateral trading facility of an EU Member State, or contracts entered into with certain eligible counterparts in the EEA).

Extendable Maturity Structures

The RJOC allows extendable maturity structures. Covered bond maturities can be extended upon, either the withdrawal of the issuer's banking license, or a foreseeable or actual failure to pay amounts due at the scheduled maturity that cannot be remedied within 10 business days. A failure to pay and its respective grounds must be communicated to the CMVM at least 10 days before the maturity extension's effective date. The CMVM can oppose to such extension within a 10-day period. These non-discretionary triggers must be specified in the issue's terms and conditions, with the final maturity date determinable at all times. Also, upon an insolvency event, such maturity extension must not affect investors' ranking or invert the programme's original maturity schedule. Lastly, information provided to investors has to be sufficient to determine the bond's risks, including

9 Pursuant to the applicable delegated regulation adopted pursuant to Article 460 of Regulation (EU) No 575/2013, valued in accordance with that delegated regulation

10 As per Article 178 of the CRR

the impact of insolvency or resolution of the issuer on a maturity ex-tension, as well as the role of the CMVM in the maturity extension procedure.

Additional Regulatory Requirements

Covered bond issuers are obliged to regularly report evidence of compliance with applicable regulatory requirements concerning foreign exchange risk, liquidity risk, interest rate risk and asset coverage. Secondary legislation is due to be published by the CMVM pursuant to the RJOC by the end of 2022.

VI. TRANSPARENCY

Portuguese covered bonds issuers ensure data consistency and transparency by adopting the European Covered Bond Label Harmonised Transparency Template ("HTT"), which has been continuously adapted to market needs as well as regulatory and legal requirements over recent years. This year's adaptation fo-cused mainly on the compliance with Article 14 of the Covered Bond Directive, which has been transposed into the RJOC. With the HTT, issuers should be providing sufficiently detailed information, at least on a quarterly basis, to allow investors to assess the risk profile of the covered bond programme, including at least a) the value of the cover pool and outstanding covered bonds; b) the list of ISINs of all covered bond issued; c) a geographical distribution and type of cover assets, their loan size and valuation method; d) details in relation to market risk, including interest rate risk and currency risk, and credit and liquidity risks; e) the maturity structure of cover assets and covered bonds, including an overview of the maturity extension triggers if applicable; f) the levels of required and available coverage, and the levels of statutory, contractual and voluntary overcollateralisation; and h) the percentage of loans where a default is considered to have occurred or that are more than 90 days past due. The HTT templates are typically published on a quarterly basis both on the issuer's institutional website and on the Covered Bond Label website[11].

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Covered bond issuers must appoint an independent auditor – the "cover pool monitor" – who acts in the best interests of covered bond holders, both until and after an issuer insolvency event, and continuously verifies the quality of the cover pool and its compliance with applicable legislation, including asset eligibility criteria, derivatives, segregation, composition and homogeneity of the cover pool, as well as any intragroup and joint funding structure, hedging and liquidity requirements, and the information provided to investors.

The cover pool monitor is deemed independent if it (i) has not been the issuer's auditor during the two years preceding its designation as cover pool monitor, and (ii) is not closely associated with the issuing entity, in particular by having, or acting on behalf on any entity with, more than 5% shareholding in the issuing entity, and (iii) has not acted as the cover pool monitor of the relevant covered bonds issue or covered bonds programme for ten consecutive years.

The RJOC allows the cover pool monitor not to be separate from the issuer ("internal cover pool monitor") provided the internal covered pool monitor i) has no role and is independent from the credit decision-making process, ii) can only be removed by the management body in its supervisory function, and iii) has direct access to the management body in its supervisory function.

Compliance with the legal and regulatory requirements above are the subject of a cover pool monitor report, both prior to the establishment of a covered bond programme, and annually with reference to 31st December and to be delivered to the CMVM by the following 31st March.

Any irregularity detected by the cover pool monitor should be immediately and simultaneously reported to the CMVM, and to the issuer who must implement respective remedies. Any dismissal of the auditor must be properly justified and communicated to the CMVM within 10 days.

11 https://www.coveredbondlabel.com/issuers/national-information-detail/19/

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

All cover assets (including any substitution assets and derivative contracts) shall be held by the issuer in separated accounts (the "cover register") and identified under a codified form. The legal effect of the cover register is the segregation of those assets from the insolvent estate of the issuer, forming a separate legal estate (the "cover pool") administered in favour of the covered bondholders and any other special claimant.

In addition to a common claim over the issuer, covered bond holders benefit from a special preferential claim (privilégio creditório) over the cover pool for the redemption of principal and payment of interest. This preferential claim has precedence over that of any of the issuer's creditors, while mortgages that guarantee these credits prevail over any other real estate preferential claims. Portuguese covered bond legislation thus supersedes the national general bankruptcy regulation. This preferential claim is shared with the derivative counterparties whose contracts are part of the cover pool on a pari passu basis with bondholders. Consequently, their contracts are not expected to be called in case of insolvency of the originator.

In case of insolvency, dissolution or wind-up of the issuer ("insolvency event")[12], the RJOC establishes the cover pool shall be segregated from the insolvency estate of the issuer and will not form part of it until full payment of any amounts due to covered bond holders and derivative counterparties. Also, all amounts corresponding to payments under any assets in the cover pool will not form part of the insolvency estate of the issuer.

An insolvency event does not trigger an automatic acceleration of the covered bonds. However, covered bond holders are entitled to pass a resolution approving the immediate acceleration of the covered bonds by a majority of at least two thirds of the votes of the holders of covered bonds then outstanding.

The CMVM shall work together with the Bank of Portugal to ensure protection of the best interest of covered bond holders, including the management of the cover pool.

Upon an insolvency event, the CMVM appoints a cover pool special administrator who shall (i) autonomously manage the cover pool, including if necessary, the transfer of the cover pool, together with associated covered bond payment obligations, to another covered bond issuer and (ii) ensure payments of any amounts due to the holders of covered bonds.

The cover pool special administrator shall provide for the liquidation of the cover pool for the benefit of covered bond holders and derivative contract counterparties, who will rank pari passu among themselves. If cover assets liquidation proceeds prove to be insufficient to make up for all due and payable amounts, for the remaining due amounts covered bond holders and derivative counterparties will rank pari passu with issuer's senior creditors in relation to all other the issuer's assets. Remuneration of the cover pool special administrator is set by the CMVM and is paid out of cover pool funds or liquidation proceeds.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The legislation when taken together with the practices, processes and procedures across the industry should fall within the criteria of Article 129 CRR. Portuguese covered bonds meet the requirements of Article 129 CRR. Credit institutions investing in covered bonds within the scope of the Portuguese jurisdiction qualifying under Article 129 of Regulation 575/2013 (CRR) can apply a 20% risk weighting. The risk-weighting of derivatives that are included in the cover pool will be 20%. Investment funds can invest a maximum of 25% of their own funds in a single issuer's covered bonds.

12 Under any applicable laws and regulations, including under Decree-Law No. 199/2006, Decree-Law No. 298/92, and/or (if applicable) under the Code for the Insolvency and Recovery of Companies introduced by Decree-Law No. 53/2004

X. ADDITIONAL INFORMATION

The EUR 38,750 mln Portuguese covered bond market is vastly backed by residential mortgages, with the exception being BPI's EUR 600 mln public-sector loan backed programme. It is mostly one of 12-month soft-bullet maturities, even if conditional pass-through structures gained some ground between 2015 and 2019, with the emergence of two programmes – one by Novo Banco, one by Banco Montepio – making up a total of EUR 7,800 mln of outstanding bonds.

The national banking sector's is currently at a general comfortable liquidity position, to a great extent supported on an accommodative ECB's monetary policy, and improved macro-context. These factors together with MREL instrument issuance requirements, to which covered bond issuers are subject to, have resulted in reduced activity over recent years. Indeed, 2021 was the first year without a single issuance in Portugal.

Issuers: NOVO BANCO, S.A., Banco BPI, S.A., Banco Comercial Português, S.A., Banco Santander Totta, S.A., Caixa Económica Montepio Geral, Caixa Geral Depósitos, S.A.

ECBC Covered Bond Comparative Database:
https://www.ecbc.eu/framework/39/Mortgage_CB_%28Obriga%C3%A7%C3%B5es_Hipotec%C3%A1rias%29
https://www.ecbc.eu/framework/38/Public_Sector_CB_%28Obriga%C3%A7%C3%B5es_sobre_o_Sector_P%C3%BAblico%29

COVERED BOND LABEL: NOVO BANCO, S.A. (1 pool) , Banco BPI, S.A. (1 pool) , Banco Comercial Português, S.A. (1 pool), Banco Santander Totta, S.A. (1 pool), Caixa Económica Montepio Geral (1 pool), Caixa Geral Depósitos, S.A. (1 pool).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Portuguese market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.31 ROMANIA

By Nicoleta Ruxandescu (Alpha Bank Romania) and Adrian-Stefan Sacalschi (Takarék Mortgage Bank)

I. FRAMEWORK

The Romanian Covered Bond Legislation has been updated during 2022 in line with the EU Covered Bond Directive The former Law 304/2015 was repealed and replaced by Law 233/2022 ("CB Law") accompanied by a new Covered Bond Regulation ("CB Regulation") issued by the National Bank of Romania ("NBR").

Alpha Bank opened the covered bond market in Romania in April 2019 when it established its EUR 1 billion Global Covered Bond Programme. The first issuance of EUR 200 million took place on May 16th, 2019. The issue is currently listed on the Luxembourg Stock Exchange and the Bucharest Stock Exchange.

II. STRUCTURE OF THE ISSUER

The issuer can only be a credit institution, as defined by the Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms ("CRR"), which falls under one of the following categories provided for in the Government Emergency Ordinance no. 99/2006 on Credit Institutions and Capital Adequacy, approved with amendments and supplements by Law. No. 227/2007, as amended and supplemented:

> banks,

> credit co-operative organisations, except for credit co-operatives, and

> mortgage banks.

The issuer must obtain approval from the National Bank of Romania on the covered bond programme.

The issuer holds the assets on its balance sheet. A direct legal link between single cover assets and covered bonds does not exist. All obligations from bonds are obligations of the issuing bank as a whole. In the event of insolvency, the cover pool is segregated by law from the general insolvency estate and is reserved for the claims of bondholders.

The covered bonds are direct and unconditional obligations of the issuer. The claims of the holders of covered bonds are secured by a first rank security over the cover assets, which are segregated from the rest of the issuing bank's patrimony, in case of bankruptcy. Eligible cover assets liquid assets and financial derivatives are structured by the issuer in cover pools depending on the cover bond labels used for classification (see section III below).

The law imposes asset encumbrance limits: the total value of the cover pool cannot exceed certain thresholds of the issuer's total assets, i.e. 10%, 15% or 20%, depending on the metrics defined by the National Bank of Romania, such as capital, liquidity, asset quality, loan-to-deposits ratio.

III. COVER ASSETS

As per the new CB Law, covered bonds can be issued under two labels: European Covered Bonds or European Covered Bonds (Premium).

While the repealed CB legislation permitted as primary cover assets only mortgage loans (i.e. residential or commercial mortgage loans) and, for substitution or liquidity coverage, eligible financial assets, the new CB Law takes a broader view and the cover pool can include the following asset categories: residential mortgage loans, commercial mortgage loans, exposures to or guaranteed by the public sector, exposures to EU credit institutions, either compliant with art. 129 (1) a), c), d) and f) of CRR or considered to be of high quality as per the conditions set out in the CB legal framework and the CB Directive.

The primary cover assets must account for at least 70% of the accounting value of the cover pool and composition and some of the eligibility criteria differ between the two labels.

The geographical scope of cover assets is restricted to the European Union and the European Economic Area.

The issuer can include in the cover pool, apart from the categories described above, financial derivatives, subject to certain conditions set out in the CB Law. Derivatives can be included in the cover pool only for the purpose of hedging interest rate risk and foreign currency risk. Financial derivatives may be included in the cover pool only if the agreements related thereto do not contain a clause according to which the bankruptcy or the resolution of the issuer is deemed to be a termination event.

The CB legislation stipulates that the cover pool is dynamic. The replacement/supplementation of the mortgage loans included in the cover pool is compulsory when certain mortgage loans no longer comply with the eligibility criteria, have become non-performing in the meaning of the CB legislation, the weighted average maturity of the mortgage loans included in the cover pool decreases below the weighted average maturity of the corresponding covered bonds, or the value of the mortgage loans included in the pool declines below the thresholds provided by the CB legislation.

The value of the residential loans included in the cover pool cannot exceed 80% of the value of the issuer's total residential loans that are eligible for the cover pool. For commercial loans this ratio is 60%.

A novelty of the CB Law is the enforcement of Intragroup pooled covered bond structures whereby internally issued covered bonds by a credit institution can be used as cover assets for the external issue of covered bonds by another credit institution that belongs to the same group, if certain conditions are met.

IV. VALUATION AND LTV CRITERIA

Property valuation is regulated and is required to be undertaken by an authorised real estate appraiser. Details about the valuation process and the qualifications of evaluators are regulated by the Romanian Association of Evaluators (ANEVAR).

Re-evaluation of immovable properties securing real estate receivables included in the cover pool is made in accordance with art. 208 par. (3) of the Regulation (EU) no. 575/2013 and, for assets collateralizing European Covered Bonds (Premium), with art 129 of CRR as amended by Regulation (EU) 2019/2160. The asset monitor will check the fulfilment of this issuer's obligation.

In order to be eligible for inclusion in the cover pool, the mortgage loans collateralizing the Premium label bonds must have an LTV in line with art 129 of CRR (up to 80%/60% residential/commercial), while for European covered bonds the LTV is allowed to reach 85%/70% residential/commercial.

V. ASSET – LIABILITY MANAGEMENT

The CB legislation stipulates an asset coverage test, an overcollateralisation test, and a liquidity coverage test. Under the asset coverage test, the value of the cover pool must at all times exceed the value of all liabilities of the covered bonds, i.e. principal and interest of the bonds, payment obligations attached to derivatives and winding down costs of the covered bond programme. In calculating the value of the cover pool, the value of mortgage loans will be the lower of: the accounting value of that receivable; the value of the principal of that mortgage together with any previous mortgage rights; and the value of that mortgaged property weighted with the appropriate LTV cut off percentage as indicated in section IV above.

Under the overcollateralisation test, the net present value of the outstanding assets must exceed at all times 105% of the net present value of all bond-related liabilities. The overcollateralisation test is calculated under certain stress scenarios as well, where the net present value of assets must be at least 100% of the net present value of liabilities. The stress tests include: shocking the yield curve (+/-) by 350 basis points, shocking the EUR-RON exchange rate (+/-) by 35.5%, stressing the level of payment patterns based on historical prepayment rates for cover assets, taking into account a decrease in real estate prices and the loss given default in real estate enforcements.

Under the liquidity coverage test the issuer must calculate liquidity deficits that might arise over the following 180 days and cover them with liquid assets eligible for liquidity operations with NBR, which constitute a liquidity buffer.

The liquidity coverage test is performed daily, while the overcollateralisation tests under stress scenarios are performed at least monthly.

In terms of extendable maturity, the New CB Law does not allow the issuance of covered bonds with such structures.

VI. TRANSPARENCY

Issuers shall prepare and publish on their own websites quarterly reports as regards inter alia the risks related to the cover pool, the total volume of the issued mortgage bonds and the structure of the cover pool, including the nominal value of the receivables in the pool, their residual value and the structure of the maturities of the receivables in the pool.

In addition, the issuer shall make available on its website updated information from the cover pool registry, for each asset included in the cover pool, and update it regularly.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Under the CB legislation, the activity of a covered bond issuer is supervised by the NBR. As a mandatory prerequisite for the issuance of mortgage bonds, an asset monitor (in Romanian "*agent*") must be appointed by the issuer, as independent auditor of the cover pool. The agent has to be authorised by the NBR.

The agent's main role is to monitor the cover pool, to certify the issuer's reports to NBR and to report its findings on the observance of the legal requirements to NBR. Its monitoring obligations shall be performed regularly, based on the documentation provided by the issuer. The agent has to observe the issuer's compliance with the law and prospectus requirements. Based on the documentation provided by the issuer, the agent shall issue a certification attesting the issuer's compliance with the provisions of the law and with the prospectus regarding the cover pool structure.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

The issuer has the obligation to keep an internal cover pool register, which allows for the identification of the cover assets. Registration in the cover register reflects the structure and dynamic of the portfolio at any time throughout the life of the issue. For each label, the cover register shall have separate sections for each category of assets included in the cover pool, i.e. primary assets, substitution assets, liquid assets, and derivatives. For each loan in the cover pool, the registry shall include at least the identification number and the value of the amount borrowed plus the interest to be received throughout the life of the loan, calculated at the origination date. The cover register is kept by the issuer and is subject to regular verifications by the agent.

Pursuant to the CB legislation, the issuer is required to create a movable mortgage over the cover pool assets. The movable mortgage will be registered with the National Register in the name of the asset monitor, but on behalf of the covered bondholders, prior to the offering of the covered bonds for subscription, by means of a global registration form. The movable mortgage will be transferred in the name of the covered bondholders' representative should it be appointed. According to the CB legislation, such movable mortgage is not required to be registered in the relevant land register of the immovable assets securing the loans.

Asset segregation

By registration of the movable mortgage over the cover assets and the entry into the internal cover register of the assets included in the cover pool, such assets are segregated from the other assets of the issuer.

In order to fulfil all the obligations of the issuer towards bondholders under the CB legislation the cover pool securing the covered bonds represents a distinct estate, separate from the estate of the issuer including in case of bankruptcy or resolution of the issuer.

According to the CB legislation, no other creditor of the issuer may initiate enforcement procedures in relation to the cover pool or any part thereof before the covered bondholders, while in case of bankruptcy or resolution of the issuer, the cover pool shall not be part of the general estate of the Issuer until bondholders' claims are fully satisfied.

Acceleration

In case of an event of default under the cover bonds programme, bondholders have the right, upon approval by bondholders' meeting, to request to the issuer the acceleration of covered bond payments and, in this respect, the assignment of cover pool receivables to another credit institution or legal entity authorized in accordance with the law to perform lending activities.

The distribution of the amounts resulted from the assignment of receivables shall be made in the following order of preference:

> receivables resulting from the holding of mortgage bonds, pro rata, irrespective of the seniority and maturity of the covered bonds issue and receivables held by counterparties under the agreements underlying the financial derivatives included in the cover pool;

> receivables under financing arrangements granted to the issuer with the view to covering the temporary liquidity deficit;

> receivables of the issuer's creditors not paid in full upon the temporary closing of the bankruptcy proceedings.

Resolution and bankruptcy

The initiation of resolution of the issuer does not automatically trigger acceleration.

In case of bankruptcy, the cover pool is not affected by the liquidation procedure of bank's assets and any sale-purchase agreements concluded in breach of these legal provisions are null and void by law. Bondholders will continue to receive the amounts they are entitled to (principal and interest) within the deadlines provided by the prospectus/offering document.

The cover pool will continue to be managed by the liquidator (in Romanian "*lichidator judiciar*") for the purpose of reimbursing the amounts owed to the covered bondholders.

Dual recourse

Pursuant to the movable mortgage, the covered bondholders and the counterparties of the derivatives contracts included in the cover pool are entitled to a) a claim against the cover pool; (b) in the case of the insolvency or resolution of the credit institution issuing the covered bonds, a priority claim against the principal and any accrued and future interest on cover assets; (c) in the case of the insolvency of the credit institution issuing the covered bonds and in the event that the priority claim as referred to in point (b) cannot be fully satisfied, a claim against the insolvency estate of that credit institution, which ranks pari passu with the claims of the credit institution's ordinary unsecured creditors determined in accordance with art 234 of Romanian Insolvency Law.

There are no specific regulations expressly addressing the issue of voluntary overcollateralisation in insolvency. It may be argued that voluntary overcollateralisation is part of the cover pool with all legal consequences regarding segregation in the event of bankruptcy applicable to the respective pool.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The legislation creates the framework for covered bonds to be eligible for preferential treatment in compliance with art. 129 of the CRR.[1] and art 52 (4) of UCITS Directive.

Issuers: Alpha Bank Romania.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.
In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database). For further national information on the Romanian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.covered-bondlabel.com/compare/select/frameworks.

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): https://hypo.org/ecbc/covered-bonds/.

3.32 RUSSIA

By Tim Lassen, PFP Group Ltd., Representative Office, Moscow

I. FRAMEWORK

This article will give an overview over the current Russian legal framework for mortgage obligations. Legal basis is the Law on Mortgage Securities[1]. This law is supported by rules in the Mortgage Law, the Bankruptcy Law, and the Securities Market Law.[2]

In addition the Central Bank of the Russian Federation (CBRF) issued the instruction "On mandatory standards and additives"[3] and the regulation "On securities issuance standards"[4]. The former Federal Financial Markets Service (FSFR) released:

> The Mortgage Cover Determination Order[5],

> A joint order containing (i) the Special Depositor Decree and (ii) the Register Maintenance Rules[6] and

> The Mortgage Cover Administrator[7].

Further rules are in general regulations of the CBRF in its role as regulator of the financial market[8].

II. STRUCTURE OF THE ISSUER OF COVERED BONDS

The Russian Law on Mortgage Securities foresees two types of "mortgage obligations"[9] (Art. 7, sec. 1[10]): obligations[11] issued (i) by a credit organisation (covered bonds) or (ii) by a SPV ("mortgage agent") (MBS)[12].

Obviously the mortgage obligations issued by credit organisations, are oriented on the European covered bond model, those mortgage obligations issued by SPVs on the MBS model.[13]

1 Federal law dated 11 November 2003 No 152-FZ "On Mortgage Securities", latest amendment: Federal law dated 08 December 2020 No. 418-FZ (SZ RF, 14.12.2020, no. 50 (part III), item 8063).

2 The legal environment, in comparison to other countries and to the MBS model is described in Lassen, Tim: Banking mortgage securities (Covered Bonds) in Russia and abroad (Bankovskiye ipotechnye tsennye bumagi (Covered Bonds) v Rossii i za rubezhom); Statut Publishers, Moscow 2019. Pledge backed securites have a long history in Russia, going back to the early modern ages: Rybalov, A. O.: Oborot zakladnych kabal v russkom prave XVI v. (Turnover of Pledge Prescriptions in Russian law in the 16th Century); Herald (Vestnik) of Civil Law, no. 3 2008 volume 8; p. 90 – 106. See also: Encyclopedia of Russian Securitization 2021; 8th ed. Saint Petersburg 2021.

3 The Instruction of the CBRF dated 31 March 2004, No 112-I "On mandatory requirements for credit organisations, issuing securities with mortgage cover" has been replaced by the Instruction of the Central Bank of the Russian Federation of November 29, 2019 No. 199-I "On mandatory standarts and additives to the standarts of capital accuracy of banks with a universal license"; registered with the Ministry of Justice 27.12.2019 no. 57008, published: Herald (Vestnik) of the Bank of Russia, No. 11 - 12, 30.01.2020, in force since 01 April 2011 (Instruction CBRF No. 199-I).

4 Dated 19 December 2019 No. 706-P, registered with the Ministry of Justice 21 April 2020 No. 58158; published: Herald (Vestnik) of the Bank of Russia, No. 37-38, 26.05.2020 (Regulation CBRF No. 706-P).

5 Order dated on 1 November 2005 No 05-59/pz-n "On confirmation of the Decree on the method of determination of the mortgage cover".

6 Order dated 01 November 2005 No 05-60/pz-n "On confirmation of the Decree on the activity of the special depositar for the mortgage cover and the Rules of the maintenance of the register of the mortgage cover".

7 Order dated 15 December 2009 No 09-57/pz-n "On confirmation of the Decree on data reporting of the administrator of the mortgage cover and the Decree on data reporting of the specialised depositor of the mortgage cover".

8 See ECBC Fact Book 2017, p. 437, footnote 6.

9 Language of the Law: "Obligations with mortgage cover".

10 Law citations without link are citations of the Law on Mortgage Securities.

11 "Housing mortgage obligations" are a special type of mortgage obligations (in Russian *zhilishchnaya obligatsiya s ipotechnym pokrytiem*): Their cover pool consists only of claims, secured by mortgages over housing premises (Art. 3 sec. 5). "Mortgage obligations secured by a pledge of rights of claim of a participant in shared construction" (*obligatsiya s ipotechnym pokrytiem, obespechennoy zalogom prav trebovaniya uchastnika dolevogo stroitel'stva*) are secured by a pledge over a contract for participation in shared construction that meets the requirements of Federal Law of 30 December 2004 no. 214-FZ (art. 3 sec 3.1).

12 Another mortgage security under the Law is the "mortgage participation certificate" (Art. 17 – 31), an instrument similar to investment fund certificates. Due to their different structure in this article we will not look after them.By Law No. 418 (see footnote 1) the possibility to issue new "mortgage participation certificates" has been abolished.

13 Cover rules for Covered Bonds and MBS are nearly the same. The issuing SPVs ("mortgage agents", art. 8) are described in detail in the ECBC Fact Book 2011, p. 413 and 2015, p. 393.

For new issues (new series of issues) new cover pools need to be set up. The cover pool for every issue can be modified in cases, stipulated by the law, to ensure that there is always enough cover for the outstanding mortgage securities.

Credit organisations (Art. 7, sec. 2)

A credit organisation has to comply with the Banking Law and the rules, set up by the Central Bank for credit organisations. If the credit organisation does not fulfil the statutory requirements, the licence can be revoked (Art. 20, sent. 1, no 10 of the Banking Law).

The CBRF has set up a regulation[14] for the minimal ratio between the volume of the cover pool and the volume of the issued mortgage obligations (N18): 100 % (pt. 10.1 of the Instruction CBRF No. 199-I).

For credit organisations the excess amount of the cover pool shall not be more than 20% (Art. 13, para. 3, sec. 2).[15]

Protection of terms

Due to Art. 6, the words "obligation with mortgage cover" (in Russian *obligatsiya s ipotechnym pokrytiem*), mortgage participation certificate (*ipotechnyj sertifikat uchastiya*), mortgage cover (*ipotechnoe pokrytie*), mortgage agent (*ipotechnyj agent*) and "mortgage specialized organisation" (*ipotechnaya spezializirovannaya organisatsiya*)[16] may be used only for the purposes of the Law on Mortgage Securities.

III. COVER ASSETS

Eligible assets under the Russian Law on Mortgage Securities are mortgage secured claims under a loan or credit agreement, including interest (Art. 3, sec. 1) or pledged claim rights of a participant in shared construction[17] (art. 3 sec 3.1 and 7)[18].

Eligible are also money in Russian and foreign currency, state bonds and real estate (Art. 3, sec. 1).

Requirements for eligible mortgage secured claims are:

> The mortgage shall content a prohibition on sale of the mortgaged property by the mortgagor without consent of the mortgagee (Art. 3, sec. 2, pt. 2).

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14 On the bases of Art. 7, sec. 2.

15 Banks enjoying only a basic banking licence are allowed to run capital market operations with mortgage securities (pt. 1 sec. 5 Direction of the CBRF dated 27.11.2018 no. 4979-U (registered by the Ministry of Justice 19.12.2018, no. 53056, published Herald (Vestnik) of the CBRE, no. 97, 28.12.2018) in connection with Art. 24 sec 5 Federal Law dated 02.12.1990 no. 395-1 "On Banks and Banking Activities" (SZ RF, 05.02.1996, no. 6, item. 492). Art. 5.1 Banking Law sets limitations for activities of banks with a basic license.

16 "Mortgage specialized organization" is another allowed name for "mortgage agent" (Art. 8, sec. 1, para. 5).

17 Arising from a contract for participation in shared construction that meets the requirements of Federal Law of 30 December 2004 no. 214-FZ "On participation in shared construction of apartment buildings and other real estate and on amendments to some legislative acts of the Russian Federation". Introduced into the Law on Mortgage Securities by Art. 1 of the Federal law dated 02 August 2019 No. 261-FZ.

18 These "pledged claim rights" are eligible, if (art. 3 sec 3.1)
- the contract of participation in shared construction fits to the Ferderal Law dated 30 December 2004 no. 214-FZ;
- the contract of participation in shared construction contains a clause, by which the pledgor cannot give an order to the bank, holding the pledged account, where as a result of fulfilling this order, the amount of money on the account will be lower, than an amount equivalent to the pledged claim rights.
- pledged claim rights are only eligible up to 80 per cent of all pledged claim rights under the contract. This amount has to appraised by an independent valuer;
- item of the pledged claim rights can only be money claims;
- share of secured claim rights in the cover pool shall not be more than 40 per cent of the cover pool.
- When the pleged claim right converts into a mortgage secured claim, this mortgage secured claim has to fit to the Law on Mortgage Securities to be eligible. In particular the mortgaged real estate object has to be insured not later than 6 month after state registration of its ownership.

The pleged claim right has to be proofed by (art 3 sec 7):
- Excerpt from the Unified State Register of Immoveables, showing the registration of the contract of participation in shared construction;
- credit or loan agreement, from which the pledged claim right is originating;
- a document of transfer of the creditors and pledgees rights (if any).

> The property has to be insured to the benefit of the mortgagee for the whole term of the loan to an amount not less than the mortgage secured claim (Art. 3, sec. 2, pt. 3).

> The share of mortgage secured construction claims is limited to 10% of the cover pool (Art. 3, sec. 3, para. 3). For housing mortgage obligations, mortgage secured construction claims are not eligible (Art. 3, sec. 3, para. 1, sent. 2).

> Claims, secured by a second ranking mortgage are eligible, as far as they do not exceed the LTV limit of 70% (Art. 3, sec. 3, para. 2).

> In the moment of distribution (razmeshcheniye) or delivery (vydacha) of the mortgage obligations the cover cannot sustain of mortgage secured claims, pledged to secure other obligations (Art. 3, sec. 3, para. 1).

One asset may only be used for one cover pool (Art. 3, sec. 5).

The Federal Law dated 01 May 2019 No. 76-FZ introduced additional rules for cover assets (art. 13 sec. 7; 14 sec. 1 para 4): changes to the Consumer Credit Law allow under certain circumstances for "mortgage holiday" – for a time period up to 6 months a consumer may take "holiday" from paying for the mortgage. After this period he will step in at the same stage of credit, where he took holiday. This shall not be seen as a deterioration of the cover quality or as a breach of cover rules. Further similar rules are introduced by art. 1 in connection with art. 6 and 7 of the Federal law dated 03 April 2020 No. 106.

In Moscow a state project for renovation of old buildings has started. Part of this program is the relocation of the residents of such buildings to newly built houses and demolition of the old building. If a resident as owner has mortgaged his flat in the old building the Federal law dated 1 July 2017 No. 141-FZ sets – for this special case – a mechanism to transfer the mortgage to the new flat of the resident. Within six months from the change of the mortgage object the mortgagor has to insure the flat against loss and damage. Otherwise the claim secured by this mortgage has to be deleted from the cover register (art 3 sec 2.1). As valuation – as a market valuation might not be available – the official cadastre value may be used (art 3 sec 2.2). This possibility to transfer the mortgage to another object is now a common rule in the Mortgage law (art. 20 sec 2 para 4; 41.1), not only for Moscow.

IV. VALUATION AND LTV CRITERIA

Due to art. 3, sec. 2, para. 2, the LTV limit is 80% of the market value of the property. If a second ranking mortgage is used for cover, the LTV limit is 70%[19] of the market value (Art. 3, sec. 3, para. 2). In both cases, the valuation has to be made by an independent valuer[20].

The Law does not contain special regulations on valuation for the purpose of mortgage securities.

V. ASSET-LIABILITY MANAGEMENT

Art. 3, sec. 4 stipulates that the amount of the cover is defined by summing up the mortgage secured claims, amount of money in the cover and value of other assets. Details are set up by the FSFR in the Mortgage Cover Determination Order.

The following claims shall not be encountered by summing up the mortgage cover:

> No payment made on the claim for more than six month;

> Loss of the mortgage object, including if the mortgage was declared void by a court;

> Secured obligation declared void by a court;

> Bankruptcy of the debtor; and,

19 Including the first ranking mortgage.
20 The valuers' profession and independence of the valuer is regulated in the Valuation law.

- No insurance of the mortgage object for more than 6 month.
- The cover asset does not fit to the general rules for eligible claims; cover assets can be replaced by other assets (Art. 14, sec. 1; Art. 3, sec. 2 and 4).

For proper performance of the obligations under the mortgage bonds[21] the amount of the cover pool for the whole maturity of the bonds shall not be lower than the aggregate outstanding nominal value of the bonds (Art. 13, sec. 2, para. 2, sent. 1).

One cover pool can secure two or more tranches of mortgage obligations (Art. 11, sec. 2, para. 1; Art. 13, sec. 2). In this case the rules on calculation of the necessary cover for one tranche apply similarly (Art. 11, sec. 2, para. 1). If mortgage securities are issued in several tranches on the bases of one cover pool, the volume of the cover pool has to be either not less than the nominal value of each tranche together with other tranches with similar or foregoing ranks or at least not less than the amount of the mortgage cover, set up in the decision on issue of covered bonds of the respective and the foregoing ranks (Art. 13, sec. 2, para. 3). Among the two or more tranches the issuer may define an order of priorities: The performance of claims of one tranche is only allowed after proper performance of the claims of the higher ranking tranche(s) (Art. 11, sec. 2, para. 2 and 3). The rule, that for all tranches at any time the cover rules are fulfilled, can be excluded for the junior tranche by the decision on the issue (Art. 11, sec. 2, para. 1; Art. 13, sec. 6).

Money received from the repayment of the mortgage secured claims has to be included into the cover pool as far as this is necessary to fulfil the legal stipulations on the volume of the cover pool (Art. 13, sec. 4). Only at the moment of formation of the cover pool, it has to sustain for 100% of mortgage loans. After issuing the bonds, due to amortisation of the cover pool, this share will reduce. To avoid the consequence of necessary prepayment of the issue, and the risk that potential new cover mortgage loans will not fit to the parameters, the money from regular repayments of the mortgages has to be included into the cover pool.[22]

The mortgage securities' holders have the right to claim for prepayment of the mortgage securities in the following cases (Art. 16, sec. 1): Breach of the rules regarding:

- Volume of the cover pool;
- Replacement of cover assets;
- Proper fulfilment of obligations under the mortgage securities;
- The issuer is active in fields not allowed for it; and,
- Other reasons stipulated by the decision on issuing mortgage obligations.

A time frame to claim for prepayment has to be set up in the decision of the issue and shall not be less than 30 days from discovery or disclosure by the issuer of the prepayment right to the mortgage securities' holders (Art. 16, sec. 3, sent. 1). After this term the right to claim for prepayment ends (Art. 16, sec. 1, sent. 2). If the prepayment right arose in connection with a breach of the rules for the volume of the cover pool and/or the proper fulfilment of obligations under the mortgage securities as described in Art. 13, the right to claim a prepayment ends on the date of discovery or disclosure of information by the issuer of elimination of the breaches (Art. 16, sec. 3, sent. 2).

The issuer has to inform the mortgage securities' holders, that the right to claim for prepayment has arisen, the value of the securities, the procedure of prepayment and the termination of this right (Art. 16, sec. 2).

21 In Russian "nadlezhashchoe ispolnenie obyazatel'stv po obligatsiyam s ipotechnym pokrytiem".
22 See pt. 5 Explanatory Memorandum of the authors of the draft dated 19 August 2011.

VI. TRANSPARENCY

The Law on Mortgage Securities stipulates a wide range of publishing information on the mortgage obligations by the issuer (Art. 37 – 41). In addition to the main rules according to the Securities Market Law (Art. 37, para. 1; Art. 40, sec. 1), important information is an accounting report on performance of the cover assets (Art. 40, sec. 4, para. 2). Credit organisations issuing mortgage obligations have special reporting duties to the Central Bank (Art. 7, sec. 1, para. 3; pt. 3.1 – 3.5 of the Mortgage Cover Mandatory Requirements Instruction).

Main points for publishing information are:

> If the mortgage obligations are rated by a rating agency, this rating has to be published (Art. 37, para. 2).[23]

> Interested persons have the right to get knowledge of the cover register (Art. 39, para. 1).

> The regulator set up further special rules for mortgage obligation issuers in the general regulations on disclosure of information[24].

VII. COVER POOL MONITOR, COVER REGISTER AND BANKING SUPERVISION

Cover pool monitor

The cover pool is controlled by a cover monitor (the "specialized depositor of the mortgage cover"[25]), Art. 33, sec. 1. The cover monitor has to be a commercial organisation[26], licensed for (i) activity as special depositor for investment funds, share investment funds and non-state pension funds as well as for (ii) performance of depositary activities on the securities' market (Art. 32, para. 2). The FSFR has published the Special Depositor Decree.[27]

The duties and tasks of the cover pool monitor are described in the ECBC Fact Book 2012, pp. 418 – 419.

Cover register

Cover assets have to be registered in a "register of mortgage cover"[28] (Art. 5). The FSFR has adopted Register Maintenance Rules[29].

Details are described in the ECBC Fact Book 2012, pp. 419 – 420.

Supervision

Since 2013 the whole financial and banking system is supervised by the Central Bank of the Russian Federation.

Concerning mortgage securities the state regulation of issuing mortgage securities (Art. 42 – 46) as well as the supervision of banks, issuing mortgage securities, is done by the Central Bank (Art. 7, sec. 2).

Issuing of mortgage obligations

For details of this process see ECBC Fact Book 2012, pp. 420 – 421.

For issuing securities, Russian law foresees a five step process[30]: (i) Taking the decision on issue, (ii) approval of the decision, (iii) state registration of issue, (iv) placement of securities and (v) state registration of the report or notification on results of the issue. For these general steps, the CBRF has set up special requirements

23 Regarding ratings see: Decision of the Council of Directors of the Central Bank dated 23.12.2021.

24 Statute on Dislcosure of Information by the Issuers of Issuing Securities (Bank of Russia, 27.03.2020, No. 714-P)(registered by the Ministry of Justice, 24.04.2020, No. 58203; published: Herald (Vestnik) of the Central Bank, No. 39-40, 27.05.2020). Special rules for mortgage securities are foreseen in chapter 36, Section IX (chapter 66 – 68), Annex 2 pt. 7.4.3.4 and 9.6, Annex 3 pt. 4.3.1.

25 In Russian "spetsializirovannyj depozitariy ipotechnogo pokrytiya".

26 Not affiliated with the issuer (Art. 33, sec. 3, para. 2).

27 In the letter „On procedure of work of the specialized depositor" dated 30.08.2017 no. 54-2-3-5/1943 the CBRF gave some explanations regarding the duties of the cover pool monitors.

28 In Russian "reestr ipotechnogo pokrytiya".

29 The cover register contains information on the mortgage claims on the loan-level basis (Art. 5).

30 Art. 19 Securities' Market Law; Pt 1.1 Statute CBRF No 428-P. The CBRF prepared a new Statute "On standarts of issuing securities" (19.12.2019, no. 706-П), which has not come into force yet.

for the issue of mortgage securities.[31] Due to art. 12 sec 3.3 mortgage secured bonds can be issued as stock exchange bonds under the Securities' Market Law.

If in the decision on issue of mortgage securities an issuing program is foreseen, the law stipulates several rules regarding content of this program (Art. 12 para 3.2). In this case the decision on the issue shall sustain of two parts. The first part will describe the rights of the bond holders and other general conditions of one or several issues of the program. The second part will contain detailed conditions of single issues. In addition to the rules of the Securities Market Law for bond issuing programs, housing mortgage obligation issuing programs shall contain information on the securing pledge over the cover pool and some other information.

Covered bonds can be issued only as uncertificated securities (Art. 16 sec. 2 Securities Market Law).

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF MORTGAGE OBLIGATIONS

The claims of the mortgage securities' holders are secured by a pledge over the cover pool (Art. 11, sec. 1).

Asset segregation

In case of bankruptcy the cover pool is excluded from the bankruptcy estate of the issuer (Art. 16.1, para. 1 of the Law on Mortgage Securities; Art. 131, sec. 2, para. 3; Art 189.91, sec. 2 para 1, sec 4 of the Bankruptcy Law).

The insolvency administrator is obliged to open two special bank accounts for the cover pool to collect the money paid on the mortgage secured claims or from realisation of these claims and to make payments to the mortgage obligations' holders (Art. 133, sec. 4 of the Bankruptcy Law). A special administrator of the cover pool, different from the insolvency administrator of the general bankruptcy estate is not foreseen.[32]

Impact of insolvency proceedings on mortgage obligations

The Law on Mortgage Securities stipulates two possibilities of realisation of the cover pool in case of bankruptcy of the issuer (Art 16.1, para. 2):

> Change of the issuer ("zamena ėmitenta obligaciy s ipotechnym pokrytiem"): The cover pool will be sold with the obligation for the buyer to fulfil all conditions of the decision on issuing the mortgage obligations. Details have to be stipulated by a federal law. This federal law has not been enacted yet.

> Selling of the cover pool ("prodazha ipotechnogo pokrytiya"): The cover pool assets will be sold and the money received will be distributed among the mortgage obligations' holders. The mortgage obligations accelerate.[33]

The rules for the change of the issuer foresee the following: The claims of the holders of the mortgage securities will not be included into the general creditors' register under the bankruptcy law, but they will be registered in a separate register. The representative of the bond holders or the central depositor[34] for rights connected with bonds will be entered in the creditors' register for claims of mortgage securities' holders[35], if they are appointed. If not, the mortgage securities' holders will be registered as creditors (Art. 16.1 para 1 sec. 2).

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31 Special rules for mortgage securities are foreseen in Regulation CBRF No. 706-P.

32 Due to art. 16.2, sec. 3, para. 3 and 4 in case if one (or severeal) bond holders' representatives are appointed for the covered bonds secured by one cover pool (for several tranches secured by one cover pool) the bankrupcy receiver will transfer the money to a special account of the representative. The representative will distribute the money among the the bond holders. Regarding the bond holders' representative, see ECBC Fact Book 2014, p. 395, footnote 28. Some details regarding beginning of office of the representative have been clearified by the CBRF in the Information letter dated 10.10.2018 no. IN-06-28/65 (published Herald (Vestnik) of the Central Bank, no. 78, 17.10.2018).

33 Moody's assigned a timely payment indicator (TPI) of "Very Improbable", as covered bonds under Russian law accelerate, if the issuer becomes insolvent. Due to Moody's the Law on Mortgage Securities offers limited support for timely payment to the covered bond holders, after issuer default (Moody's Investors Service: Pre-Sale Report: DeltaCredit Bank Mortgage Covered Bonds, 20 November 2012 and 19 July 2013, in both reports p. 2).

34 Depositor's activity is foreseen in Art. 7 Securities Market Law for uncertificated securities.

35 In Russian: "Reestr trebovaniy kreditorov – vladelcev obligaciy s ipotchnym pokrytiem".

A list of the mortgage securities' holders shall be prepared by the holder of the register of mortgage securities' holders on demand of the bankruptcy receiver and shall be in line with the according rules of the Securities Markets Law (Art. 16.1 para 5).

If a representative or a central depositor is appointed, the bankruptcy receiver shall transfer the money, received from realization of the cover pool to a special account of the representative or depositor (Art. 16.2 para 3 sec 3 and sec 5).

Preferential treatment of mortgage obligations' holders

Mortgage obligations' holders enjoy preferential treatment as the Russian law stipulates the separation of the cover pool from the general insolvency estate of the issuer (Art. 16.1, para. 1).

In case they are not satisfied in the realisation of the cover pool, the mortgage obligations' holders may ask for satisfaction from the general bankruptcy estate of the issuer (Art. 16.1, sec. 1 para. 3).

They are also enjoying a preferential treatment against deposit holders, as the cover pool – securing mortgage obligations – is excluded from the general bankruptcy estate, which in turn secures depositors on preferential bases[36].

For details to access to liquidity in case of insolvency and sale and transfer of mortgage assets to other issuers, see ECBC Fact Book 2012, p. 423.

Enforcement into the cover pool

Russian Covered Bond Law allows for enforcement of the covered bond holders into the cover pool (Art. 15). The general realisation rules of the Mortgage Law will apply. In case of different issues with different ranking, the ranking has to be kept in distribution of the receipts (Art. 15, sec. 3).

If an issue sustains of several tranches, the foreclosure in one tranche is only allowed upon an application of the bond holders' representative (Art. 15, sec. 1, para. 3).

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION; ECBC LABEL CONVENTION

Russian mortgage obligations (mortgage obligations, issued by credit organisations) comply with the requirements of Art. 52, sec. 4 UCITS and the ECBC Label Convention (see ECBC Fact Book 2012, pp. 424 - 426). The CRR is fulfilled for mortgage obligations, issued by banks, where the cover pool sustains only of housing mortgage loans (e.g. housing mortgage obligations).[37]

By implementing Basle III rules, in 2015 the CBRF adopted the "Statute on the Order on Calculation of the Amount of Market Risk by Credit Organisations"[38]. In pt. 2.1 sec. 9, 10 this Statute CBRF No. 511-P contains for this Statute a definition of securitisation: Securitisation instruments are securities, performance of which is partly or in full secured by the cash inflow from pledged assets, which in turn are no securitisation instruments (or which are securitisation instruments itself, if it is a multiple securitisation). Due to the double recourse character of covered bonds – the covered bond gives a claim towards the bank, which the bank has to fulfil also

36 See the Explanatory Memorandum of the authors dated 01 February 2011, the Official Opinion of the Government of the Russian Federation dated 6 July 2011 and the Conclusions of the Financial Markets' Committee of the State Duma as of 20 September 2011 and 24 January 2012 to draft law no 495103-5 (enacted as Federal law dated 25 June 2012 No 83-FZ).

37 For mortgage obligations, secured by commercial mortgage loans, the CRR requirements (Art. 129, sec. 1, lit. f) are not fulfilled, as a loan up to a value of 80% of the market value is allowed under Russian law as cover asset (see ECBC Fact Book 2014, pp. 399 – 403).

38 Statute approved by the Central Bank on 03.12.2015 No. 511-P (registered by the Ministry of Justice, 28.12.2015, No. 40328; published: Herald (Vestnik) of the Central Bank, No. 122 (1718), 31.12.2015, p. 50 – 70, here following: Statute CBRF No. 511-P. The Statute came into force 1 January 2016 (pt. 5.1).

in case, if there are no payments on the cover assets, the cover pool acts as security in case of bankruptcy of the issuing credit institute – the Statute CBRF No. 511-P seems not to be applicable to covered bonds.

For calculation of sufficiency of equity of investments of a bank in mortgage securities and shares of a mortgage agent (and other assets) the CBRF set up a formula of accounting the credit risk.[39]

X. ADDITIONAL INFORMATION

Investment regulations

The EU investment regulations for mortgage obligations are not transferred into Russian law. Nevertheless, different investment rules and privileges for mortgage securities do exist. E. g. in 2017 the Central Bank has set up new rules for investing pension deposits of non-state pension funds in different asset classes.[40]

39 Art. 2 sec 2 and 7 of the Statute approved by the CBRF on 04.07.2018 no. 647-P "Statute of accounting of the amount of credit risk by banks in transactions, outcome of which is the attraction of monies through issue of bonds, settlement of each of it is in full or in part secured by return of monies from assets, used as security" (registered by the Ministry of Justice dated 10.10.2018 no. 52392; published: Herald (Vestnik) no. 79, 24.10.2018).

40 Statute approved by the Central Bank on 01.03.2017 No. 580-P (published: Herald (Vestnik) of the Central Bank, No. 56, 10.07.2017, here following: Statute CBRF No. 580-P). See pt. 1.1.2. of Statute CBRF No. 580-P

> Figure 1: Overview over the issues of bank mortgage obligations (covered bonds)[41]

	Date of issue	Issuer	Tranches	Volume[42]		Interest rate	Maturity
				RUB	EUR		
1	21.09.2011	VTB 24	 A B	5,000.0 3,333.3 1,666.7	116.5 77.7 38.8	 9.00% 3.00%	26.11.2043
2	14.09.2012	VTB 24	 A B	6,000.0 4,000.0 2,000.0	147.9 98.6 49.3	 9.00% 3.00%	 15.09.2044 15.09.2044
3	23.05.2013	VTB 24	 A B	6,000.0 4,000.0 2,000.0	148.7 99.2 49.6	 9.00% 3.00%	01.09.2044
4	18.12.2013	VTB 24	 A B	12,300.0 8,200.0 4,100.0	271.7 181.2 90.6	 9.00% 3.00%	18.09.2046
5	27.03.2014	DeltaCredit[43]		5,000.0	102.1	12.00%	27.03.2024
6	25.06.2014	VTB 24	 A B	6,000.0 4,000.0 2,000.0	129.8 86.5 43.3	 9.00% 3.00%	14.08.2043
7	01.10.2014	DeltaCredit		7,000.0	140.1	11.1%	01.10.2024
8	10.10.2014	DeltaCredit		5,000.0	98.1	11.92%	10.10.2024
9	10.12.2014	Gazprombank	 A B	7,000.0 4,666.7 2,333.3	104.7 69.8 34.9	 9.00% 3.00%	27.04.2048
10	10.12.2014	VTB 24	 A B	5,800.0 3,800.0 2,000.0	86.7 56.8 29.9	 9.00% 3.00%	06.12.2044
11	24.11.2016	DeltaCredit		7,000.0	102.9	10.29%	24.11.2021
12	28.12.2017	DeltaCredit		7,000.0	100.7	7.82%	28.12.2022
Total outstanding				**72,100.0**	**1,447.1**		
							Date of redemption
1	16.12.2009	VTB 24		15,000.0	341.3	9.70%	10.12.2014
2	11.10.2007	MIA		2,000.0	56.7	12.50%	01.10.2015
3	12.02.2015	Investtorgbank		2,500.0	33.4	15.35%	12.02.2020
4	14.09.2011	Unicreditbank		5,000.0	121.3	8.20%	07.09.2016
5	02.04.2013	DeltaCredit		5,000.0	125.6	8.50%	02.04.2016
6	09.11.2011	DeltaCredit		5,000.0	119.2	8.33%	02.11.2016
7	11.12.2012	DeltaCredit		5,000.0	125.5	9.15%	05.12.2017
8	04.02.2015	DeltaCredit		5,000.0	65.1	8.50%	04.02.2018
9	10.07.2013	DeltaCredit		5,000.0	117.3	8.65%	04.07.2018
10	05.09.2013	DeltaCredit		5,000.0	113.4	8.45%	30.08.2018
11	30.03.2016	DeltaCredit		5,000.0	65.1	10.57%	30.03.2019
12	23.09.2015	Unicredit		4,000,0	54.1	12,25%	16.09.2020
13	26.02.2016	Gazprombank		15,000,0	178.1	10,90%	19.02.2021
14	24.11.2016	DeltaCredit		7,000,0	102.9	10,29%	24.11.2021
Total redeemed				**85,500.0**	**1,619.0**		
Total issued				**157,600.0**	**3,066.1**		

41 Details of the issues can be found on www.cbonds.info and Encyclopedia of Russian Securitization, 5th ed. Saint Petersburg 2018, pp. 185, 186.
42 CBRF exchange rate as of date of issue.
43 Since 1 June 2019 AO CB Delta Credit has been reorganized by incorporation into PAO Rosbank (as mortgage center Rosbank-Dom).

3.33 SINGAPORE

By Colin YS Chen, DBS Bank & Chairman of the ECBC Global Issues Working Group and Franz Rudolf, UniCredit

I. FRAMEWORK

On 31 December 2013, the Monetary Authority of Singapore ("MAS") published its regulations regarding the issuance of covered bonds by banks incorporated in Singapore (MAS Notice 648)1. The regulations became effective 31 December 2013 and were amended in June 2015 and October 2020. The requirements set out in the notice are mandatory for Singapore's banks as MAS Notice 648 is part of The Banking Act in Singapore. The regulation outlines MAS' rules relating to the issuance of covered bonds by banks incorporated in Singapore and it will enable Singapore's banks to gain access to longer term, stable funding options as well as to facilitate the diversification of funding sources for the banking and financial markets in Singapore.

DBS Bank Ltd was the first to establish its USD 10 bn Covered Bond Programme under these new regulations on 16 June 2015 and on 30 July 2015, issued the inaugural Singapore covered bond, pricing USD1 bn, fixed rated covered bonds due 2018. Following then, United Overseas Bank Ltd. also launched its USD8 bn Covered Bond Programme on 23 November 2015. The first series of EUR500 mn fixed-rate covered bonds was subsequently issued on 3 March 2016. The third issuer was Oversea-Chinese Banking Corporation, which issued a EUR500 mn fixed rate covered bonds due 2022 on 15 March 2017, as part of its USD10 bn Covered Bond Programme.

Singapore's covered bonds are based on contractual agreements and governed by the law of contracts under common law, which applies to all elements of the covered bond structure. This, together with the implemented specific covered bond regulations, creates a framework comparable with that of other European jurisdictions, e.g. in the UK, via a more prescriptive regulatory framework.

Singapore's legal system is similar to the legal system in the UK in that the covered bond structure is fundamentally based on statutes or acts, which have been formally enacted by the legislative authority of the Republic of Singapore. It is considered a primary authority and source of law and determines the applicable legislation. The MAS guidelines arising from the MAS Notice 648 and its amendment provide clarity on the characteristics of a Singapore covered bond.

Singapore covered bonds are direct and unconditional obligations of the issuer and in the event of a default or insolvency of the issuer, the covered bond investors will have dual recourse: an exclusive senior secured claim on the pool of cover assets and also a senior unsecured claim on the issuer. The cover pool assets will be held in a special purpose entity, which, in turn, will provide a guarantee in respect of the principal and interest pay- ments under the covered bonds' outstanding. A bond/security trustee is appointed to hold the security over the cover pool for the benefit of the covered bond investors.

II. STRUCTURE OF THE ISSUER

In the MAS Notice 648 covered bonds are defined as "bonds, notes or other debentures issued by a bank or an SPV (Special Purpose Vehicle) where the payments of the liabilities to the holders of such covered bonds and any liabilities arising from the enforcement of the rights of the holders of the covered bonds are: (a) secured by a cover pool; and (b) recoverable from the bank regardless of whether the cover pool is sufficient to pay off such liabilities." This implies the dual recourse nature of covered bonds with a claim of covered bond holders against the cover pool as well as the issuing bank. The cover pool, in this context, comprises the eligible assets owned by the bank or an SPV for the purpose of securing the liabilities to the holders of the covered bonds only. MAS Notice 648 is applicable to all banks incorporated in Singapore. In order to issue covered bonds, the bank has to notify MAS at least one month prior to the issuance of covered bonds. In addition, issuers will have to submit to the MAS a Memorandum of Compliance, confirming that the guidelines with respect to the program and issuances for covered bonds have been adhered to and complied with.

1 MAS Notices can be found on MAS website at www.mas.gov.sg.

III. COVER ASSETS

According to Paragraph 6(a) of MAS Notice 648, the cover pool must comprise mortgage loans secured by residential property ("residential mortgage loans"), whether in Singapore or elsewhere, and may also comprise one of more of the following assets:

> Any other loans secured by the same residential property as the residential mortgage loans;

> Assets, including intangible properties, that form part of all the security provided for the residential mortgage loans, such as guarantees and indemnities;

> Any interest held by the bank as trustee or a replacement trustee for the SPV in relation to the residential mortgage loans or the assets referred to in paragraphs 6(a)(i) and (ii);

> Derivatives held for the purpose of hedging risks arising from the particular issuance of covered bonds;

> Cash (including foreign currency);

> Singapore Government Securities, and

> MAS Bills.

The aggregate value of substitute collateral (cash, Singapore Government Securities and MAS Bills) is limited to 15% of the cover pool. The 15%-limit can be temporarily exceeded in order to allow the issuer to build up the necessary liquidity to meet payments in the upcoming 12 months or to account for operational timing differences.

MAS imposed to limit the amount of collateral in the cover pool at 10% of total assets of an issuer. This limit has been increased in October 2020 from previously 4%. Total assets of the bank include assets of the branches but does not include assets of the subsidiaries of the bank. For the purpose of determining the total assets of a bank, the bank must exclude assets it uses to meet regulatory requirements under sections 38, 39 and 40, read with section 65, of the Banking Act, section 8 of the Deposit Insurance and Policy Owners' Protection Schemes Act (Cap. 77B) and other regulatory requirements as may be prescribed or specified by MAS. Commercial mortgage loans or public sector loans are not eligible.

IV. VALUATION AND LTV CRITERIA

The legal framework sets an 80% loan-to-value (LTV) limit for the eligibility of residential mortgage loans. The LTV limit is a soft limit, meaning that in case a mortgage loan exceeds 80%, the loan can still be included in the cover pool, but only the value up to 80% is given credit to when determining the value of the cover pool. The value of the underlying collateral is determined by the current market valuation of the residential property that is used to secure the residential mortgage loan. A valuation of residential properties used to secure the loans must be conducted on an annual basis at the minimum.

V. ASSET – LIABILITY MANAGEMENT

MAS Notice 648 Paragraph 6(h) stipulates a mandatory minimum overcollateralisation (OC) of 3% on a nominal basis as "... the value of assets in a cover pool must be at least 103% of the outstanding nominal amount of the covered bonds secured by the assets at all times." Covered Bond issuers must in accordance with MAS Notice 648 Paragraph 8(a) perform regular asset coverage tests (ACTs) to ensure collateral quality and the proper level of overcollateralisation. In addition, regular stress tests on risks related to default, prepayment, currency, interest rate, counterparty and liquidity have to be performed. Details regarding these tests will be addressed in the respective covered bond programs of Singapore issuers.

VI. TRANSPARENCY

Covered bond issuers must disclose to the covered bond holders the results of asset coverage tests (ACTs) performed and cover pool characteristics on a regular basis and in any event, at least every quarter, according to MAS Notice 648 Paragraph 8(e).

VII. COVER POOL MONITOR AND BANKING SUPERVISION

According to Paragraph 8(b), a cover pool monitor must be appointed. The cover pool monitor, who has to be an external third party qualified to be an auditor under the Companies Act (Cap 50), has to verify the compliance of the covered bond issuer with MAS Notice 648 regulations and report these to MAS. A certified report has to be submitted to MAS annually in the first quarter following the end of the bank's financial year. The duties of the cover pool monitor explicitly include to:

> Verify annually that the bank complies with covered bond-specific regulations (asset cap, eligible assets, LTV limits, overcollateralisation, et al. as defined in Paragraph 6(a) to (i), 6A, 6B, 6C and 6D);

> Verify annually that the bank or SPV, as the case may be, keeps an accurate register of the assets in the cover pool;

> Assess the adequacy of the bank's or SPV's, as the case may be, risk management process and internal controls relating to the covered bond program annually, including an independent review of ACTs performed by the bank of SPV, as the case may be;

> Submit a certified report to MAS annually on compliance with covered bond regulations no later than the last day of the third month immediately following the end of the bank's financial year; and

> Report to MAS immediately if it becomes aware that the bank or SPV has breached any of the conditions imposed.

Singapore's covered bond regulations stipulate that the issuing bank must ensure adequate risk management processes and that internal controls are in place to manage the risks arising from the issuance of covered bonds, including appropriate governance arrangements and regular stress tests on risks arising from issuing covered bonds such as default, prepayment, currency, interest rate, counterparty and liquidity risks. This also includes having governance processes in place with respect to the authority to approve any issuance of the covered bond. Finally, regulations state that the board and senior management of the issuer are responsible for conducting due diligence in assessing the risks associated with issuing covered bonds and ensuring that risk management processes that are put in place for covered bonds are adhered to.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Given that Singapore's legal system is based on Commonwealth Common Law, a similar structure applies as used for the issuance of covered bonds in the UK, Canada, Australia, or New Zealand. Thus, covered bonds will be issued by a bank, with the cover pool collateral sold by way of an equitable assignment or by declaring a trust over the collateral to a Special Purpose Vehicle (SPV). The covered bond will benefit from dual recourse on the issuer and the cover pool. This structure ensures the segregation of the cover assets from the insolvency estate of the issuer in the case of an issuer default. The contractual agreements for the issuance of covered bonds are structured within the general legislation in Singapore.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Singapore covered bonds are not UCITS 52(4) or CRR Article 129 compliant given that Singapore is not a Member State of the European Union. As such, it is unlikely that Singapore covered bonds will benefit from preferential risk weighting for regulatory capital purposes. However, given the revised release of the Basel III framework containing preferential risk weights explicitly for covered bonds and the definition of minimum standards, the framework could have a positive impact for covered bonds outside the European Union when it comes into force on 1 January 2023. Covered bonds are LCR eligible in Singapore if they have a long-term credit rating of at least AA- from a recognised external rating agency, and have a proven record as a reliable source of liquidity in the markets even during stressed market conditions. MAS also introduced the Emergency Liquidity Facility, which will allow for eligible covered bonds to be repo-ed with the MAS.

Issuers: DBS Bank Limited, United Overseas Bank Limited, Oversea-Chinese Banking Corporation.

COVERED BOND LABEL : DBS Bank Ltd (1 pool), United Overseas Bank Limited (1 pool), Oversea-Chinese Banking Corporation Limited (1 pool).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Singaporean market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.34 SLOVAKIA

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I. FRAMEWORK

Covered bonds are regulated by the Act on Bonds (Act No. 530/1990 Coll., Part Four, Article 20b); by the Act on Banks (No. 483/2001 Coll., Part 12); by the Insolvency Act (Act No. 7/2005 Coll., Part 6); by five Decrees of the National Bank of Slovakia (the "NBS") for covered bonds programme, for example: stipulating the details of an application for prior approval of the NBS and the Decree of the NBS stipulating Covered Bond Register, reporting and disclosure. The entire legal framework has recently been updated by the Act No. 454/2021 implementing the EU Directive 2019/2162 on the issue of covered bonds and covered bonds public supervision (the "CBD Act").

According to the Act on Banks, a covered bond is a secured bond under a special regulation (Act on Bonds) the nominal value and aliquot interest income of which are fully covered by assets or asset values included in the relevant cover pool (the "Cover Assets") and correspond to the value of assets which, for the whole period of validity of the covered bond, are preferentially intended to satisfy claims arising from this covered bond. In the case of the resolution of the bank issuing the covered bonds or if it is not able to properly and timely pay its liabilities, the Cover Assets (including any collateral securing those assets) will be preferentially used to meet the issuing bank's Covered Bond Liabilities (see Section III. "Cover Assets" below).

Cover pool consists of primary assets, substitution assets, hedging derivatives and buffer of liquid assets.

The Bank can manage a single covered bonds programme individually for each of the following types of primary assets:

(1) assets eligible pursuant to Article 129(1), let. (a) of Regulation (EU) No 575/2013 (the "CRR") i.e. exposures to or guaranteed by central or regional governments, ESCB central banks and public sector entities or local authorities in EU;

(2) assets eligible pursuant to Article 129(1), let. (d) and (f) of CRR i.e. residential (or commercial) mortgage loans with a maximum loan-to-value (LTV) of 80% (or 60-70%) of the value of the mortgaged real estate (the assets referred to in points (1) and (2) commonly as the "CRR Assets");

(3) other high-quality cover assets consisting of residential (or commercial) mortgage loans with a maximum LTV of 70% of the value of the mortgaged real estate or LTV of 100% in the case of real estate according to CRR (the "HQ Assets");

(4) loans to or guaranteed by public undertakings majority owned by the state or regional authorities which provide essential public services and are subject to public supervision (the "PU Loans").

The bank shall include the words "covered bond" ("krytý dlhopis") in the title of the security which may also be labelled "European Covered Bond Premium" ("európsky krytý dlhopis (prémiový)") if secured by CRR Assets and meeting all conditions under article 129 of CRR or "European Covered Bond" ("európsky krytý dlhopis") if secured by HQ Assets or PU Loans.

The coverage ratio calculates the total of the values of Cover Assets towards the total of the values of Covered Bond Liabilities. The bank must maintain the minimum level of 5 % of overcollateralization for each relevant covered bonds programme that includes CRR Assets in the cover pool and 10 % for each that includes HQ Assets or PU Loans. In individual terms and conditions of the issuance of the covered bonds, the bank can determine a higher coverage ratio than 105 % resp. 110 % and from this moment the bank is obligated to maintain such a higher coverage ratio until the full repayment of the covered bond issuance for the entire relevant covered bonds programme. If the bank determines several higher coverage ratios for different issuances, it is obligated to maintain the highest coverage ratio for the entire relevant covered bonds programme until the full repayment of the covered bonds issuance with such highest coverage ratio, while the bank is also obligated to immediately replenish and continuously replenish the cover pool to the extent corresponding to such highest coverage ratio.

The bank is obligated to calculate the coverage ratio as of the last day of the relevant month.

Covered bond holders and counterparties of derivative contracts have recourse to the issuer as well as a preferential claim on the cover pool. The Cover Assets are recorded in a special register of covered bonds (the "CB Register") and monitored by a cover pool administrator. The special public supervision is performed by the banking supervision of the NBS.

The claims attached to the Cover Assets, or any part thereof, in relation to which the debtor is considered defaulted (under Article 178 (1) of CRR) shall not be accounted for in calculating the coverage ratio and must be deleted from the CB Register.

II. STRUCTURE OF THE ISSUER

The covered bond in Slovakia can be issued only by a bank with granted prior approval from the NBS to perform activities related to covered bonds programme.

The issuer of covered bonds keeps the Cover Assets on its balance sheet separately from the other banking assets.

III. COVER ASSETS

Cover pool consists of the following Cover Assets:

a) primary assets that include CRR Assets, HQ Assets and PU Loans. Certain special conditions apply to CRR Assets and HQ Assets that consist of the receivables of the issuing bank from mortgage loans. Mortgage loan according to Act on Banks is a loan secured by a lien or other security right to real estate, including building under construction, apartment, including apartment under construction or non-residential premises, including non-residential premises under construction (hereinafter the "real estate"), a part of real estate or future real estate and granted by a bank, foreign bank or a branch of a foreign bank. The mortgage loan must be secured by liens to residential or commercial real estate located in Slovakia and registered by the bank in the CB Register at its discretion. All primary assets include, in addition to the receivables, also the liens to real estate or other forms of collateral used to cover these receivables. The CRR assets must account for at least 90% and HQ Assets or PU Loans for at least 80% of the total nominal value of the covered bonds to which such relevant primary assets form coverage under the relevant covered bonds programme. For the purpose of coverage ratio, the value of the primary assets is calculated on the basis of a residual nominal value of individual receivables. For other purposes, the calculation of the value shall include also aliquot interest income. The CBD Act allows the bank to use as primary assets the assets originated by its own subsidiaries or by other banks, which it acquired by purchase or as a result of the transfer by way of financial collateral arrangement. The bank is then obliged to assess the credit-granting standards of the subsidiary or perform itself a thorough assessment of the borrower's creditworthiness.

b) substitution assets that may include assets meeting conditions under CRR. The substitution assets can account for not more than 10% of the total nominal value of the covered bonds to which such assets form coverage in the cover pool including CRR Assets and not more than 20% of the value of the total nominal value of the covered bonds in the cover pool including HQ Assets or PU Loans. For the purpose of coverage ratio, the value of the substitution assets is determined on the basis of the lower of their real value (including an aliquot interest income) and nominal value. For other purposes the real value of securities and nominal value of other substitution assets is considered together with the aliquot interest income.

c) hedging derivatives the purpose of which is to manage and mitigate currency risk or interest rate risk connected with issued covered bonds and which shall form part of the cover pool until such risks cease to exist. The hedging derivatives are included into the calculation of the value of the cover pool as follows:

   i) the hedging derivatives used to mitigate the currency risk are measured at fair value,

   ii) the hedging derivatives used to manage and mitigate the interest rate risk of the substitution assets are measured at fair value,

   iii) the hedging derivatives used to mitigate the interest rate risk of the primary assets and the covered bonds are not included into the calculation of the value of the cover pool.

d) liquid assets consisting of assets of level 1 assets, level 2A assets or level 2B assets (under Articles 9 to 13 of Commission Delegated Regulation (EU) 2015/61 of 10 October 2014 supplementing CRR) except own assets issued by the bank issuing the covered bonds or its affiliates and exposures toward institutions (Article 129 (1)(c) of CRR.

   In every moment the bank must cover net liquidity outflow (i.e. all payment outflows of the covered bonds programme falling due on one day) from a buffer of liquid assets at least in the value of the maximum cumulative net liquidity outflow over the next 180 days. The value of the buffer of liquid assets is a part of the coverage ratio and, for that purpose only, the value of securities entering the buffer of liquid assets shall be determined on the basis of the lower of their nominal value and real value (including an aliquot interest income). Otherwise, the real value of securities (including an aliquot interest income) and nominal value of other assets are considered when entering the buffer of liquid assets.

Assets and other asset values become a part of the cover pool and are considered Cover Assets when registered in the CB Register. They are a part of the cover pool until they are deleted from the CB Register.

The cover pool can be used to cover only:

a) the liabilities of the issuing bank in order to pay the nominal value and aliquot interest income from all covered bonds issued by this bank until they are fully repaid,

b) the estimated liabilities or costs of the issuing bank (operational cost of covered bonds programme) which arise and are immediately connected with the management and termination thereof and settlement toward persons that conduct activities under the Act, or arising from issuance conditions especially toward the administrator of the covered bonds programme, payment service agents, administrators, representatives of the owners of the covered bonds and other persons performing similar activities,

c) the liabilities of the issuing bank which arise from the hedging derivatives included in cover pool. (all liabilities in preceding let. a) to c) together the "Covered Bond Liabilities").

Cover Assets are used by the bank preferentially to cover the Covered Bond Liabilities and the bank must not dispose of them or use them to secure other liabilities until they are deleted from the CB register.

IV. VALUATION AND LTV CRITERIA

The CBD Act sets a 70% LTV limit for the eligibility of HQ Assets consisting of mortgage loans. The LTV limit is a soft one, meaning that in case a mortgage loan exceeds 70%, the loan is included into the primary assets only up to the lower of (i) the amount that does not exceed 70% of the value of the pledged property or (ii) the value of the actual and earlier registered pledge rights. If the value of the pledged property drops in any case below the amount of the outstanding principal of the mortgage loan, such mortgage loan must be immediately deleted from the CB Register.

The value of the property will be determined by the bank based on an overall assessment of the property and the bank is bound solely by own assessment of the property. The bank is obligated to continuously monitor and regularly reappraise the value of the pledged property according to Decree of NBS No.10/2016 at least once in three years.

The mortgage on the real estate securing the mortgage loan is established by its recording in the Land Register (Act No. 162/1995 Coll.; Cadastre Law) on the basis of a proposal of the bank and owner of the real estate.

V. ASSET – LIABILITY MANAGEMENT

If the bank makes transactions in order to mitigate the currency or the interest rate risk arising from a net open currency position or an interest rate position between the issued covered bonds and the assets making up the cover pool, it is obligated to include these hedging derivatives and financial flows from them, together with their security, into the cover pool. The hedging derivatives must meet qualification criteria of an effective hedging relation.

The bank shall carry out yearly stress tests as part of its covered bonds programme. The stress test shall be set in line with the stress test performed to evaluate the appropriateness of the internal capital and include test for credit risk, interest rate risk, currency risk, liquidity risk, counterparty risk, operational risk and immovable property prices decline risk. The bank is required to prove in the stress test that it is able to keep the coverage ratio also during the stress test period.

VI. TRANSPARENCY

The bank issuing covered bonds shall publish, among others:

a) the structure of covered bonds, maturity thereof, the number and volume of the covered bond issuances, the currency and the interest rates thereof,

b) the value of the cover pool, value, type, proportion, maturity structure and asset evaluation method in the cover pool and important changes in it,

c) the volume according to the currency of the monetary nominal value, weighted average residual maturity, weighted average interest rate and weighted average value of primary assets security indicator in the cover pool,

d) the possibility of maturity extensions, the level of required and available coverage, the statutory or contractual level of overcollateralization, the percentage of the loans where it is presumed that the borrower is defaulted and of the loans overdue for more than 90 days;

e) other documents and information related to the covered bonds programme.

Until 30 April of a current calendar year, the administrator shall submit to the NBS a report on the covered bonds programme covering the preceding year and containing, among others, the following information:

a) number, volume, revenues and maturity dates of the issued covered bond issues,

b) volume of Cover Assets and covered bonds issued in euros or foreign currency,

c) structure of the cover pool,

d) coverage indicator,

e) average value, maturity of the primary assets, as well as the fixation period and weighted interest rate,

f) volume of failed and eliminated mortgage loans from the cover pool,

g) structure of immovable property securing the primary assets, broken down by family houses, flats, building land and unfinished structures,

h) method for calculation and amount of the estimated liabilities or costs incurred by the bank,

i) other factors related to the activities of the bank.

The bank shall publish this report on its website.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The NBS appoints the covered bonds programme administrator and his deputy on its own initiative or on the proposal of the bank issuing covered bonds, whereas in the latter case NBS makes also its own suitability assessment of the bank's nominee. The administrator shall monitor the conditions related to the covered bonds programme set out in the Act on Banks and other generally binding legal regulations.

The administrator shall perform his activities individually, independently and impartially. Prior to any issue of covered bonds, the administrator is required to prepare a written certificate evidencing that coverage of those covered bonds is secured in line with the legislation. The administrator shall immediately inform NBS in writing if he finds any deficiencies or breaches in relation to the covered bond programme. Based on such findings NBS shall take appropriate remedial measures.

The administrator's duties include, among others, to check and verify whether:

a) the aggregate nominal value of the issued covered bonds, and the corresponding interest revenues, is covered by the Cover Assets at least at the coverage indicator value,

b) the bank complies with the requirements for structure of the cover pool,

c) the Cover Assets registered in the CB Register comply with the Act on Banks,

d) the agreement dealing with the hedging derivatives comprising the cover pool contains provisions pursuant to Section 73(5),

e) the immovable property securing the primary assets meet the legal requirements.

The bank must allow the administrator to perform his activities; in particular to allow him to inspect accounting records, documents relating to the cover pool and covered bonds programme. Activities of the administrator and his deputy are subject to supervision by the NBS.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

In the event the bank issuing covered bonds is declared bankrupt (such declaration being made in form of a resolution of a bankruptcy court and made known to all creditors via publication in the Official Journal), the Cover Assets are fully segregated from the general insolvency estate of the bankrupt bank. The trustee of the bankrupt bank is obliged to manage those Cover Assets as a special separate bankruptcy estate for the benefit of the covered bondholders and the counterparties of hedging derivatives having, by operation of law, a preferential claim and first priority perfected security interest in the cover pool. A segregated estate represented by a relevant cover pool is created separately for each individual covered bonds programme.

Only the Cover Assets included in the CB Register may serve as collateral and be used for satisfying the claims against the bankrupt issuing bank and its estate.

The bankruptcy trustee must observe special procedures regarding the administration and management of the overall covered bonds programme upon declaration of the issuer's bankruptcy. In particular, it is the responsibility of the bankruptcy trustee to asses, with a due and professional care, whether further administration of the covered bonds programme is feasible and does not result in reduction of the covered bond holders' claims.

Once the trustee ascertain that a possible reduction may threaten, he shall cooperate with the special covered bonds programme administrator in the process of notification to the NBS regarding the intention to transfer the covered bonds programme (or its part) to one or more solvent banks. The performance of the transfer of the covered bonds programme is subject to the prior approval by the NBS and must be completed within one year following the date of its notification. The NBS may grant extension to the original period by additional one year in case the transfer has failed to be executed within the original one year's period and it can be presumed that its later performance will result in higher degree of satisfaction of the covered bond holders' claims. During both original as well as additional period for the transfer, the issuer is obliged to make postponement of payments of principals and is allowed to make only yield payments pertaining to the covered bonds within their original maturities.

The payments of principals are allowed only in respect of the issuances with original maturities falling due within the first month of the original period for the transfer of the covered bonds programme. For the issuances which mature later but still anytime during the original or additional period for the transfer of the covered bonds programme, the maturity extensions for another 12 month apply and payments of principals are postponed until the expiry date of the relevant extended period. There is also no acceleration of repayment of the issuer' liabilities relating to the covered bonds during these periods. The transfer procedure features identical mechanics as the sale of the company's enterprise or its part on a solvent basis ("predaj podniku"). It includes the transfer and assumption of the whole portfolio of claims and liabilities pertaining to the covered bonds and to the Cover Assets from the bankrupt issuer to one or more transferee banks. If the trustee has failed to successfully transfer the entire portfolio within the relevant period, then the acceleration of repayment of the issuer's liabilities relating to the covered bonds is triggered immediately following after the trustee has terminated the operation of the covered bond issuer's business.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Slovak "Krytý dlhopis" comply with the requirements of Article 52(4) UCITS as well as of Article 129 of CRR.

The listed covered bonds are eligible for repo transactions with the central bank.

X. ADDITIONAL INFORMATION

Issuers: Československá obchodná banka, Prima banka Slovensko, Slovenská sporiteľňa, Tatra banka, VÚB – Všeobecná úverová banka, 365.bank, UniCredit Bank Czech Republic and Slovakia, foreign bank branch (this entity is not the issuer of the new covered bonds (CBs) but only administers the originally issued mortgage-backed bonds (HZL) which were predecessors of CBs under former legislation).

COVERED BOND LABEL **:** Prima banka Slovensko (1 pool).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.
In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database). For further national information on the Slovak market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): https://hypo.org/ecbc/covered-bonds/.

3.35 SLOVENIA

By Franz Rudolf, UniCredit Bank AG

I. FRAMEWORK

On 8 July 2022, the new Slovenian covered bond law came into force. The new law replaces the previous legal framework, which has been in place since 2012. Covered bonds in Slovenia are governed primarily by the Mortgage Bond and Municipal Bond Act (Zakon o Hiotekarni in Komunalni Obveznici – ZHKO-2; "the Covered Bond Act"). In addition, general rules of the Financial Instruments Market Act, the Banking Act, the Resolution and Compulsory Dissolution of Credit Institutions Act and the Consumer Credit Act are to be applied (Article 5 of the Covered Bond Act).

The Bank of Slovenia1 ("BoS") issued further relevant by-laws in the Official Gazette of the Republic of Slovenia No. 11/22, namely the Regulation on the Conditions for Obtaining an Authorisation for Issuing Mortgage and Municipal Bonds, the Regulation on Matching the Cover Pool with the Outstanding Mortgage and Municipal Bonds, the Regulation on the Conditions for Inclusion of Deriva tive Instruments in the Cover Pool of Mortgage and Municipal Bonds and the Regulation on the Documentation for Proving the Fulfilment of Conditions for the Cover Register Administrator Appointment. In addition, the Governing Board of the BoS adopted Recommendations for Managing the Records of the Cover Register as of 28 February 2012.

Although the Covered Bond Act altogether with the Regulations of the BoS represents a modern and suitable legal framework for the issuance of covered bonds in Slovenia, implementing the European Covered Bond Directive, there have been no covered bond issuances from the Slovenian market yet.

II. STRUCTURE OF THE ISSUER

Covered bonds can be issued by banks holding a valid banking license and which are authorised from the Bank of Slovenia to issue mortgage covered bonds or public sector covered bonds.

In order to obtain a special license for the issuance of covered bonds, an issuing bank must prove that it fulfils the following conditions, set out in Article 7 of the Covered Bond Act[1]:

> Suitable risk management procedures and instruments associated with the issuance of covered bonds as well as with the cover pool assets;

> Adequate number of qualified staff and ability to be organisationally and technically qualified to issue mortgage covered bonds or municipal bonds;

> Separation of services related to the issuance of covered bonds and to the covered assets from the bank's other operations;

> Rules for maintaining the cover register and appointment of a cover pool administrator;

> Confirmation of adequate cover by the cover pool monitor to the Bank of Slovenia

> Rules for property valuation and at least one independent valuer.

III. COVER ASSETS

Only receivables from mortgage loans and loans that are secured by an eligible state or a local community, that are in accordance with Article 129(1)(d) and (f) of Regulation 575/2013/EU and meet the requirements of Article 129 of Regulation 575/2013/EU and the provisions of the Covered Bond Act, can be considered as the cover assets for covered bonds.

1 Separate license must be obtained for each issuance (release program)

The cover assets of mortgage covered bonds can consist of receivables arising from loans secured by a mortgage on residential property or commercial property that is located in the member states of the European Union or the European Economic Area (EEA).

The cover assets of public sector covered bonds can consist of receivables arising from (i) loans granted to or debt securities issued by an eligible state or an eligible local community, (ii) loans granted to or debt securities issued by another legal entity provided that the obligations in respect to such loans or securities are irrevocably, unconditionally and unlimitedly guaranteed by an eligible state.

Up to a maximum of 20% of the cover pool can be provided by substitute cover assets. Taking into account Article 129 of Regulation 575/2013/EU, eligible assets are (i) balances on the accounts with the BoS, (ii) investments in marketable debt securities issued or guaranteed by an EEA member state or their central banks or ECB, or (iii) investments in other debt securities issued by EIB, EBRD or any other bank, provided that they correspond to credit quality step 1, and (iv) investments in other debt securities of credit institutions that correspond to credit quality step 1 or 2 (Article 20 of the Covered Bond Act).

Additionally, an issuer can also include derivative financial instruments in the cover pool in order to reduce/hedge the market risks on its assets, in particular the risks associated with interest rate and currency mismatch.

Finally, an issuer must take into account also the following limitations according to Article 21:

> Up to 5% of the cover assets can consist of mortgage loans secured by a mortgage on residential property under construction;

> Up to 10% of the cover assets can consist of mortgage loans secured by a mortgage the registration of which is still pending;

> Up to 20% of the cover assets can consist of loans where the mortgage is on commercial property

> Up to 20% of the cover assets can consist of mortgage loans granted to an individual or to legal entities which are considered as a group of related parties and may not exceed the maximum admissible exposure set out in Regulation 575/2013/EU.

IV. VALUATION AND LTV CRITERIA

The level of receivables from mortgage loans that can be taken into consideration for the cover assets must not exceed: (i) 80% of the mortgage lending value or the market value for loans secured by mortgage on residential properties; (ii) 60% of the mortgage lending value or the market value of mortgaged property for loans secured by mortgage on commercial properties. When the level of receivables from mortgage loans exceeds the above restrictions, only an appro priate portion of the loan can be considered as eligible cover assets (Article 16 of the Covered Bond Act).

Generally, the valuation of residential and commercial property is based on the current value that is equal to or less than the market value or the mortgage lending value at the time of inclusion in the cover pool. However, if the latter cannot be determined, the market value is used instead. It is important to note that a valuation must be performed by a licensed property valuer who is independent of the credit decision-making process and in compliance with the international property valu ation standards.

A value of property is determined individually for each real property. During the term of the mortgage loan, an issuer must regularly monitor the value of mortgaged property and assess the value at least once a year for commercial as well as for residential property. The issuer can also use statistical methods to monitor the value and determine the properties that need to be revalued. In addition, the value of the mortgaged real estate must be checked at least once every three years by the appraiser. A need for a new valuation of the property also arises when a value of real property and/or general market prices of real properties in the area where the real property is located drop substantially (by more than 20%), or when a borrower is late in meeting his obligations under the mortgage loans by more than 90 days (Article 18 of the Covered Bond Act).

V. ASSET – LIABILITY MANAGEMENT

Article 28 of the Covered Bond Act states, that the minimum level of overcollateralization for mortgage covered bonds and public sector covered bonds generally amounts to 5% on a nominal as well as on a net present value basis. In case the valuation is based on the mortgage lending value, the minimum OC is 2% on a nominal as well as on a net present value basis. Furthermore, cover assets need to be matched with liabilities stemming from issued covered bonds and derivative financial instruments also in terms of maturities, interest rates, currency exposure and estimated operational costs. The compliance with the above–mentioned conditions must be verified at least once a month.

An issuer must compare the amount of maturing receivables from the cover assets entered in the cover register with the amount of maturing liabilities stemming from the issued covered bonds and from the derivative financial instruments entered in the cover register over the next 180-day period on a daily basis. Subsequently the coverage must be provided in form of a liquidity reserve covering the highest cumulative net liquidity outflows for the next 180 days and consisting of liquid assets. (Article 29 of the Covered Bond Act). The calculation of the principal of outstanding obligations with an extendible maturity structure is based on the final maturity date in accordance with the contractual terms of the bonds.

The planned maturity of covered bonds can be extended in accordance with Article 46 and 48 of the Covered Bond Act. The appointed special manager of the cover assets may extend the due date of payments of obligations from covered bonds by extending the due date of payment of principal and interest by four weeks without further requests. After the four-week period, the special manager may additionally extend the planned maturity of the covered bonds by extending the maturity of the principal payment by a maximum of 12 months in total (two times six months) if he believes this is needed to fulfill resurrection measures and that the issuer will be able to repay the obligations after the extension. The maturity of the covered bonds can only be extended by the special manager and may not be based on the discretion of the issuer. The maturity extension may not affect the structural characteristics of the covered bonds and payment sequence.

VI. TRANSPARENCY

According to the Covered Bond Act (Article 37), issuers are obliged to provide detailed information on a quarterly basis to investors on their websites. This includes at least the value of the collateral assets and the value of outstanding liabilities, an ISIN list of all issued covered bonds, information on assets regarding geographical distribution, types, amounts, valuation methods, information on market risks, maturity structures, levels of overcollateralization and non-performing collateral.

Article 40 stipulates that the issuers have to provide a detailed reporting to the Bank of Slovenia on a quarterly basis. This includes, among others, an extract from the cover register with details on the eligibility of cover assets, the separation of funds, the operation of the trustee, coverage requirements and maturity structures.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Cover register

Each issuing bank needs to keep a cover register (Article 30 (1) of the Covered Bond Act). In case of issuing both mortgage covered bonds and municipal bonds or when has more issuance programs, a bank must keep separate cover registers.

The cover register contains all the receivables and investments that represent cover assets for the issued mortgage covered bonds and municipal bonds (public sector covered bonds) as well as the record of all mortgage covered bonds and municipal bonds issued.

Cover register administrator

A cover register administrator ensures that the cover register is maintained in accordance with the provisions of the Covered Bond Act and its related Regulations. Only a person that is a certified auditor or an otherwise qualified expert that was previously being granted a licence from the BoS to perform the tasks of a cover register administrator can be appointed as a cover register administrator. Moreover, such a person must also be independent from the issuer[2] (Articles 32 and 33).

The duties and obligations of a cover register administrator are, among others, as following (Articles 34):

> To ensure that the cover assets provide a sufficient coverage for the total value of the covered bonds in circulation and liabilities stemming from derivative financial instruments;

> To ensure that the requirements regarding the liquidity reserve of the cover assets are met;

> To ensure that the assets are recorded in the cover register in accordance with the Covered Bond Act;

> Prior to the issuance of covered bonds, to confirm that the cover assets provide a sufficient and adequate coverage for covered bonds;

> To ensure that transparency requirements are in accordance with Article 37 of the Covered Bond Act;

> To notify the BoS of its findings every three months pursuant to the Covered Bond Act.

Mortgages for the loans entered into cover pool can be deleted from the land registry only with the prior consent of the cover register administrator. Assets can be entered into or deleted from cover register only with the consent of the cover register administrator.

Role of the BoS

The BoS is the competent authority and is responsible for supervising the issuer regarding the issuance, management and repayment of mortgage covered bonds and municipal bonds (Article 39). In addition, it grants and withdraws the licence, given to a bank and to the cover register administrator prior to the issuance of covered bonds.

An issuer is required to send to the BoS an extract from the cover register, signed by the cover register administrator, every three months (Article 40) and on request.

VII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Segregation of cover assets

The issuer must ensure that all cover assets that make up the cover assets are segregated in a legally binding and enforceable manner (Article 27). According to Article 30, no other creditor of the bank, except the bond holders, and only for obligations of the bank in relation to issued covered bonds, can start judicial enforcement against the assets entered into cover register. Separation of cover assets also applies in the event of rescue or forced termination of the issuer. Investors in mortgage covered bonds and municipal bonds have a dual claim. This also applies to counterparties of derivatives. Investors have the claims against the issuer as well as the preferential rights to repayment of the principal and all accrued and future interest from the cover assets in the event of liquidation, rescue or forced termination of the issuer (Article 11).

Bankruptcy remoteness of covered bonds

According to Article 12, in the case of resolution and forced termination of the issuer, payment obligations related to mortgage covered bonds and municipal bonds shall not be subject to automatic acceleration.

2 Under certain conditions administrator can also be an employee of the bank.

In the event of rescue and forced termination of the issuer, the BoS appoints a special manager of the collateral assets (Article 45). The special cover asset manager deals with the management and disposal of the cover assets to the extent that is necessary for the continuous timely payment of obligations under covered bonds and derivative financial instruments. After being appointed, the special manager may extend the due date of payments of obligations from mortgage covered bonds and municipal bonds in accordance with the conditions set out in Article 48 of the Covered Bond Act by extending the due date of payment of principal and interest by four weeks without further requests. After the four week period, the special manager may additionally extend the planned maturity of the covered bonds by extending the maturity of the principal payment by a maximum of 12 months in total (two times six months), if this maturity extension is necessary to ensure the fulfillment of the payment obligations and if there is reason to assume that, after the resolution and forced termination measures implemented, the issuer will be able to settle its overdue obligations after the longest possible period of maturity extension (Article 46).

It should be added that the special manager of the cover assets can transfer the entire cover pool and all obligations arising out of the issued covered bonds to another issuer by a way of contract. A full transfer must be authorised by the BoS (Article 47).

VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The new legal framework for Covered Bonds implemented the European Covered Bond Directive into national law and applies since 8 July 2022. The risk-weighting of covered bonds in Slovenia is regulated directly by Capital Requirements Regulation (CRR). The provisions of the Covered Bond Act fall within the criteria of Article 129 (1) CRR as well as within the cri teria of Article 52 (4) of the UCITS Directive. The label "European covered bond" is used only for mortgage covered bond programs and municipal bond programs that meet the requirements of the Covered Bond Act. The label "European covered bond (premium)" is used only for mortgage covered bond programs and municipal bond programs that meet the requirements of the Covered Bond Act and the requirements of Article 129 of Regulation 575/2013/EU.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Slovenian market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): https://hypo.org/ecbc/covered-bonds/.

3.36 SOUTH KOREA

By Hoin Lee, Kim & Chang and Frank Will, HSBC & Chairman of the ECBC EU Legislation Working Group

I. FRAMEWORK

Efforts to create a covered bond market in Korea

The Covered Bond Act of Korea (the "Covered Bond Act") was passed by the National Assembly on 19 December 2013 and came into effect on 15 April 2014. Prior to the enactment of the Covered Bond Act, domestic banks in Korea had been looking at covered bonds as a potential alternative source of funding and the Korea Federation of Banks, a major association of banks in Korea, set up a task force team in 2008 to pursue the introduction of covered bonds in Korea, including by way of a dedicated covered bond statute. Even prior to the Korea Federation of Banks task force team, market participants were looking into alternative structured covered bond structures utilising Korea's Act on Asset-Backed Securitisation (the "ABS Act").

Such efforts eventually led to Kookmin Bank's offshore covered bond issuance in May 2009 (the "KB Structured Covered Bonds"). Kookmin Bank developed a structure on the basis of the securitisation techniques under the ABS Act and the Trust Act that enabled the relevant asset pool to be "ringfenced" and effectively granted dual-recourse to its investors through contractual arrangements. The KB Structured Covered Bonds were the first covered bonds issued out of Korea and the Asia-Pacific region.

Separately, in July 2010, the Korea Housing Finance Corporation ("KHFC") issued the second covered bond out of Korea and the first statutory covered bond transaction out of Asia. KHFC utilised the "mortgaged-backed bonds" (the "KHFC Covered Bonds") under the Korea Housing Corporation Act (the "KHFC Act") in issuing the covered bonds. Mortgaged-backed bonds are economically similar to covered bonds because the bond holders have a statutory priority right over a pool of assets segregated from the other assets of KHFC.

The successful issuance of the KHFC Covered Bonds in 2010 stimulated new interest for covered bonds in Korea, with KHFC Covered Bonds being considered as a potential alternative to traditional residential mortgage backed securities (RMBS) transactions as a funding source for Korean mortgage lenders. Several follow-on transactions have been completed that utilise KHFC as the issuer and the dual recourse feature of mortgage-backed bonds under the KHFC Act. KHFC issued (i) EUR 500 mn of euro denominated social covered bonds in October 2018, (ii) EUR 500 mn of ECBC Covered Bond-labeled social covered bonds with a AAA rating in June 2019, (iii) EUR 1 bn of ECBC Covered Bond-labeled social covered bonds with a AAA rating in February 2020, (iv) EUR 500 mn of ECBC Covered Bond-labeled social covered bonds with a AAA rating in July 2020, (v) EUR 1 bn of ECBC Covered Bond-labeled social covered bonds with a AAA rating in June 2021, (vi) EUR 550 mn of ECBC Covered Bond-labeled social covered bonds with a AAA rating in October 2021 and (vii) EUR 600 mn of ECBC Covered Bond-labeled social covered bonds with a AAA rating in March 2022, a total issuance size of EUR 4,650 mn. KHFC's June 2019 social covered bond offering was the first Euro denominated social bond issued by a Korean issuer.

Following the enactment of the Covered Bond Act, on 12 June 2015, Kookmin Bank became the first bank in Korea to set up a global covered bond programme pursuant to the Covered Bond Act, which it listed on the Luxembourg Stock Exchange. The KB Covered Bond Programme was the first covered bond programme by an Asian financial institution to be listed and obtained ratings of AAA and Aaa from Fitch and Moody's, respectively. These ratings were higher than Kookmin Bank's ratings (A1 at that time) and even Korea's sovereign ratings (AA, Aa2). This enabled Kookmin Bank to procure funds from the offshore market at reduced costs in subsequent issuances. In October 2015, Kookmin Bank issued the first covered bonds under the KB Covered Bond Programme followed by a second transaction in February 2016 and a third transaction in December 2018. Kookmin Bank established a new global covered bond programme in April 2020, which it listed on the Singapore Stock Exchange and for which it obtained ratings of AAA from each of Fitch and S&P. Kookmin Bank issued (i) EUR 500 mn of ECBC Covered Bond-labeled social covered bonds with AAA ratings in July 2020 and (ii) EUR 500 mn of ECBC Covered Bond-labeled green covered bonds with AAA ratings in October 2021 under this programme. In light of the successful issuances by Kookmin Bank, other commercial banks began showing increased interest in covered bonds as an alternative, long-term funding source. Hana Bank set up a global covered bond programme in December 2020 pursuant to the Covered Bond Act with ratings of AAA from Fitch and S&P, under which it issued ERU 500 mn of ECBC Covered Bond-labeled social covered bonds with AAA ratings in January 2021.

On January 31, 2019, the Financial Service Commission ("FSC") announced several measures to stimulate the use of covered bonds as a means to stabilise household debts. The measures included the following: 1) reducing covered bond issuance expenses by exempting registration fees payable to the Korean Financial Supervisory Service, 2) expanding the current limit of 1% in recognising funds raised from covered bond issuances with a maturity of five years or more as Korean-won deposits when calculating loan-to-deposit ratios, 3) reducing the contribution fee to the Housing Credit Guarantee Fund on the issuance of covered bonds, and 4) (effective in 2022) applying lower risk weights in calculating BIS or RBS when a bank or an insurance company invests in covered bonds. These governmental efforts appear to have further catalysed the domestic covered bond market. For example, on 14 May 2019, Kookmin Bank issued a KRW 400 bn covered bond with a five-year maturity and a KRW 100bn covered bond with a seven-year maturity pursuant to the Covered Bond Act, both of which represented tenures previously not seen in the domestic covered bond market. Five Korean commercial banks issued to date Korean won covered bond in a total amount of KRW 5,350 bn. Besides these banks, other domestic banks are also in the process of issuing covered bonds.

II. STRUCTURE OF THE ISSUER

1. KHFC Act

Eligible issuer

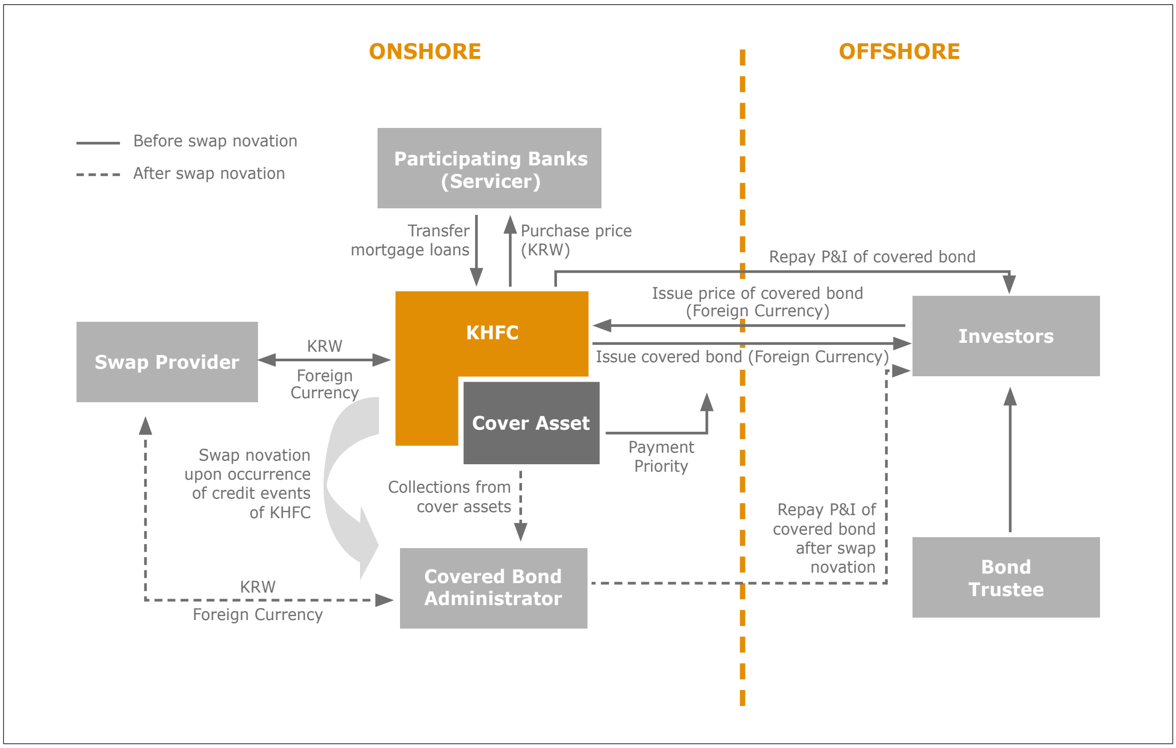
KHFC, which is wholly owned by the Korean government and the Bank of Korea, is the only eligible issuer of KHFC Covered Bonds. Pursuant to Article 31 of the KHFC Act, the holders of KHFC Covered Bonds have a statutory priority right of payment from a separately managed pool of mortgage loans designated as the underlying collateral for KHFC Covered Bonds (the "KHFC Cover Pool"). In addition, if principal and interest on a KHFC Covered Bond are not fully paid out of the KHFC Cover Pool, it can be paid from the general assets of KHFC. KHFC issues these bonds without transferring the cover assets to a separate legal entity and the bankruptcy remote cover assets are left on KHFC's balance sheet. The investors have dual recourse in respect of the KHFC Covered Bonds: (a) a senior unsecured claim to KHFC prior to the occurrence of an issuer event of default or at maturity; and (b) a statutory priority right of payment over the KHFC Cover Pool upon the occurrence of an issuer event of default.

In the case of KHFC Covered Bonds issued offshore, KHFC enters into a cross currency swap agreement and an interest rate swap agreement with the swap providers, pursuant to which KHFC will deliver KRW interest periodically and principal at maturity to the swap providers in exchange for foreign currency payments. The swap providers pay foreign currency denominated interest periodically and principal at maturity. The swap agreement is subject to an automatic swap novation mechanism (the "Swap Novation") in which the swap providers, KHFC, and the swap delegate entered into a tripartite automatic novation agreement at the closing date, which states that the swap agreement will be automatically terminated with KHFC and novated to the swap delegate upon the occurrence of certain events of default regarding KHFC, and that the mark-to-market valuation of the swap agreement as of the novation date will not be exchanged between KHFC and the swap providers or between KHFC and the swap delegate.

Subsequent to such events of default, the swap delegate will pay KRW generated from the KHFC Cover Pool to the swap providers in exchange for the foreign currency denominated payments, and the swap providers will pay the foreign currency denominated interest periodically and principal at maturity.

The following diagram illustrates the structure of the KHFC Covered Bonds transaction.

FIGURE 1: KHFC COVERED BONDS TRANSACTION STRUCTURE



Source: Kim & Chang

Issuance limit

KHFC may issue KHFC Covered Bonds up to 50 times of its paid-in equity capital.

2. Covered Bond Act

Eligible issuer

Eligible issuers of covered bonds under the Covered Bond Act (the "Covered Bonds") include (i) banks licensed and established under the Bank Act of Korea, (ii) the Korea Development Bank, (iii) the Export-Import Bank of Korea, (iv) the Industrial Bank of Korea, (v) Nonghyup Bank, (vi) Suhyup Bank, or (vii) KHFC. Eligible issuers of Covered Bonds, however, must have equity capital of not less than KRW 100 bn, BIS ratio of not less than 10%, and appropriate funding and operation structures and risk management procedures, etc.

Issuance limit

The Covered Bond Act prescribes that eligible issuers may issue Covered Bonds up to the ceiling set by the Presidential Decree of the Covered Bond Act (the "Presidential Decree") which shall not exceed 8% of its total assets as of the end of the fiscal year immediately preceding the scheduled date of issuance and the Presidential Decree limits this to 4% of its total assets as of the end of the fiscal year immediately preceding the scheduled date of issuance. The FSC, as the Korean financial regulator, reserves the right to restrict this further to 2% of its total assets taking into consideration various factors, such as collateralisation ratio and financial condition including liquidity position.

III. COVER ASSETS

1. KHFC Act

The mortgage loans in the KHFC Cover Pool are acquired from certain Korean financial institutions that function as the originating banks. The individual mortgage loans included in the KHFC Cover Pool may change from time to time as a result of substitutions by KHFC, and KHFC is responsible for ensuring that the mortgage loans are properly serviced and delegates its servicing responsibility to the originating banks, with each originating bank servicing those mortgage loans originated and sold by it to KHFC.

2. Covered Bond Act

The cover pool (the "Cover Pool") shall comprise of (1) the Underlying Assets, (2) the Liquid Assets and (3) Other Assets. The "Underlying Assets" shall include (i) residential mortgage loans with 70% or lower loan-to-value (LTV) ratio and first priority mortgage, obligors of which are not subject to insolvency proceedings, (ii) loan receivables against the government, a local government or a corporation incorporated under the special laws, Korean Treasury bonds, municipal bonds or bonds issued by a corporation incorporated under the special laws, (iii) mortgage loans secured by ships or aircraft with 70% or lower LTV ratio and is insured for an amount in excess of 110% of the sum of (a) the aggregate outstanding balance of the relevant loan and (b) any other outstanding debt of the issuer that are at least pari passu with such loan and (iv) asset backed securities issued under the ABS Act and KHFC Covered Bonds and residential mortgage backed securities issued pursuant to the KHFC Act. The following limitations are applicable to the residential mortgage loans comprising the Underlying Assets: (x) at least 20% must have a debt-to-income (DTI) ratio of 70% or less, (y) at least 30% must be fixed rate loans, and (z) if there are residential mortgage loans of which 50% or more of their outstanding principal balance may be set off against the relevant issuer, such residential mortgage loans should comprise 10% or less of all residential mortgage loans. The "Liquid Assets" shall comprise of cash, certificates of deposit with a maturity of no more than 100 days issued by financial companies other than the issuer of the Covered Bonds, bonds issued by any government as prescribed by the FSC, financial instruments issued by foreign financial companies as prescribed by the FSC similar to the certificates of deposit referred to above and deposits and term deposits at either domestic or foreign financial companies with maturity of 3 months or less. Finally, "Other Assets" shall comprise of collections and other property rights acquired from the Underlying Assets and the Liquid Assets and the claims acquired from derivatives transactions executed in order to hedge foreign exchange rate or interest rate risks and other risks associated with the cover pool pursuant to the Covered Bond issuance plan.

IV. VALUATION AND LTV CRITERIA

1. KHFC Act

There is no statutory standard for valuation of residential mortgage loans that are included in KHFC Cover Pool. Instead, the valuation methods are set forth in individual transaction documents for the KHFC Covered Bonds which value residential mortgage loans between 100% and 0%, depending on the length of delinquency.

2. Covered Bond Act

LTVs for residential mortgage loans as well as loans secured by ships or aircrafts in the Cover Pool shall be 70% or lower. Valuation shall be carried out by reference to the closing market price of the relevant day on the securities exchange. In cases where no reliable market prices are available on the relevant day, book value, par value, purchase price, transaction price and price provided by an entity which satisfies statutory requirements shall be taken into account, alongside the prevailing exchange rate at the time of valuation. Where derivative transactions have been entered into for the purpose of hedging exposure to movements in foreign currency exchange rates, the exchange rates as specified in such derivative transactions themselves shall be used, and non-eligible assets and derivative transactions shall be valued at "0".

V. HEDGING AND ASSET – LIABILITY MANAGEMENT

1. KHFC Act

In the case of KHFC Covered Bonds issued offshore, the underlying residential mortgage loans are denominated in KRW but the KHFC Covered Bonds are issued in foreign currency and KHFC entered into swap agreements to hedge the resulting currency risk. This swap agreement is subject to the Swap Novation described above. There are no statutory regulations on overcollateralisation or excess yield of collateralised assets. However, the transaction documents in previous KHFC Covered Bonds have required the KHFC Cover Pool to satisfy an asset coverage test and the failure for the KHFC Cover Pool to satisfy the foregoing test for a certain period of time becomes an issuer event of default which in turn triggers the management of the KHFC Cover Pool to be transferred to a separately appointed swap delegate, in addition to the above-mentioned Swap Novation.

2. Covered Bond Act

The total value of the Cover Pool shall be equal to or more than 105% (the "Required Overcollateralisation Ratio") of the total value of the covered bonds and the liquid assets shall not exceed 10% of the total outstanding amount of the Cover Pool. The details of the valuation standard and method, etc. for each type of assets comprising the cover pool are prescribed by the Presidential Decree. The issuer shall prepare and maintain separate books for the management of the Cover Pool. If the total value of the Cover Pool is likely to fall below the Required Overcollateralisation Ratio or cover assets fail to satisfy the Cover Pool eligibility criteria set forth in the Covered Bond Act (the "Cover Asset Eligibility"), the issuer shall add or substitute the Underlying Assets and Liquid Assets without delay in order to comply with the Required Overcollateralisation Ratio and the Cover Asset Eligibility. Unlike the KHFC Act, the claims acquired from derivatives transactions executed in order to hedge foreign exchange rate or interest rate risks and other risks associated with the Cover Pool pursuant to the Covered Bond issuance plan are included in the Cover Pool as described above and the swap provider also has a priority right of payment from the Cover Pool under the Covered Bond Act. As such, we do not expect there to be a particular need to novate the relevant swap agreement to a third party.

VI. TRANSPARENCY

1. KHFC

To issue KHFC Covered Bonds, KHFC must register a securitisation plan with the FSC and this securitisation plan is available to the public on the FSS website. Amendments to the securitisation plan after the terms and conditions of the KHFC Covered Bonds are confirmed must also be registered with the FSC.

2. Covered Bond Act

Any eligible issuer that intends to issue Covered Bonds must register the Covered Bond issuance plan and details of the Cover Pool with the FSC. The issuer must also register amendments to the issuance plan or the matters concerning the Cover Pool, while minor changes shall be reported to the FSC within seven days from the date of such change.

The issuer is required to establish and monitor at least on a quarterly basis separate risk management standards and procedures relating to the issuance and redemption of the Covered Bonds. The issuer is also obligated to disclose on its website on a quarterly basis the result of risk management monitoring, the report prepared by the Cover Pool monitor and other information necessary. The FSC may request data concerning business or properties of the issuer and its administrator and the Cover Pool monitor, or investigate such business and properties if necessary, for protecting the Covered Bond investors.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

1. KHFC Act

There are no explicit provisions in the KHFC Act on the KHFC Cover Pool monitor but independent third parties are appointed to supervise and monitor KHFC's management of the KHFC Cover Pool. For example, an accounting firm has been appointed as the cover pool monitor in previous KHFC Covered Bond issuances to be responsible for confirming whether the KHFC Cover Pool minimum maintenance requirements have been satisfied. In addition, the KHFC Covered Bond administrator is appointed in advance for the management of the Cover Pool in order to protect the KHFC Covered Bond holders upon occurrence of any issuer event of default including a bankruptcy event of KHFC.

2. Covered Bond Act

The issuer shall appoint with the approval from the FSC a Cover Pool monitor to monitor the eligibility of the Cover Pool independently. The Cover Pool monitor shall be (i) a person who qualifies as a bond administrator under the Korean Commercial Code, (ii) KHFC (excluding the case where the issuer is KHFC) or (iii) a corporation with equity capital of KRW 1 bn or more that has five or more administration personnel necessary for the performance of duties as a Cover Pool monitor including two or more experts such as lawyers, certified public accountants or certified public appraisers and one or more persons with experience in business related to Covered Bonds.

The Cover Pool monitor is authorised to take any actions in court or otherwise necessary for the management, maintenance and disposition of the Cover Pool. The Cover Pool monitor is obligated to submit on a quarterly basis a report to the FSC within 30 days of the end of each quarter on the performance of its duty as a Cover Pool monitor and provide it to the issuer and, upon request, the Covered Bond investors and other parties, as described below, who have a priority right of payment from the registered Cover Pool.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

1. KHFC Act

Articles 30 and 31 of the KHFC Act state that (i) KHFC may issue the KHFC Covered Bonds with a statutory priority right of payment over the mortgage loans separately managed in accordance with the applicable KHFC Act securitisation plan, and (ii) if mortgage loans in the KHFC Cover Pool are separately managed according to the applicable KHFC Act securitisation plan, the investors will have a priority right of payment against such mortgage loans unless otherwise prescribed in other laws. Considering the legislative intent and history of these provisions, the statutory priority right of payment over the mortgage loans owned by KHFC was considered as having been granted to the investors through the registration with the FSC of the applicable KHFC Act securitisation plan without taking any other actions necessary for the establishment or perfection of the statutory priority right.

KHFC is required to separately manage the mortgage loans included in the Cover Pool from its other assets on the basis of the applicable KHFC Act securitisation plan.

2. Covered Bond Act

Article 13 of the Covered Bond Act states that (i) holders of Covered Bonds, (ii) swap providers, (iii) claimholders relating to the redemption/maintenance and management of the Covered Bonds and management/disposal and execution of the Cover Pool, and (iv) the Cover Pool monitor have a priority right of payment on the registered Cover Pool over third parties. Article 12 of the Covered Bond Act states that, in case of an issuer's insolvency, the Cover Pool shall not be subject to the issuer's insolvency proceedings, including compulsory execution, preservative measures and stay orders. If the principal of the Covered Bonds is not fully repaid, Covered Bond holders have the right to payment from other assets of the issuer in addition to the Cover Pool. With the consent of the holders of at least 75% of the aggregate outstanding principal amount of the Covered Bonds, FSC may issue an order to transfer relevant contracts to another eligible issuer.

The issuer is required to separately manage the mortgage loans included in a Cover Pool from its other assets on the basis of the applicable issuance plan. The books for the Cover Pool must also be separately maintained and any violation may be subject to criminal sanctions.

IX. RISK-WEIGHTING AND COMPLIANCE WITH EUROPEAN REGULATION

The Covered Bonds under the Covered Bond Act and the KHFC Covered Bonds under the KHFC Act are not compliant with Article 52(4) UCIT and do not benefit from the higher investment limits because neither KHFC nor any of the potential South Korean issuers of the covered bonds is a credit institution with its registered office in a EU member state. These covered bonds cannot be CRD compliant without meeting the requirements of Article 52(4) UCITS.[1] Thus, the covered bonds cannot benefit from special treatment in terms of risk weighting.

Issuers: Korea Housing Finance Corporation and Kookmin Bank, KEB Hana Bank.

COVERED BOND LABEL: Korea Housing Finance Corporation (1 pool), Kookmin Bank (1 pool), KEB Hana Bank (1 pool).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Korean market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): https://hypo.org/ecbc/covered-bonds/.

3.37 SPAIN

By Gregorio Arranz, Spanish Mortgage Association

I. FRAMEWORK

The legal framework for Spanish covered bonds – "bonos garantizados" (BG) – is determined by the Royal Decree Law 24/2021 of 2 November 2021 (RDL). According to the Spanish constitutional system the RDL, although already a genuine law, is currently being processed as a project of law by the Parliament where some technical improvements are to be introduced.

RDL 24/2021 served to transpose not only the Covered Bonds Directive (Directive 2019/2162 of 27 November 2019, CBD) but also a wide range of different directives on many fields.

RDL 24/2021 regulates Spanish covered bonds (CB) whatever their collateral contrasting with previous legal solution of having different pieces of legislation for mortgages bonds, public sector loans and *internationalization* bonds, although legislation of the two latter was built on the mortgage bonds one.

Although secondary legislation is contemplated as a possibility, mainly referred to the appraisal process of the underlying assets and the approval procedure and supervision by the Bank of Spain (BE), such legislation is contemplated as a mean to improve the RDL but not at all as a condition for its complete and immediate application.

As regards transitional measures, when the RDL came into force – on 8 July 2022 – their provisions were fully applicable to the CB issued before that date, discarding any grandfathering-like solution and so going beyond article 30 of the Directive. This legal option reflects the firm position of the issuers' community in favor to what it was termed as the *big bang* solution, on the basis that keeping two types of CB fragments the market and is very difficult to manage. Transitional measures mainly contemplate the setting up of the initial pools of assets, the appointment of the covered pool monitor (CPM) and the approval process by the BE. It is worth to mention that the RDL specifically bans any right of the bondholders affected by the change to claim for the early repayment of the bonds.

II. STRUCTURE OF THE ISSUER

Issuers of the BG must be credit institutions according to art. 3.1 of the CBD. In Spain universal credit institutions have traditionally been the ones issuing CB. There is not a need of a special license for issuing BG but issuers must have at any moment sufficient capacity and means.

The issuer of the BG owns directly the cover assets forming the pool on its balance sheet and they are not transferred to a different legal entity.

On a different note in Spain the issuer is normally the originator of the cover assets although nothing in the law prevents their acquisition from another credit institution and moreover *joint funding* (art.9 CBD) is specifically envisaged.

III. COVER ASSETS

Spanish legislation – although common for all the BG – envisages four types of BG, each one having cover assets (*primary assets*) of different nature as collateral.

Furthermore, for each type of *primary* assets there are two alternatives in order to outline the bonds: cédulas – open-ended pools and *bonos* – closed–ended pools. This solution preserves the Spanish traditional legal binary option although as a matter of fact issuers in the past have only issued cédulas and apparently it was kept for flexibility reasons. Most RDL provisions are equally applicable to both figures.

The four types of BG are:

a) Mortgage CB (*cédulas y bonos hipotecarios*).

b) Public sector CB (*cédulas y bonos territoriales*).

c) *Internationalization* CB (*cédulas y bonos de internacionalización*).

d) *Other* CB.

The three first types of CB are specifically regulated by the RDL being all them CRR (*EU* Regulation 575/2013 on prudential requirements for credit institutions and investment firms amended by Regulation 2019 /2160 as regards exposures in the form of covered bonds) *compliant* since their respective regimes meet all the requirements contemplated in said Regulation and particularly the LTV limits and the minimum overcollateralization (OC) ratios stipulated.

Internationalization CB are a sub-type of public sector CB distinguished by their purpose of financing initiatives related to the internationalization of entrepreneurs.

With the fourth category – *Other CB* – Spanish legislator intends to open a door to future issuances of BG backed by assets of different nature to the primary assets, provided art. 6 of the CBD (*Eligible covered assets*) requirements and limits are met.

Assets are normally located in Spain although according to the Directive Spanish law allows assets located in the European Union and even outside (art.7 of the CBD) to be incorporated to the pools.

Mortgage CB (*cédulas hipotecarias*) is the type with the most complete regulation as they have notably been the most important in Spain.

All mortgage loans incorporated to the pool must comply with the following requirements:

- The mortgage that guarantees the loan must be a first-ranked mortgage.
- The recording of the mortgage on the public register must be valid.
- Singular LTV limits are to be respected. We shall expose them in the next chapter.
- The mortgaged properties must have been valued previously by the so-called "Sociedades de Tasación".
- Mortgaged assets must be insured against damages claims.
- Residential loans cannot exceed 30 years.

Additionally – and for all the three types of specifically regulated CB – RDL permits the incorporation of substitution assets consisting in public debt issued by entities contemplated in art 129.1 a) and b) of the CRR or in short-term deposits to credit institutions contemplated in art 129.1 c). Substitution assets cannot exceed 10% of the total assets and if said limit is supervened exceeded the issuers should either buy back CB or replace the substitution assets by additional primary assets.

Finally, RDL allows joint pools and intragroup structures being their regulation just a literal reproduction of the terms of the CBD (arts. 8 and 9).

IV. VALUATION AND LTV CRITERIA

The RDL develops the general principles laid down in art.6.5 of the CBD as follows.

An updated valuation must exist (no more than 6 months old) for all the physical assets when the loans are included in the pool.

The valuation should be revised at least yearly. A genuine new appraisal is only necessary when there are signals of a depreciation of the assets pursuant the solutions envisaged in art.208 of the CRR.

The valuation is normally carried out by specialized companies, the "Sociedades de Tasación" (widely regulated in the RDL) supervised by the BE or by independent professionals. This rule is compatible with the use of internal and statistical models/methods where a genuine appraisal is not necessary.

In any case, the valuer must be independent from the credit decision process and in the valuations speculative element should not be considered.

Detailed regulation on the valuation of assets has been issued by the BE.

The valuers must document their assessments having their internal records at the disposal of the CPM and the Bank of Spain.

In the case of mortgage loans, the basis for the property valuation is the mortgage lending value.

Regarding LTV constrains, the RDL only contemplates them in relation to mortgage CB. Spain was one of the very few countries opting for a system of hard limits when incorporating art. 129 1 of CRR, but did it with some peculiarities. The chosen solution maintains what was the traditional rule in Spain.

> When loans are incorporated to the pool they may not exceed 60% of the mortgage lending value of the mortgaged assets, except for residential loans, in which case they may reach up to a maximum of 80% of such value. The loans exceeding the latter percentages are considered not *eligible* **in their totality** (*hard limits*).

> Notwithstanding above, mortgage loans that initially exceed these percentages can be used as cover assets for the issuance of CB when due to the repayment of their principals the values do not exceed said LTVs.

Additionally, and differently to the traditional rule in Spain, in case that due to the decrease of the market value of the mortgaged properties after the loans are incorporated to the pool (supervened depreciation of collaterals) LTV exceed said percentages, mortgages loans could be considered *eligible* but only up to the 60% or 80 % of their amount (*soft limit*-like solution). Notwithstanding this, these loans – although only partially *eligible* for the denominator of the OC level – are incorporated to the pool in their entirety (*i.e.* the so named top tranche is incorporated to the pool).

V. ASSET – LIABILITY MANAGEMENT

Assets and OC

The RDL makes a rather literal transposition of art. 15 – *Coverage requirements* – of the CBD incorporating the *nominal principal*: aggregate principal amount of all cover assets of the pool must be equal or exceeds the aggregate principal amount of outstanding covered bonds.

The text also incorporates all the Directive's national discretions permitted *i.e.* consideration of future interests (as an option for the issuer) or calculation of a lump sum for calculating expected costs related to maintenance and administration for the winding-down of the CB program.

Regarding OC RDL distinguish between legal (mandatory) overcollateralization and voluntary one.

Legal OC is only specifically contemplated for the three types of CB subject to specific regulation (CRR compliant CB): mortgage bonds, public sector bonds and *internationalization* bonds, introducing the 5% percentage on a nominal basis pursuant to the new art 129 3 a) of the CRR. Only for the fourth category of CB – *Other* CB – a mandatory OC is not specifically envisaged.

Beyond legal OC issuers may voluntarily assume higher levels of OC. These OC *extra* levels are voluntary as regards their adoption but once reflected on the issuance prospectus (or other contractual documents) issuers are compelled to respect them. The RDL does not introduce any cap to the voluntary OC.

Liability management

> The RDL has introduced for first time in Spain a rather complete regulation of the liability management fully aligned with the provisions of the Directive. In the previous period there was some sort of tacit consensus that the huge amount of overcollateralization (the entire portfolio of loans) made not strictly necessary a regula-

tion of the liability management. The only *liquidity mitigants* contemplated were the substitution assets (liquid ones) but they were very rarely employed.

Traditionally the primary method used by Spanish issuers to mitigate market and interest risk has been the natural matching. This has now rightly been reinforced by the different tools the RDL implements (all taken from the CBD).

> Firstly, RDL regulates a cover pool liquidity buffer – following closely art 16 of the CBD provisions – as main tool to deal with liquidity risk.

The liquidity buffer is to cover the maximum cumulative net liquidity outflow over the next 180 days, the RDL not extending this term.

With respect to the type of liquid assets admitted into the buffer, RDL does not restrict the list envisaged in art 16.3 of the CBD.

In case that extendable maturity structures are used the RDL determines that the final maturity date is to be considered for the calculation of the principal, incorporating so the Directive's possibility and conceding more flexibility to the issuers.

> RDL also regulates the use by issuers of derivatives contracts for mitigating risks, mainly interest risk.

Here also the regulation reproduces faithfully the Directive requirements (art 11).

The hedging counterparties must be credit institutions with the specific credit quality mentioned in art 129 1 c) CRR.

RDL adequately regulates that hedging counterparties' claims have the same preference as covered bond holders in case of bankruptcy or resolution of the issuer and that when any of the latter circumstances occur derivative contracts cannot be early terminated.

> RDL also introduces extendable maturity structures that were completely unknown in Spain.

The regulation reproduces the requirements contemplated in art 17.1 of the CBD. Their effective use is a free option for the issuers always within the legal framework.

These structures will normally adopt the form of soft bullets.

With respect to the objective triggers entitling issuers for maturity extensions the RDL mentions:

> Serious liquidity problems.

> Insolvency or resolution situations.

> No viability of the credit institution according the Recovery and Resolution Directive.

> Serious market disturbances.

Moreover, RDL requires a specific BE approval to activate the requested extension.

> RDL also obliges issuers to implement internal tests to mitigate interest rate, foreign exchange and maturity mismatch risks.

VI. TRANSPARENCY

The transparency regime that RDL lies down is a reproduction of art. 14 (*investor information*) of the CBD. The information is to be disclosed quarterly and not more frequently.

On top of that, main Spanish issuers of BG, coordinated by the Spanish Mortgage Association, and since the end of 2011, have been utilizing the ECBC Label Foundation HTT (Harmonized Transparency Template). At this stage the Label Foundation has undertaken a process to fully adapt current HTT to art. 14 provisions.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Cover pool monitor

In contrast with other European legislations the institution of the CPM (*órgano de control del conjunto de cobertura*) was completely unknown in Spain being its introduction a novelty of the RDL.

Although the Directive does not make the introduction of this figure into the national legislation compulsory, Spanish legislator rightly introduced it assuming was a feature of most European legislations.

Its mission – according to the art 13.1 of the CBD – is to perform ongoing monitoring of the fulfillment by the CB issuers of all the legal requirements and limits and the RDL specifies its concrete duties.

The RDL incorporates the two alternatives permitted by the Directive for the issuers implementing this figure.

a) Appointing an external entity.

b) Configuring it as an internal CPM.

> External CPM.

The external CPM must be a commercial society with sufficient human and material resources and sound internal procedures. Qualified stakeholders (10% of the capital), directors and general managers must all be good repute.

RDL explicitly prevents from being CPM auditors having acted as such for the issuer (or a company of its group) in the three previous years to their appointment or corporations belonging to the issuer's group.

External CPM must be appointed for a minimum period of 3 years, which could be extended up to a maximum of ten years (although it could be re-appointed once 3 years have elapsed since the end of its mandate). Notwithstanding the issuer can decide to dismiss the CPM when appreciating is not fulfilling their duties correctly, notifying it to the BE and proposing a new candidate to be approved by it.

> Internal CPM.

The RDL requires that this kind of CPM has sufficient independence, *authority*, and resources within the issuer. Its appointment corresponds to the Board of Directors of the issuer to whom direct access should be permitted.

When the issuers apply for the approval of the CB program by the BE they must indicate who is the proposed (external or internal) CPM and prove that all the relevant requirements are met, corresponding in any case the final decision to the BE. The Bank of Spain has a very wide margin of discretion to determine who can be effectively appointed. CPM are recorded in a special register hold by the BE.

The RDL invests the CPM with a very wide range of powers and faculties and envisages different levels of reporting firstly to the issuer itself and subsequently to the BE to check that issuers always act correctly and prevent breaches of the legislation.

Banking Supervision

RDL confers CB public supervision to the BE giving it wide supervisory powers in line with the provisions of art.18 of the Directive.

BG issuers require a special permission from the Bank of Spain for each CB program. Needed requirements to obtain the permission are basically the same as those laid down in art 19.2 of the CBD, but additionally requiring the issuers to file an impact assessment of the program on its financial situation (solvency, liquidity...) and also provide information on the risk management of the pool. The applicant issuer also must file a draft of the prospectus required by the Securities Markets legislation.

The reporting to the BE is designed with a quarterly frequency and referred to all the necessary elements to justify the correct functioning of the programs in line with art 21.2 of the CBD.

On top of this the BE can request at any moment more information through the CPM.

The RDL finally dedicates several articles to the disciplinary regime following closely arts. 23 and 24 of the CBD provisions, comprising:

> Infractions.

> Penalties and their publication.

> The disciplinary procedure applicable is the one contemplated in the credit institutions general legislation.

A "special" supervision is also carried out by the Spanish Securities Markets regulator (Comisión Nacional del Mercado de Valores) who supervises compliance with bonds' marketing and public offers rules and as well the functioning of CB secondary markets.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Asset segregation from the insolvency estate

As we already said above, before the RDL was approved Spanish legislation did not recognize the figure of pools of assets as such. In case of insolvency the entire mortgage (or other eligible assets) portfolio worked as collateral having bond holders a preferential right against **all** the loans whatever their characteristics were. This was the main singularity of the Spanish model of *cédulas*.

The new regulation radically changes said solution introducing for first time the idea of pool (defined set of assets) making Spanish legislation convergent with the solution adopted by all the other jurisdictions and subsequently adopted by the Directive itself.

All covered bond programs are linked to a specific pool of assets (*conjunto de cobertura*) securing the payments obligations attached to the covered bonds, being said assets duly segregated from other assets held by the credit institution.

All the assets integrating the conjunto de cobertura are recorded in an internal register (cover register) continuously updated.

Credit institutions must configure the register permitting the individual identification of each asset and to check its compliance with the *eligibility* requirements the RDL lies down. The RDL specifies the concrete information to be shown over each registered asset.

Effective segregation initially operates through the inclusion of the assets in the register.

Upon the insolvency of the issuer, segregation is reinforced by incorporating all the assets included in the *conjunto de cobertura* to a separate estate (*patrimonio separado*). This estate remains on the issuer's balance sheet (it is not a special purpose vehicle or similar) and is completely independent respect to the issuer (general) bankruptcy estate.

RDL supersedes general bankruptcy law and also develops general provisions contained in the resolution legislation.

One of the most positive elements of the RDL is that contains a wide and detailed procedural regulation on how insolvency or resolution of the issuer affect to the *conjunto de cobertura*.

Using the option contained in art 20.2 of the CBD the RDL has introduced the figure of the special administrator both for insolvency and resolution procedures. Their appointment corresponds to the competent (bankruptcy) judge or to the FROB (resolution authority), but the BE must be always consulted.

The special administrator is granted with a very ample range of powers on behalf of the covered bonds investors, including the faculty to assign or pledge the assets.

While insolvency or resolution procedures are open the issuer bank retains its condition of credit institution, so outstanding covered bonds keep their specific nature.

Also according to the Directive, the Spanish regulation ensures coordination among the special administrator, the BE and the FROB.

In the case of insolvency, if at the end there is need to wind up the *patrimonio* separado since assets are clearly and definitively insufficient to pay the bond holders (default of the pool), the bonds payment shall be done on a pro rata basis, regardless of their issuance dates.

Finally, if after realizing the cover assets, bondholders' credits are not completely satisfied, they also have a right against the bankruptcy estate (recourse) but ranking *pari passu* with unsecured creditors.

On the contrary, once bondholders' claims were fully satisfied if hypothetically there were remaining assets in the *patrimonio separado*, ordinary creditors also have a right against them.

Bankruptcy remoteness

Regarding bankruptcy remoteness, the RDL clearly determines that the opening of bankruptcy or resolution procedures in no case implies the automatic acceleration of payments, explicitly excluding any entitlement to the bondholders to claim for the early payment of the debts.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

As we said in the first chapter – Framework – the RDL has carried out a complete and respectful transposition of the Covered Bond Directive as well as a correct integration of the revised CRR (art 129) provisions.

The RDL mainly regulates *CRR compliant* CB (mortgage bonds, public sector bonds and *internationalization* bonds) but also contemplates a fourth category "*Other covered bonds*", where bonds only must comply with art 6 of the CBD (*eligible* cover assets) requirements and which could include assets not contemplated in art. 129.1 of the CRR, with no specific determination of the assets to be fit (open category).

Issuers: ABANCA Corporación Bancaria, S.A., Banco de Sabadell, S.A., Banco Santander S.A., Bankinter, S.A., BBVA, CaixaBank SA, Caja Rural de Navarra, Credit Cooperative, Eurocaja Rural, Grupo Cooperativo Cajamar, Ibercaja Banco S.A., Kutxabank S.A., Unicaja Banco SA.

COVERED BOND LABEL: Banco de Sabadell, S.A. (2 pool), CaixaBank SA (2 pool), Banco Santander S.A. (1 pool), Kutxabank S.A. (1 pool), Unicaja Banco SA (1 pool), BBVA (2 pool), Bankinter, S.A. (1 pool), Ibercaja Banco S.A. (1 pool), Eurocaja Rural (1 pool), Caja Rural de Navarra, Credit Cooperative (1 pool), ABANCA Corporación Bancaria, S.A. (1 pool), Grupo Cooperativo Cajamar (1 pool).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Spanish market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.38 SWEDEN

By Jonny Sylvén, Association of Swedish Covered Bond Issuers (ASCB)

I. FRAMEWORK

In Sweden, the issuance of covered bonds is governed by the Swedish Covered Bonds Issuance Act ('CBIA'), which came into force on 1 July 2004[1] and has been revised a couple of times, lastly this summer with the regulation required by the Covered Bond Directive (CBD). The CBIA prevails over the general bankruptcy regulation and grants covered bond investors a priority claim on the eligible cover assets. A regulation and guidelines from Finansinspektionen, the Swedish Financial Supervisory Authority ('SFSA'), complement the legislation[2]. In the SFSA regulation and guidelines, some detailed criteria are specified regarding authorisation to issue covered bonds, cover pool requirements, coverage requirements and the cover register. The regulation has been revised to implement some parts of the CBD.

II. STRUCTURE OF THE ISSUER

The CBIA allows for all banks and credit institutions to issue covered bonds, provided that they have obtained a special authorisation from the SFSA. The issuer has to meet certain criteria to qualify for the authorisation. These criteria include the submission of a financial plan showing the issuer's financial stability for the coming three years, the conversion of any outstanding mortgage bonds into covered bonds and the conduct of business in compliance with the CBIA. The SFSA has the right to withdraw the authorisation should the institution be in material breach of the CBIA or have failed to issue covered bonds within one year of receiving the authorisation (Figure 1). If the SFSA withdraws an authorisation, the SFSA may lay down a plan to wind down the operation.

> Figure 1: Authorisation required to issue covered bonds

Requirements for authorisation to issue covered bonds:

> The institution's articles of association, by laws or regulations must comply with the CBIA.

> The issuer must conduct the covered bonds business according to the CBIA and related regulatory provisions.

> Any outstanding mortgage bonds must be converted into covered bonds or administered in an equivalent manner with respect to the creditors.

> A financial plan for the next three fiscal years, confirmed by auditors, showing that the issuer is sufficiently stable and that the interest of other creditors is not jeopardised when it issues covered bonds.

> The issuers have to submit an operational plan that shows sound management and supervision of the covered bond business (including information on the IT operations).

The SFSA may withdraw an authorisation if:

> The institution is in material breach of its obligations pursuant to the CBIA; and/or

> The institution has failed to issue any covered bonds within one year of receiving the authorisation.

Source: Lag 2003:1223, FFFS 2013:01

The cover assets correspond to the covered bond investors claims on the issuer and remain on the balance sheet, i.e. there is no transfer of the cover assets to a separate legal entity. The covered bonds are direct, unconditional obligations on the part of the issuer. The cover pool is dynamic, and the outstanding covered bonds are secured by the whole cover pool; the individual cover bonds are not linked to any specific cover assets.

1 Lag (2003:1223) om utgivning av säkerställda obligationer (the Covered Bonds Issuance Act).
2 FFFS 2013:01 Finansinspektionen's Regulations and Guidelines regarding covered bonds.

In the event of insolvency of the issuer, the cover pool is bankruptcy-remote and not included in the general insolvency estate of the issuer but is exclusively available to meet outstanding claims of covered bond holders. Moreover, covered bond investors enjoy ultimate recourse to the insolvency estate of the issuer, ranking *pari passu* with senior unsecured investors.

III. COVER ASSETS

Eligible cover assets are mortgage loans, loans to the public sector and exposures to credit institutions. There is no requirement for separate cover pools for mortgage and public sector cover assets; both asset classes can be mixed in a single cover pool. However, most of the cover assets are mortgages (more than 95% of the assets in the cover pools).

For mortgagees to be eligible as cover assets they should be secured by:

> real property intended for residential or commercial use;

> site-leasehold rights intended for residential or commercial use;

> a pledge against tenant-owner rights; or

> similar foreign collateral (EEA).

Mortgages to commercial property are limited to 10% of the total value of the cover pool. If the purpose of the commercial property is agriculture this limitation is not valid. The collateral for the mortgage loans has to be located in Sweden or the European Economic Area (EEA). Neither asset-backed nor mortgage-backed securities are eligible as cover assets. The mortgage loans have to meet valuation criteria and certain loan-to-value ratios specified in the CBIA and the SFSA regulation (see section IV).

Eligible public sector assets are securities and other claims according to Capital Requirement Regulation (CRR) article 129(1) point (a) and (b).

Cover assets can also be exposures to credit institutions according to CRR article 129(1) point (c) that fulfil credit quality step 1 or 2. If the asset just fulfil credit quality step 3 an approval from the SFSA is needed. Assets that fulfil the requirement for the liquidity buffer are also allowed.

Non-performing loans due over 60 days cannot be included for the purpose of meeting the matching requirements set forth in the CBIA.

Derivative contracts

The CBIA provides for the use of derivatives for hedging of interest and currency risk. The derivatives must be structured so that an early termination is not triggered by an issuer default or on the counterparty's demand. The law stipulates asymmetrical collateralisation. Collateral, a guarantee or replacement language is required from the counterparty in the event of the rating falling below the minimum rating level. There are no reciprocal requirements on the covered bond issuer, but the derivative counterparty has a priority claim on the cover pool. The derivative contracts are included in the net present value coverage calculation, the purpose of which is to ascertain a good balance between the value of the assets and the liabilities in the covered bond programme.

IV. VALUATION AND LTV CRITERIA

The principles for the valuation of collateral for the mortgages in the cover pool are specified in the CBIA. The valuation relating to residential properties may be based on general price levels. The value of any other eligible property class must be based on the market price and determined on an individual basis by qualified professionals. The market value should reflect the price achievable through a commercial sale, without time pressure and excluding any speculative or temporary elements. Issuers are required to monitor the market value of the property in line with CRR article 129(3), and in the case of a significant decline review the valuation and ensure that the loan to value (LTV) of the related mortgage loan remains within the limits. The valuer can be an employee of the issuer or external.

For the various mortgage types eligible as cover, the following maximum LTV ratios apply:

> 80% of the value for real estate, site-leasehold rights and tenant-owner rights where the property is intended for residential use;

> 60% of the value for real estate, site-leasehold rights and tenant-owner rights where the property is intended for commercial use, which may be exceeded up to a maximum level of 70% if all conditions prescribed in CRR article 129(1) point (f) are met.

The LTV limits are relative, not absolute. A loan with a higher LTV ratio can be included in the cover pool up to the legal threshold. The balance is refinanced through other funding instruments.

The issuer is required to test and analyse how changes in property values may affect LTV ratios and the value of the cover pool at least once a year. The tests should be based on conservative assumptions.

V. ASSET – LIABILITY MANAGEMENT

The CBIA requires the nominal value of the cover assets to at all times be at least 102 percent of the aggregate nominal value of claims arising from outstanding covered bonds. The cover assets, including derivatives, should, on a net present value basis, always be at least 102 percent of the corresponding net present value of outstanding covered bonds, taking into account the effects of stress-test scenarios on interest and currency risks set by the SFSA. The stressed scenario that should be tested regarding interest-rate risk is a sudden and sustained parallel shift in the reference swap curve by 100 bps in an unfavourable direction, and a twist in the swap curve. The currency risk should be tested for a 10% sudden and sustained change in the relevant foreign exchange rate for the currency of the covered bonds and the currency of cover assets. There is a minimum overcollateralisation (OC) requirement of two percent. Both the statutory OC and any additional OC for structural enhancement purposes are bankruptcy-remote and protected in the event of issuer insolvency.

The issuer shall ensure that the cash flow with respect to the assets in the cover pool, any derivative agreements and the covered bonds are such that the issuer is always able to meet its payment obligations towards the bondholders and derivative counterparties. The issuer should be able to account for these funds in the register.

VI. LIQUIDITY RISK

The issuer must cover at any time the cumulative maximum net cash outflow for the next 180 days with a liquidity buffer. The issuer may hold assets defined as liquid under level 1 or 2A of the EU Liquidity Coverage Regulation or short-term exposures to credit institutions of credit quality step 1 or 2. Under certain conditions the SFSA can allow some specific other assets (level 2B and deposits from institutions CQS 3).

The issuer can use covered bonds with extendable maturity structures. The bonds can be extended after an approval by the SFSA, and such approval can only be achieved if the SFSA is convinced that the extension will prevent a default of the issuer. If the issuer uses extendable bonds, it is the latest of the maturities that is used to calculate the liquidity buffer.

VII. TRANSPARENCY

The issuers are required to disclose information regarding their cover pool and outstanding covered bonds every quarter in line with the requirement in CBD article 14. This is being done publishing the harmonized transparency template (HTT) and a national transparency template (NTT) on each issuer's website.

In addition to the publicly disclosed information, the issuers are required to give their respective cover pool inspector (see section VII) additional information, specified in the SFSA regulation, and do quarterly reporting to the SFSA.

VIII. COVER POOL MONITORING AND BANKING SUPERVISION

The covered bond issuers are subject to special supervision by the SFSA. The SFSA supervises the issuers' compliance with the CBIA and related regulatory provisions. If an issuer is in material breach of its obligations under the legal framework, the SFSA can issue a warning or revoke the authorisation to issue covered bonds altogether. The SFSA may also revoke an authorisation if the issuer waives the license or if the institution has failed to issue covered bonds within a year from the date of the authorisation.

For each issuer, the SFSA appoints an independent and suitably qualified cover pool inspector (cover pool trustee), who is remunerated by the covered bond issuer. The duties of the cover pool inspector are to monitor the register and verify that the covered bonds, the derivative agreements, and the cover assets are correctly recorded. The inspector also ensures compliance with calculation of coverage and market risk limits in accordance with the framework. The inspector is also required to monitor the revaluations of underlying collateral that has been conducted during the year. The issuer is obliged to provide the covered bond inspector with any information requested relating to its covered bond operations. The inspector submits a report of his or her assessment to the SFSA on an annual basis and is required to notify the SFSA as soon as he or she learns about an event deemed to be significant.

IX. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Cover register

The issuer is required to keep a register of the eligible assets in cover pool, derivative contracts, and outstanding covered bonds. The law specifies the form and content of the register, which shall be easily accessible for the SFSA and the cover pool inspector. The registration ensures that the covered bondholders and derivative counterparties have a legally enforceable priority claim on the cover pool in the event of issuer insolvency. Prior to an issuer being declared insolvent, cash flows accruing from the cover assets must be accounted for in the register by the issuer. In the event of issuer default, covered bond investors and derivative counterparties have the same priority claim on such cash flows as they have on the cover pool. Any cash flows accruing from the cover assets after issuer insolvency should also be recorded in the cover pool register.

Issuer insolvency

In the event of issuer insolvency, the registered cover assets, registered derivatives and the covered bonds are segregated from the general insolvency estate. Covered bonds are not accelerated as long as the cover pool fulfils the requirements set out in the CBIA, which also allows for "temporary, minor deviations"[3]. An issuer default does not trigger early termination of any registered derivative contracts. Covered bond holders and registered derivative counterparties have a priority claim on the cover pool and cash that derives from the pool, ensuring timely repayment to original agreed terms, as long as the cover pool is compliant with the CBIA. The cover pool does however not constitute a separate legal estate. According to a legal opinion, the bankruptcy of the issuer should not lead to a debt moratorium on the covered bonds.[4]

Under the Swedish Bankruptcy Code, the insolvency of a parent company does not automatically trigger the insolvency of its subsidiary.

Cover pool default and preferential treatment

In the event of the cover pool being incompliant with the eligibility criteria, the covered bonds would be accelerated. Covered bond investors and derivative counterparties would have a priority claim on the proceeds

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3 According to the legislative history of the Act, this would be, for example, "temporary liquidity constraints".

4 There are no means in the Act that could disrupt or delay payment to covered bondholders. However, the Act does not explicitly derogate from the general provision of the Code of Procedures 1948 or the Bankruptcy Act 1987, of which neither explicitly ensures the integrity of payments on covered bonds.

from the sale of the cover assets, ranking pari passu among themselves but prior to any other creditors. If the proceeds are insufficient to repay all liabilities on the outstanding covered bonds, covered bond investors and derivative counterparties would have an ultimate recourse to the insolvency estate of the issuer, ranking pari passu with senior unsecured investors.

Survival of OC

Any OC present in the cover pool at the time of the issuer's insolvency is bankruptcy-remote provided that it is recorded in the cover pool register. Full repayment of outstanding claims related to the covered bonds and registered derivatives is required before the cover assets would be available to satisfy any claims from unsecured creditors.

The law does not provide for the appointment of a special cover pool administrator. The receiver-in-bankruptcy represents the interests of both the covered bond investors and the unsecured investors. The receiver can use the OC to pay advance dividends to other creditors of the bankrupt issuer, if the pool contains more assets than necessary.[5] If the cover assets later prove to be insufficient, these advance dividend payments can be reclaimed.

Access to liquidity in case of insolvency

In the cases of the issuer's insolvency, the law does not enable the receiver-in-bankruptcy to refinance maturing covered bonds by issuing new covered bonds. The receiver cannot substitute ordinary cover assets for other assets. However, the receiver can utilise available liquid assets included in the cover pool and is allowed to sell assets from the cover pool to create the necessary liquidity.

The receiver-in-bankruptcy also has a mandate to, on behalf of the bankruptcy estate enter into loan agreements and other contracts for the purpose of maintaining sufficient coverage and liquidity and managing the currency and interest rate risks. The receiver should only enter into agreements if, on the date of execution of the agreement, the agreement is deemed to be in the bondholders' and derivative counterparties' interest and if the assets in the cover pool are deemed to fulfil the legal requirements. When the receiver enters into an agreement, the counterparty has a claim on the bankruptcy estate that ranks ahead of the secured creditors and creditors with rights of priority.

X. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The Swedish covered bonds are compliant with CRR article 129 and CBD. Since the bonds are compliant with CRR article 129, the applicable risk-weight for the Swedish covered bonds will be ten percent for those banks that use the standard method. Because the CBIA require compliance with CRR article 129, the bonds can be labelled "European Covered Bond Premium" and "svensk säkerställd obligation".

Covered bonds issued in other jurisdictions enjoy the same preferential capital treatment in Sweden, subject to the relevant foreign supervisory authority having assigned the covered bonds preferential risk-weights (principle of mutual recognition).

The Swedish UCITS Act (Lag (2004:46) om värdepappersfonder) allows for Swedish UCITS to invest up to 25% of their assets in Swedish covered bonds, instead of the 5% generally applicable to other asset classes.

XI. ADDITIONAL INFORMATION

Issuing and trading of Swedish domestic covered bonds

Normally the Swedish covered bonds are registered at Nasdaq Stockholm (a Nasdaq Inc. subsidiary), although no actual bond trading takes place there. The base prospectuses used follow the standard of and are compli-

5 According to a legal opinion, the receiver-in-bankruptcy would have to take into account a substantial safety margin to ensure that the cover pool's integrity and compliance with the Act is not jeopardized, which would be difficult to prove unless outstanding covered bonds were due to mature imminently.

ant with the Prospectus Regulation and are approved by the SFSA. The normally used technique for issues is “on tap”.

To ensure a good market liquidity, the large issuers issue their bonds as benchmarks which in the Swedish market mean large issues (SEK 3 bn and more) and that a number of dealers show both bid and offer prices. Only benchmarks are deliverable in the future contracts. When a new benchmark bond is issued, the issuer makes sure that the amount issued meets the requirements for a benchmark sized deal. After the initial day of issuance, the issuer can, without further notice, issue “on tap” the size required to fund the lending. At the peak of the life of the bond it typically has a volume of SEK 50 to 70 bn. After that the volume decreases due to active repurchase operations by the issuer. With one year to go to maturity a loan is no longer of benchmark status. This paves the way for a controlled redemption of the remaining part of the loan.

The bonds are sold into the primary market through banks acting as agents for the issuer. These banks also act as market makers in the secondary market. Currently, there are five banks that act as market makers in covered bonds: Danske Bank, Nordea, SEB, Svenska Handelsbanken and Swedbank. The market for government and domestic covered bonds, as well as treasury bills, is a telephone and screen-based over-the-counter market. Market makers display indicative two-way prices on an electronic information system which is instantaneously relayed by Reuters. Fixed prices are quoted on request and most deals are concluded via telephone. Trading in the secondary market takes place on all business days between 09.00 and 16.15 (local time). The number of bonds to be quoted is regulated in an agreement between the issuer and the market-maker.

Bonds are quoted on a yield basis with bid and ask spreads of (under normal market conditions) 2 bp for the liquid benchmark bonds. The settlement day for bonds is three business days after the trading date. Treasury bills are quoted on a simple yield basis and are settled two business days after the trading day. The normal trading lot in government securities and liquid covered bonds is SEK 200-500 m.

Sweden has a liquid repo market with almost all banks and broker firms involved in the trading. The repo market in Sweden started in the late 1980s and developed fast. The Swedish Debt Office offers a repo-facility in government bonds and treasury bills and the covered bond issuers offer their market makers a repo-facility in their own covered bonds. The repo transactions are viewed as ‘sell-buy back’ or ‘buy-sell back’ deals and the ownership of the security must be transferred. There are no standard conditions for a repo transaction and the counterparties agree on maturity, settlement day and delivery for each deal. Mostly, repos are settled two banking days after the trading day. Repo rates are quoted as a spread vs the Riksbank repo rate. Because of quantitative easing there is currently a lack of government bonds in the repo market, which has negative effects on the functionality of the repo market.

Almost all publicly listed securities in Sweden are in book-entry form, registered and settled via Euroclear Sweden’s system. Domestic settlement requires a securities account or a custody account with one of the Swedish banks or investment firms. Foreign investors can either have a custodian service with a Swedish bank or investment firm or settle via Euroclear or Clearstream.

Accrued interest is calculated from the previous coupon date to the settlement date. The interest rate is calculated by using ISMA’s 30E/360-day count – “End-of-month” convention.

Swedish government bonds and covered bonds have five ex-coupon days, hence there is a negative yield when settlement occurs within five business days before the coupon date. Swedish krona bonds redeem at par upon maturity and most of them pay coupon annually. All domestic banks act as paying agents.

The ASCB

The Association of Swedish Covered Bond issuers (ASCB), which was established in 2009, performs ongoing work to further improve the conditions for the Swedish covered bond market. More information about the Swedish covered bond market can be found at www.ascb.se.

Essential terms and conditions of a typical Swedish market maker agreement

Typically, the larger issuers have 5-8 covered bond series with benchmark status. For the benchmark issues, the market maker typically has a duty to:

> Help the issuer sell bonds via taps of the benchmark loans in the market;

> Actively support trading of these bonds in the secondary market; and

> Continuously quote indicative rates in the information systems used.

The obligations of a market maker are conditional upon a number of things, inter alia:

> that no change in the economic, financial or political conditions, which in the reasonable opinion of the market maker would create a major obstacle to the fulfilment of the obligations, have occurred;

> that the bonds, in the reasonable opinion of the market maker, cannot be placed in the primary or secondary market on normal market conditions.

If the obligations cannot be fulfilled, the market maker shall notify the issuer and may withdraw from the du ties wholly or in part for a shorter or longer time.

The issuer has an obligation to, under normal market conditions, offer a limited repo facility in the outstanding benchmark bonds to the market maker.

Issuers: Stadshypotek, Swedbank Mortgage, Nordea Hypotek, Swedish Covered Bond Corporation (SCBC), SEB, Skandiabanken, Länsförsäkringar Hypotek, Landshypotek, Danske Hypotek, Bluestep Bank, Borgo and Sparbanken Skåne. The market is dominated by the first five of them and the ma- jority of their exposure is to domestic residential mortgages, with the remainder consisting of commercial property loans and public-sector loans.

COVERED BOND · LABEL · : Länsförsäkringar Hypotek AB (1 pool), Skandinaviska Enskilda Banken AB (SEB) (1 pool), Stadshypotek AB (publ) (3 pools), Swedbank Mortgage AB (1 pool), The Swedish Covered Bond Corporation (1 pool), Nordea Hypotek (1 pool).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

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For further national information on the Swedish market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.39.1 SWITZERLAND – SWISS PFANDBRIEFE®

By Robert Horat and Markus Müller, Pfandbriefbank schweizerischer Hypothekarinstitute AG

I. FRAMEWORK

The legal framework for the Swiss Pfandbrief system is the Pfandbrief Act ("Pfandbriefgesetz", "PfG"). It is complemented by the Pfandbrief Ordinance ("Pfandbriefverordnung", "PfV"), the articles of association of the Pfandbrief institutes and the valuation regulations ("Schätzungsreglement"). The latter two have to be authorised by the Swiss Federal Council.

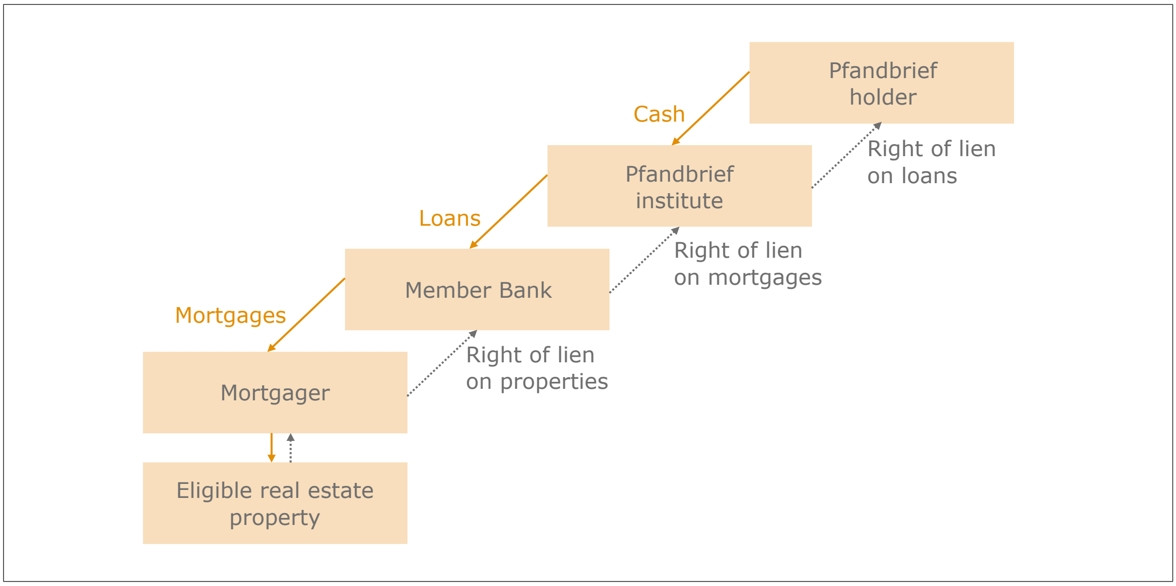
According to the PfG, the issuance of Swiss Pfandbriefe is reserved to two specialised Pfandbrief institutes, namely the "Pfandbriefzentrale der schweizerischen Kantonalbanken AG" (PZ) and the "Pfandbriefbank schweizerischer Hypothekarinstitute AG" (PB). They issue Swiss Pfandbriefe to refinance their member banks' Swiss mortgage business. As of article 1 of the PfG the purpose of the Pfandbrief institutes is to enable mortgages for real estate owners at interest rates which are as constant and favourable as possible. The "Swiss Pfandbrief" is a registered trademark. The reputation of this brand shall underpin its uniqueness within the world of covered bonds.

The Swiss Pfandbrief system is an indirect one: The Pfandbrief institutes raise money by issuing Swiss Pfandbriefe in order to grant Pfandbrief loans to their member banks. Sourced volume, currency and interest terms must be equal within each series of issuance. To get a loan, each member bank has to pledge first class Swiss mortgages to the Pfandbrief institute as a cover in advance. The Pfandbrief investors have a lien on the granted loans. The investors' lien on the loans as well as the issuers lien on the mortgages in the member banks' cover pool are determined by the Pfandbrief Act.

PfG came into effect in 1930. Its 52 articles are well balanced and the PfG had to be modified only marginally in the meantime. The fact that the Swiss Pfandbrief has a special legal basis, provides legal certainty as well as stability and predictability.

Pfandbrief institutes have a strictly limited scope:

> FIGURE 1: THE SWISS PFANDBRIEF® FRAMEWORK

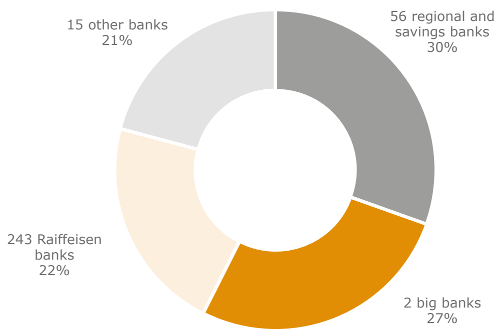


Source: Credit Suisse AG

II. STRUCTURE OF THE ISSUER

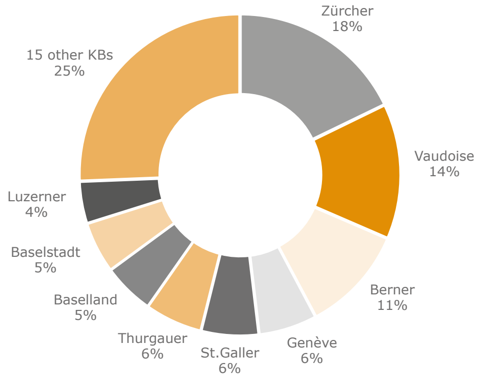
PZ operates as the Pfandbrief issuing vehicle of the Swiss cantonal banks and PB of all other Swiss banks. Both are special institutions with their business scope limited to the issuance of Swiss Pfandbriefe, to granting Pfandbrief loans to their member banks and to investing their share capital and reserves. Both Pfandbrief institutes are supervised by the Swiss financial market authority (FINMA). They are owned by their member banks. The chart below shows the structure of the shareholders:

> FIGURE 2: SHAREHOLDERS OF PB



Source: PB as of 31.12.2021

> FIGURE 3: SHAREHOLDERS OF PZ



Source: PZ as of 31.12.2021

PB was founded in 1931 and counts 286 banks with loans. Any Swiss bank has the right to become a member of PB, provided that it is headquartered in Switzerland and that Swiss mortgages account for at least 60% of the bank's balance sheet (Article 4 PfG). As of 31 December 2021 the total outstanding Swiss Pfandbriefe of PB amount to CHF 80.6 billion (EUR 78.0 billion).

PZ was also founded in 1931 and has 24 member banks. Only cantonal banks have the right to become members of the PZ (Article 3 PfG). PZ does not have its own staff but has fully outsourced its operations to Zürcher Kantonalbank. As of 31 December 2021 the total outstanding Swiss Pfandbriefe of PZ amount to CHF 70.2 billion (EUR 68.0 billion).

The total volume of all outstanding Swiss Pfandbriefe as of 31 December 2021 amounts to CHF 150.8 billion (EUR 146.0 billion). For years the two Swiss Pfandbrief institutes have been the major bond issuers in Switzerland, even more important than the government. In 2021 they issued Swiss Pfandbriefe amounting to CHF 18.5 billion (EUR 18.0 billion).

Swiss Pfandbriefe are standardised to a great extent. They are a commodity, denominated only in Swiss francs, with an original time to maturity of up to 30 years. The size of an issuance depends either on the demand of the member banks for loans or on the demand of the investors for Swiss Pfandbriefe, whichever is smaller. Whenever possible, existing bonds are reopened.

Generally, Swiss Pfandbriefe are issued as public bonds through a banking syndicate at fixed term fees (the last private placement has been placed in 2011). All of these public issuances are listed on the SIX Swiss Exchange AG. In the domestic bond segment in Swiss Francs Pfandbriefe amount to 36%, followed by public sector (Swiss government, cantons, cities, regions) with 27%, the banking and insurance sector with 18% and other industries with 19%.

In total about 14% of all Swiss mortgages are refinanced through Swiss Pfandbriefe (10/2021).

III./IV. COVER ASSETS, VALUATION AND LOAN TO VALUE (LTV) CRITERIA

As a principle, Pfandbrief loans are only granted against a pledge of eligible first class mortgages on Swiss properties.

PB has got an electronic cover pool system. Mortgages are pledged to PB by the member banks through entry of a complete "cover proposal" into the electronic pool register, which all member banks are linked to. The system immediately evaluates the member bank's cover proposal, which is then reviewed by one employee and authorised by another. PB valuates the mortgages independently from the member bank. Substantial cover proposals are additionally reviewed by a special cover pool committee.

The PfG defines a general maximum cover value LTV of two thirds (Article 5 PfG), however, the cover value is at most as high as the mortgage, but mostly lower. Member banks are obliged to replace impaired, non-performing and other ineligible mortgages. Furthermore, contractual repayments of the mortgage can also reduce the cover value of the asset pool. Therefore, the member banks and PB have to supervise overcollateralisation daily. If total cover value is below the overcollateralisation limit, latest by close of business new eligible mortgages have to be pledged by the member bank.

The "Pfandbriefbank pool" consists of approx. 202'000 mortgages all over Switzerland, which provides a good diversification. 100% are residential properties.

In case of a material change in macro-economic conditions, FINMA may request a new valuation of the real estate properties (Article 32 PfG).

V. ASSET – LIABILITY MANAGEMENT

Cover principles

The PfG stipulates that the principal amount as well as the interest payments of outstanding Swiss Pfandbriefe be at all times covered by an equivalent amount of Pfandbrief loans to the member banks (Article 14 PfG). The loans granted by Pfandbrief institutes to their member banks must be collateralised by liens on eligible real estate property (Article 19 PfG). If the interest proceeds of the pledged mortgages of a member bank are lower than its total Pfandbrief loan interest, the asset cover pool must be increased (Article 20 PfG).

Overcollateralisation

In addition to eligibility and valuation principles (LTV legally at maximum 2/3, for PB the average LTV is lower than 50%), the cover value of the cover assets has to exceed the Pfandbrief loans given to member banks by at least 8% for PB and by 15% for PZ. The higher overcollaterisation of PZ compensates for the fact that PZ does not have a standardised electronic cover pool register.

Additional Limits

Swiss Pfandbriefe are issued in individual series which must match the repayment profile of the Pfandbrief loans to member banks, eliminating interest rate and funding risks. Currency risk does not exist as both the loans to member banks and the Pfandbriefe are issued in Swiss Francs. Therefore there is no need for derivatives to hedge market risks. Liquidity concentration risk is limited by individual limits for each member bank. The investment policy for free assets limits credit and market risks on counterparty and portfolio level.

Growth of the Pfandbrief institutes is limited as the required capital must exceed 2% of the total Pfandbrief issuance volume of the respective institute (Article 10 PfG).

VI. TRANSPARENCY

Although Switzerland does not yet participate in the "Covered Bond Label" self-certification programme, PB publishes the Pfandbriefbank Pool report (including member bank rating distribution, region, property type, property type by cover value size, loan to value) semi-annually on its home page (www.pfandbriefbank.ch).

VII. COVER POOL MONITOR AND BANKING SUPERVISION

PB valuates and monitors the cover pool independently of the member bank (which grants the mortgage to the house owner) and monitors eligibility and overcollateralisation of the cover pool daily. Mortgages are back-tested by means of a hedonic valuation model. Additionally, a special cover pool committee reviews substantial mortgages and visits major properties.

The Swiss Federal Council approves the articles of association and valuation regulations and nominates one member of the board of directors.

Swiss Pfandbrief institutes as well as their member banks are supervised by FINMA and audited by external audit firms.

In addition, Moody's rates all Swiss Pfandbriefe with Triple A, investors analyse the annual reports of the Pfandbrief institutes, various analysts publish research reports and/or ratings and last but not least the capital market values Swiss Pfandbriefe.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS

In the event of a member bank's insolvency, the Pfandbrief institute has a priority claim on the registered collateral (Article 23 PfG). The insolvency of a member bank does not directly trigger the acceleration of outstanding Pfandbriefe. In this respect, the Pfandbrief institute functions as a buffer between the investors and the member banks. The Pfandbrief institutes have own funds at their disposal and maintain an unencumbered SNB-/repo-eligible bond portfolio within their free assets.

Should there be justified concern that a member bank is overindebted, has serious liquidity problems or that the bank no longer fulfils the capital adequacy provisions (Article 25 Banking Act, BankG), FINMA can order:

a) protective measures pursuant to Article 26 BankG. However, FINMA can order deferment of payments or payment extension, except for mortgage-secured receivables of the Pfandbrief institutes (Article 26 h BankG). FINMA can also order the delivery of the cover assets and then act as fiduciary (Article 40 PfG).

b) restructuring procedures pursuant to Article 28 – 32 BankG: If it appears likely that the member bank can continue to provide individual banking services (regardless of the continued existence of the bank concerned) or can recover, FINMA can issue the necessary provisions and restructuring orders (Article 28 BankG):

> Convertibility of claims (Article 49 Banking Insolvency Ordinance, BIV): All bank debt capital may be converted into equity capital, **explicitly excluding** a) defined "privileged claims", **b) "secured claims to the extent that they are secured" (including pfandbrief loans)** and "offsettable claims to the extent that they are offsettable."

> Reduction in claims (Article 50 BIV): In addition to or instead of converting bank debt capital into bank equity capital, FINMA may order a partial or full reduction in claims, again excluding the aforementioned letters a and b (of Article 49 BIV) and letters a to c of Article 48 BIV.

> In our view, this framework leads to the Swiss bank loss absorption waterfall as shown on the right hand figure (source: resolution of global systemically important banks, FINMA, 7 August 2013).

Swiss Banks - Loss absorption waterfall

<table>
<tr><th>Common equity tier 1 (CET1)</th><th>Equity</th><th>Full loss absorbency</th></tr>
<tr><td>Additional tier 1 (AT1)</td><td rowspan="4">Subordinated debt</td><td rowspan="2">Automatic loss absorbency or contractual bail-in</td></tr>
<tr><td>Tier 2 point of non-viability (PONV, incl. CoCo)</td></tr>
<tr><td>Old style tier 1 and tier 2</td><td rowspan="4">Statutory bail-in</td></tr>
<tr><td>Other</td></tr>
<tr><td>Senior unsecured liabilities</td><td rowspan="2">3rd insolvency debt class</td></tr>
<tr><td>Non priviledged deposits</td></tr>
<tr><td>Priviledged claims/deposits, secured claims (incl. pfandbrief loans) and offsettable claims</td><td>Debt</td><td>No bail-in</td></tr>
</table>

c) the member bank's liquidation due to bankruptcy pursuant to Article 33 - 37 g BankG: Should there be no prospect of restructuring or if a restructuring were to fail, FINMA will have to revoke the bank's licence, order its liquidation and make this public (Article 33 BankG). The BIV defines restructuring proceedings and bankruptcy proceedings under Article 28 – 37 g BankG in detail. This includes that FINMA may draw up a separate schedule of claims for claims secured by a registered pledge of the Pfandbrief institutes, if systemic risks can only be restricted by doing so (Article 27 BIV).

On 17 December 2021, the Swiss Parliament passed a revision of the BankG, updating bank insolvency law and revising article 40 PfG. The new article 40a PfG now explicitly states that Pfandbrief loans do not become due as a result of the opening of bankruptcy proceedings at the member bank. In addition, the person appointed by FINMA to manage the separated loans and covers must take all necessary measures to ensure that the Pfandbrief loans are serviced in full and on time.

IX. RISK-WEIGHTING & COMPLIANCE WITH INTERNATIONAL LEGISLATION

The Bank for International Settlements regularly assesses the consistency of implementation of Basel standards. Within the jurisdictional "Regulatory Consistency Assessment Programme" (RCAP) the "Basel Committee on Banking Supervision" (BCBS) rated Switzerland with an overall "compliant" grade for the risk based capital standards (June 2013), for G/D-SIB standards (June 2016) and for the Liquidity (LCR) standards (October 2017). The "large exposure framework" and the "Net Stable Funding Ratio" (NSFR) have not yet been assessed by BCBS.

Basel III – capital standards

Switzerland implements Basel III capital requirements by means of the "Banking Act" and the "Swiss Capital Adequacy Ordinance" (CAO) into national law. The CAO has two approaches to measure credit risks in banking books: The BIS standard approach and the internal ratings-based approach.

According to the BIS standard approach, Swiss Pfandbriefe have a 20% risk weighting. However, as part of the current planning for the national implementation of Basel III final, it is intended that Swiss Pfandbriefe will receive a 10% risk weighting.

"The countercyclical capital buffer [CCyB] is a (preventative) macroprudential measure for financial stability within the Basel III framework […]. If the capital buffer is activated, banks are required to carry out a temporary and gradual increase in their capital in the event of vulnerabilities on the mortgage and residential real estate markets. The aim is to protect the banking industry from the consequences of excessive lending growth by increasing banks' loss-absorbing capacity. Moreover, a capitalisation means that the costs of lending rise, and this can counter the build-up of vulnerabilities. The capital buffer may be activated for the entire credit market or just for one sector, for instance the mortgage market, and is set at a maximum level of 2.5% of the entire domestic risk-weighted assets of a bank. […] In January 2022, the Federal Council reactivated the sectoral CCyB at the proposal of the SNB, and set it at 2.5% of risk-weighted exposures secured by residential property mortgages in Switzerland. It did so because the reasons that had led to it being deactivated no longer existed and because the vulnerabilities on the mortgage and residential real estate markets had also increased since the deactivation." (www.snb.ch, glossary, CCyB, 18 February 2022)

Basel III – liquidity standards

Switzerland implements Basel III liquidity requirements by means of the "Banking Act" and the "Liquidity Ordinance" (LiqO) into national law. Swiss Pfandbriefe fulfil the Liquidity Coverage Ratio criteria for high-quality liquid assets (Article 15b of LiqO for LCR HQLA 2a: Covered bonds, not self-issued, rated AAA or AA). As a second minimum liquidity requirement for Swiss banks, the "Net Stable Funding Ratio" (NSFR) has been put into effect on 1 July 2021 to ensure long-term stable funding.

Basel III – future standards

Following the 2009 financial crisis, BCBS addressed the final Basel III risk reduction measures in December 2017, which include the structure and process organization for calculating capital requirements for credit, market, liquidity, concentration and operational risks, the output floor for modelled approaches, the leverage ratio and disclosures. The regulatory authority plans to publish the landmark requirements by 2024.

Beyond the Basel risk framework, Article 9 of the National Bank Act also lists the open market operations and standing facilities that the Swiss National Bank (SNB) may contract. The preconditions for entering into a standing intraday or liquidity facility are the granting of a limit by the SNB and the provision of eligible collateral. Only securities included in the latest SNB GC basket may be pledged as collateral for repo transactions (www.snb.ch, financial markets, monetary policy operations, collateral eligible for SNB repos). Swiss Pfandbriefe are part of the SNB GC list and are therefore eligible.

X. INVESTORS BENEFITS

An investor in Swiss Pfandbriefe benefits from

- the special institute principle with strictly limited scope.
- Swiss legislation applicable for all contracts within the Swiss Pfandbrief collateral chain.
- the cover pool, which only includes eligible Swiss franc mortgages on Swiss real estate properties.
- the fourfold security which is 1) the creditworthiness of the Pfandbrief institute, 2) the creditworthiness of the member bank, 3) the creditworthiness of the mortgager and 4) the market value of the real estate property itself.
- in the case of PB: The value of the real estate property is independently determined by PB and not by the member bank.
- in the case of PZ: Explicit state guarantee for most of its member banks[1].
- the fact that since the establishment of the PfG in 1930 neither an investor nor a Pfandbrief institute have ever suffered a loss.

Issuers: Pfandbriefbank schweizerischer Hypothekarinstitute AG (PB) and Pfandbriefzentrale der schweizerischen Kantonalbanken AG (PZ).

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Swiss Pfandbriefe market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

1 Three of PZ's member banks do not benefit from a cantonal guarantee, namely Banque Cantonale Vaudoise AG (VD), Berner Kantonalbank AG (BE) and Banque Cantonale de Genève AG (GE).

3.39.2 SWITZERLAND – CONTRACTUAL LAW BASED COVERED BONDS

By Marco Brück, Valiant Bank, and Michael McCormick, Credit Suisse

I. FRAMEWORK

In 2009 and 2010 respectively, UBS AG (UBS) and Credit Suisse AG (Credit Suisse) established contractual covered bond programmes in order to access covered bond funding in the EUR and USD markets. The UBS and Credit Suisse programmes use Swiss and English law contractual provisions to implement structural features that are standard in the covered bond market. However, in response to evolving regulatory environment and to comply with the Swiss "too big to fail" requirements, Credit Suisse and UBS have since implemented changes to their legal entity structures. Among the required changes were the establishment of new Swiss banking subsidiaries intended to hold (among other businesses) their retail mortgage businesses. These changes necessitated structural changes to the covered bond programmes which UBS and Credit Suisse implemented in June 2015 and November 2016, respectively. Following these changes, Credit Suisse and UBS no longer issue covered bonds out of these programmes.

Starting in 2017, new contractual covered bond programmes were established by Valiant Bank AG (Valiant), Credit Suisse (Schweiz) AG (CS Schweiz) and Crédit Agricole next bank (Suisse) SA (CAnb) in order to diversify their funding sources. As with UBS and Credit Suisse legacy covered bond programmes, these are structured programmes that are not subject to the Swiss Pfandbriefe legislation. However, in contrast to UBS and Credit Suisse's legacy programmes, all of these programmes exclusively use Swiss law provisions and have so far only issued CHF-denominated series.

II. STRUCTURE OF THE ISSUER

In line with the guarantor Special Purpose Vehicle (SPV) model used in the United Kingdom and the Netherlands (among other jurisdictions), the issuers have established Swiss based special purpose companies to guarantee their payment obligations for the benefit of the covered bondholders. All programmes feature direct recourse to the issuer, which remains primarily responsible for payments on the bonds. These guarantor entities hold security over the programmes' respective cover pools and may use the cover pool assets to make payments on the covered bonds should the issuer fail to do so. In case of Valiant, in addition to mortgage claims, the covered bondholders benefit from accessory preferential claims pledged by the mortgagor for the benefit of the issuer and transferred to the guarantor by way of security. The guarantee comes into operation following an issuer event of default, subject to certain conditions. All covered bonds issued under the respective programmes rank *pari passu* with each other and benefit equally from the guarantee. The guarantors are ring-fenced, bankruptcy-remote entities designed to be unaffected by the insolvency of the group to which they are consolidated (guarantors are majority-owned by their respective issuer). All issuers are financial institutions regulated by the Swiss banking regulator, the Swiss Financial Market Supervisory Authority (FINMA).

As part of their legal entity restructurings, UBS and Credit Suisse transferred their residential mortgage businesses to UBS Switzerland AG and CS Schweiz, their newly established domestic subsidiaries. Concurrently, a joint and several liability arrangements were put in place under which these subsidiaries assumed joint and several liability for all contractual obligations of the issuers under the programme, including the covered bonds themselves.

III. COVER ASSETS

The collateral of Swiss contractual law based covered bonds consists of Swiss residential mortgage loans to private individuals and the related mortgage certificates securing such mortgage loans. In case of Valiant, in addition to mortgage claims, the covered bondholders benefit from accessory preferential claims pledged by the mortgagor for the benefit of the issuer and transferred to the guarantor by way of security. The accessory preferential claims are second and third pillar pension fund assets and are not taken into account in the cover pool and in the calculation of the asset coverage test. Substitution assets can also be used as collateral of the covered bonds as long as their aggregate value does not exceed 15% of the cover pool. They comprise deposits in CHF (foreign currencies eligible only for hedging purpose) and authorised investments. The latter need to comply with stringent ratings to be cover pool eligible.

IV. VALUATION AND LTV CRITERIA

The eligibility criteria for initial inclusion the Credit Suisse, CS Schweiz and CAnb cover pool limit mortgages to those with a loan-to-value (LTV) of less than or equal to 100%, while the UBS and Valiant programmes limit eligible mortgages to those with LTV of less than or equal to 80%. Certain provisions within the programmes' asset coverage test (ACT) implement LTV limits by capping the value of each mortgage loan at a specified current LTV. This limit is 70% LTV in the Credit Suisse programme and 80% in the CS Schweiz, UBS, Valiant and CAnb programmes.

Mortgage LTVs are regularly calculated using current market values. In case of both Credit Suisse and Valiant programmes, appraisals are undertaken for each mortgage loan application by a valuation model (the IAZI). This comparative approach is one of the main methods used for the appraisal of real estate properties in Switzerland. The property is compared with thousands of other objects previously sold on the market. The price of the object is statistically estimated by comparing the price of properties with similar attributes in comparable locations. The credit risk management department, responsible for the continuous monitoring of the bank's mortgage portfolio, has the discretionary power to trigger a revaluation based on its analysis outcomes. UBS and CAnb conduct similar estimations of the collateral value for residential mortgages based on the Wüest & Partner valuation model, which is also a hedonic regression model. Other valuation methods may be used at the discretion of the lenders in specific circumstances and taken into consideration.

V. ASSET – LIABILITY MANAGEMEMT

The ACT determines whether the value of the cover pool assets is sufficient for the timely payment of capital and interest owed under the covered bonds and confirms that the minimum overcollateralization (OC) requirements are met. The test is carried out monthly and the results are disclosed in the investor reporting. In addition to the LTV limitations described above, a second part of the ACT haircuts the full balance of the mortgages using an asset percentage (AP). The AP is derived from periodic rating agency feedback and sized to maintain a triple-A rating. The value given to the mortgage assets under the ACT is the lower of (i) the result when applying the LTV limits described above or (ii) the value of the mortgage assets multiplied by the AP. In addition, credit is given to cash and substitute assets while further deductions are made for loans in arrears, borrower set-off risk and potential negative carry. The resulting value must be equal to or exceed the value of the covered bonds outstanding for the test to be passed.

The APs in UBS, Credit Suisse, CS Schweiz and CAnb programmes may fluctuate over time, but are constrained by a maximum value. Valiant uses an alternative ACT ("Aktivendeckungstest"), including a minimum OC. The adjusted value of the Valiant cover pool always has to be equal to at least the nominal value of the outstanding covered bonds including a minimum OC, corresponding to the OC required to maintain the actual ratings up to a maximum committed level capped by contractual provisions at 50%.

The Swiss contractual law covered bond programmes benefit from additional safeguards:

> Exposure to interest rate and currency risks are mitigated by use of derivatives in the UBS programme and legacy Credit Suisse programme. In case of Valiant, CS Schweiz and CAnb, the option to implement derivative instruments is available but has not been to date.

> Liquidity risk is mitigated by the requirements to establish reserve funds, pass an interest coverage test (ICT), maintain pre-maturity liquidity (for hard bullet covered bonds) and the inclusion of 12-months

extension periods (for soft bullet covered bonds). In case of Valiant, the soft bullet structure may not only be applied to a covered bond series after an issuer event of default but may also applied to all outstanding covered bond series after a guarantor event of default (to reduce fire sale risk).

> Minimum rating requirements are in place for the third parties that support the transaction, including the account bank, corporate services provider, servicer and cash manager.

> Commingling risk is mitigated by the requirement of all collections arising from the cover pool assets to be transferred into guarantor cover pool bank account after a specific rating downgrade of the issuer.

> Independent audits of the calculations undertaken on a regular basis by a cover pool monitor.

Upon an issuer event of default following the service of a notice to pay, the Amortisation Test (AT) is run on each calculation date instead of the ACT, and the ICT is no longer run. The AT is similar to the ACT and is designed to mitigate time subordination between the covered bond series therefore ensuring that the cover pool will be sufficient to make payments as required under the guarantee. Upon failure of the test, all covered bonds accelerate against the guarantor.

VI. TRANSPARENCY

The issuers have committed to publishing monthly investor reports on a timely basis. These reports provide information relevant to investors including:

> The monthly calculations of the ACT and the ICT.

> Details of outstanding covered bonds and list of parties involved in the transaction.

> The current balance of programme accounts.

> A mortgage portfolio summary disclosing total balances, average loan balance, number of properties, WA remaining terms and WA LTVs.

> Tables showing number properties and mortgages by remaining term, current LTV, total balance, interest rate type, property region, property type, and arrears.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The issuers are regulated Swiss financial institutions, which are subject to regulation and supervision by FINMA. The cover pool tests comprising the ACT and the ICT as well as AT in case of an issuer's event of default, are checked and verified on a regular basis by an independent cover pool monitor. The results of his review are summarised in cover pool monitor reports for the attention of the guarantor, the issuer and the administrator. The administrator, independent from the issuer, has the duty to advise the bondholder representative (trustee) inter alia upon the breach of a cover pool test. The administrator is responsible for an ongoing monitoring of the cover pool. His main task comprises confirming the accuracy of the inclusion in or the removal from the cover pool, inter alia ensuring that the eligibility criteria are met and verifying that the registered amount in the cover pool is correct. In order to constitute a valid security interest the issuer will no longer be able to dispose over the mortgage certificates by its sole acts. The mortgage certificates can only be accessed with the presence and approbation of the administrator. In addition, rating agencies regularly monitor the programme.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Upon the insolvency of the issuer, the mortgage receivables and the related mortgage certificates and substitute assets would not form part of the issuer's estate. Accordingly, the asset cover pool may be managed and enforced by the guarantors independently from the corporate insolvency proceedings of the issuers. There are a number of trigger events for default, the first being an issuer event of default. This can occur in a number of situations including the following:

> Failure to pay any interest or principal amount when due.

> Bankruptcy proceedings being ordered by a court or authority against the issuer.

> Failure to rectify any breach of the ACT or ICT.

An issuer event of default would not accelerate payments to covered bondholders, but would allow the trustee to activate the guarantee by serving a notice to pay on the guarantor. Upon the guarantee activation, the cover pool is frozen losing its dynamic nature and no further covered bonds may be issued. The guarantor is required to meet the covered bond obligations using the cash flows generated from the cover pool.

With the exception of one outstanding series issued under the legacy Credit Suisse programme, the covered bonds have a non-discretionary soft-bullet structure, a maximal 12-months extension of the principal repayment, in order to allow the realisation of the cover pool. The repayment extension is only granted if the bondholder representative (trustee) has served a notice to pay and neither the issuer nor the guarantor have sufficient liquidity for the repayment of the covered bond series concerned. In case of Valiant Bank, the soft bullet structure may not only applied to a covered bond series after an issuer event of default but may also applied to all outstanding covered bond series after a guarantor event of default in order to reduce fire sale risk.

The second event of default is the guarantor event of default. This would arise after an issuer event of default if the guarantor failed to make any payments when due, failure of the amortisation test or bankruptcy of the guarantor. A guarantor event of default would cause the acceleration of payments to covered bondholders and their early redemption at the amount relevant to that particular covered bonds series.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Swiss contractual-law based covered bonds have a 20% risk weighting under the standardised approach in accordance with the EU Capital Requirement Regulation (CRR) because they have not been issued by an EU credit institution. As of 1 January 2021, Swiss contractual-law based covered bonds cannot qualify for ECB repo eligibility because they are not subject to a legislative framework. Lack of legislation also means that Swiss contractual law based covered bonds are not eligible as level 1 or 2 assets under the European Commission LCR Delegated Act.

Issuers: Credit Suisse AG, Valiant Bank AG, Credit Suisse (Schweiz) AG, Crédit Agricole next bank (Suisse) SA and UBS AG.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

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For further national information on the Swiss contractual law market, please see compare.coveredbondlabel.com/frameworks. To access the “Country Comparison” feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.40 TURKEY

By Deniz Caner Kurt, Garanti Bank

I. FRAMEWORK

Turkish mortgage-covered bonds are branded as "*İpotek Teminatlı Menkul Kıymet ("İTMK")*" and "Mortgage Covered Bond ("MCB")" in Turkish and English respectively and are trademarked by the legislation.

The primary legislation with respect to the İTMKs is the Capital Markets Law No. 6362 ("CML") and the secondary legislation is the Communiqué on Covered Bonds[1] No. III-59.1 ("Communiqué") which was published by the Capital Markets Board ("CMB") on 21 January 2014 (as amended from time to time). The Communiqué regulates the MCBs as well as other asset-backed covered bonds; however, this chapter will focus exclusively on MCBs.

Together with its predecessors, the Communiqué is part of a series of legislation following the enactment of "The Housing Finance Law (No: 5582)" on 6 March 2007, which aims to establish a healthy and functioning housing finance system in Turkey.

II. STRUCTURE OF THE ISSUER

İTMKs are capital market instruments qualified as debt instruments, issued within the scope of the issuer's general liability and collateralized by cover assets.

İTMKs may be issued by housing finance institutions (HFIs) and mortgage finance institutions (MFIs). While MFIs are joint stock companies defined in Article 60 of the CML (which entities are joint stock companies, established for the purpose of acquiring and transferring assets with qualifications designated by the CMB, managing such assets or taking such assets as collateral and conducting other activities approved by the CMB within the scope of housing finance and asset finance), HFIs are banks, financial leasing companies and finance companies authorized by the Banking Regulatory and Supervision Agency ("BRSA") to perform housing finance activities.

The issuers are required to obtain CMB approval for the issuance certificate which provides an annual blanket limit and the tranche issuance certificate before each issuance. For the public offerings in Turkey, the prospectus has to be CMB approved as well.

III. COVER ASSETS

An issuer of MCBs is required by the Communiqué to maintain a cover pool for the benefit of such MCBs, which must be in compliance with, inter alia, quantitative statutory tests and the eligibility criteria of the Communiqué. Pursuant to the Communiqué, a cover pool may be created with the following assets:

> receivables of banks and finance companies, resulting from house financing as defined in Article 57 of the CML, which have been secured by establishing a mortgage at the relevant registry;

> commercial loans and receivables of the banks and financial leasing companies and finance companies, which have been secured by establishing mortgage at the relevant registry or, if approved by the CMB; otherwise,

> substitute assets, which include cash (including cash generated from cover assets), Turkish government bonds issued for domestic and foreign investors, securities issued or secured by the central government or the central banks of OECD member states, among some others, and

> derivative instruments fulfilling the conditions of the Communiqué. The Communiqué caps the ratio of the net present value of commercial loans/receivables and the substitute assets separately at 15% of the total net present value of the cover assets.

1 http://www.mevzuat.gov.tr/Metin.Aspx?MevzuatKod=9.5.19314&MevzuatIliski=0&sourceXmlSearch=Teminatl%C4%B1%20Menkul%20K%C4%B1ymetler%20Tebli%C4%9Fi.

In Turkey, almost all mortgage loans are fixed rate loans and, as a result of a change of law in 2009 requiring loans to Turkish citizens to be denominated in Turkish Lira, all are denominated in Turkish Lira other than a very small number of mortgage loans made to foreign citizens with residences in Turkey. Payments on mortgages are almost always monthly and generally are effected by having the lending bank withdraw funds from a bank account held by the borrower with the lending bank.

The maximum maturity for residential mortgage loans in Turkey is typically 240 months (with only one institution providing loans up to 360 months, while some major banks have a maximum maturity of 120 months).

Finally, as a matter of Turkish law, borrowers of mortgage loans are required to maintain earthquake insurance for the related real property, subject to a maximum claim of TL 240,000.

The Communiqué sets out the specific requirements that derivative instruments need to satisfy in order for such derivative instruments to be recognized as part of the cover pool. In general:

> the derivative instrument must be traded on exchanges or the derivative counterparty needs to be a bank or financial institution (multi-lateral development agencies also qualify);

> the derivative counterparty needs to have an investment grade long-term international rating (which is tested at the time of entry into of the derivative instrument);

> the derivative instrument cannot be unilaterally terminated by the derivative counterparty even in the event of the bankruptcy of the Issuer; with the exception that, a provision that the parties may unilaterally terminate the agreements regarding derivative instruments in case of the events provided below may be included in such agreements:

- the issuer fails to satisfy fully or partially its total liabilities and the cover assets including derivative instruments are not sufficient to meet the total liabilities,
- the occurrence of impossibility, illegality under the applicable legislation and material change of legislation with respect to terms of the agreement,
- the early redemption of the MCBs, and
- the non-registration to, or removal from, the cover register of the agreement regarding derivative instruments contrary to the provisions thereof.

In addition, in order to include the provisions that the parties may unilaterally terminate the agreement in the above-mentioned events and in other events that the CMB deems similar to these events, the approval of the CMB must be obtained; and

> the derivative instrument must contain fair price terms and reliable and verifiable valuation methods.

IV. VALUATION AND LTV CRITERIA

The immovable properties securing the mortgage loans must be located in Turkey and the market price of the immovable property is required to have been determined by an independent appraisal company that is listed by the BRSA or the CMB, at the time of utilization of the mortgage loan.

Typically, the appraisers (a) visit the relevant Land Registry Office, municipality and for on-site measurements the real property to be mortgaged, (b) conduct research regarding reference values.

With respect to loan to value requirements, the portions of the residential mortgage loans and commercial mortgage loans exceeding respectively 80% and 50% of the value of the real estate securing them shall not be taken into consideration in the calculation of the cover matching principles, which are discussed in detail in the following section.

The Communiqué requires the issuers to monitor the general changes in the property prices securing their mortgage loans and determine the ratio of such change annually at the end of each calendar year based upon a generally accepted index, if available. The best established index in Turkey is the Property Price Index (Konut Fiyat Endeksi) (the "KFE") released by the Central Bank on a monthly basis. The calculation of the KFE is based upon the price data of all the properties sold in Turkey irrespective of the construction year of the properties. The price data is obtained from valuation reports prepared for the purpose of evaluating mortgage loan applications made to 10 Turkish banks. If the issuers identify a decline in the property prices within a specific geographical region or in Turkey in general, then they must decrease the value of the relevant property by applying the property price change ratio and re-calculate whether the cover pool assets comply with the requirements of the Communiqué.

V. ASSET – LIABILITY MANAGEMENT

The cover pool must also comply with certain cover matching principles, which shall be monitored by the issuer at every change relating to the cover assets and, in any case, at least once a month. The matching principles involve:

> **Nominal value matching:** The nominal value of the cover assets may not be less than the nominal value of the MCB. While calculating the nominal value for purposes of this test, the balance of the principal amounts of the mortgage loans, the issuance price of the discounted debt instruments, and the nominal value of the premium-debt instruments shall be taken into consideration. Contractual value of the derivative instruments shall not be taken into consideration for the calculation of nominal value matching.

> **Cash flow matching:** The sum of interest, revenues and similar income that are expected to be generated from cover assets within 1 year following the calculation date may not be less than the similar payment obligations expected to arise from total liabilities under the MCBs and derivative instruments if any, during the same period.

> **Net present value matching:** The net present value of the cover assets must at all times be at least 2% more than the net present value of total liabilities under the MCBs and derivative instruments if any. This mandatory excess cover of 2% must be constituted of substitute assets.

> **Stress tests:** The responsiveness of the net present value matching to the potential changes in interest rates and currency exchange rates shall be measured with monthly stress tests. In order to measure the effect of the changes in interest rates, the yield curves obtained from swap rates shall be slid downward and upward in parallel. Parallel sliding shall be made by increasing or decreasing the TL interest rate applicable for each maturity by 300 basis points and the foreign currency interest rate applicable for each maturity by 150 basis points. In order to measure the effect of changes to the currency exchange rates on the cash flows in foreign currency, the foreign exchange buying rate shall be increased and decreased by 30%.

VI. TRANSPARENCY

According to Article 15 of the CML, information, events and developments which may affect the value and price of capital market instruments or the investment decision of investors shall be disclosed to public by issuers or related parties.

The Public Disclosure Platform (PDP) is an electronic system through which electronically signed notifications required by the capital markets and Borsa Istanbul regulations are publicly disclosed. In addition to Borsa Istanbul companies and ETFs, investment firms, mutual funds, pension funds and foreign funds may submit notifications to PDP. Independent audit companies, on the other hand, send the electronically signed financial statements for which independent audit is required, to the relevant company electronically in order to be announced to the public. However, some information on PDP may be published only in Turkish. Please see https:// www.kap.org.tr/en/menu-content/About-PDP/General-Information for further information.

In order to ensure that the covered bond holders are informed:

> compliance reports on the cover matching principles and the notifications made by the cover monitor (a third party who monitors the cover pool) are required to be announced on the website of the issuer and on the PDP on the day on which the cover monitor delivers its report or the notification to the issuer;

> an investor report is required to be announced on the website of the issuer and on the PDP within six business days following the end of the quarterly accounting period; and

> the fact that the issuer has not fulfilled its payment liabilities under the MCBs partially or fully is required to be announced on the website of the issuer and on the PDP on the date when such fact is known to the issuer.

If MCBs are issued without any public offering, the above-noted announcements are required to be delivered to the MCB investors online, through the Central Registry Agency, and shall be published in the website of the issuer for access by the MCB investors. The Issuer can freely determine the method of such announcements if MCBs are issued abroad.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Pursuant to the Communiqué, an issuer is required to appoint a cover monitor who will be responsible for monitoring the cover pool and will report to the CMB and the issuer with regard to the cover pool. The cover monitor is appointed by the issuer and must possess the expertise and experience necessary to fulfil all of its statutory duties. The company that conducts the independent audit on the financial statements of an issuer may not be designated as a cover monitor. The cover monitor is to be appointed through a cover monitor agreement, a copy of which is to be sent to the CMB within three business days of its execution. The cover monitor can only be removed from its duties by the issuer based upon just grounds to be submitted to the CMB in writing and by obtaining the consent of the CMB.

Cover monitor should, among others:

> monitor formation of the cover pool with eligible assets;

> monitor cover pool's compliance with cover matching principles and accuracy of the stress test measurements;

> in case the cover register is kept in electronic form, inspect the adequacy of such system and submit a report including the results of this inspection to the issuer, together with a copy to the Board;

> examine the accuracy of the entries made regarding addition, removal or replacement of cover assets by reviewing the underlying loan documentation and other information and documents, as it may deem necessary;

> in the event of a cover matching principle violation or a default by the issuer, inspect whether measures in connection therewith set forth under the Communique is followed;

> prepare a report at least semi-annually (at least quarterly in case of issuances offered to public in Turkey) indicating its findings regarding compliance with cover matching principles and entries made regarding removal or replacement of cover assets and, if applicable measures to be taken following violation of cover matching principles or default.

The cover monitor is required to report any inconsistencies in the cover register or failures in matching principles to the issuer.

The cover monitor is also authorised to conduct a discretionary review of the cover assets, including substitute assets as well as the derivative instruments in place.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

A cover register held by the issuer permits the identification and segregation of the cover assets. The collateral backing the MCBs is to be registered in book and/or in electronic form.

Until the MCBs are completely redeemed, even if the management or the supervision of the issuer is transferred to public institutions, cover assets cannot be disposed of for any purpose other than securing MCBs, pledged, or designated as collateral, attached by third parties, including for the collection of taxes or other public receivables, or subject to injunctive decisions of courts or included in the bankruptcy estate of the issuer.

In the event that: (a) the management or supervision of an issuer is transferred to public institutions, (b) the operating license of an issuer is cancelled or (c) an issuer is bankrupt, the CMB may appoint another bank or a mortgage finance institution (in both case, satisfying the requirements for issuers of covered bonds), the cover monitor, another independent audit company or an expert third party institution approved by the CMB to act as an administrator. This administrator would not be assuming the liabilities arising from the cover pool but would manage the cover pool and seek to fulfil the liabilities arising from the cover pool from the income generated from the cover pool.

The administrator may actively manage the cover pool to seek to ensure that the payments under the MCBs and derivative instruments arising from the cover pool are made in a timely manner, and if necessary may sell assets, purchase new assets, utilise loans or conduct repo transactions. The administrator also may (after obtaining the approval of the CMB) transfer the cover pool and the liabilities arising from the cover pool partially or fully to another bank or to a mortgage finance institution satisfying the qualifications required for issuers. In such case, transferee bank or MFI shall become the owner of the cover assets upon such transfer and shall become responsible for the payments arising from total liabilities. The administrator may also suggest the CMB that the MCBs be redeemed early.

Pursuant to the Communiqué, the covered bondholders and hedging counterparties do not need to wait until the completion of the liquidation of the assets in the cover pool for recourse to the other assets of the issuer, with respect to which they will rank pari-passu with unsecured creditors of the issuer.

IX. COMPLIANCE WITH EUROPEAN LEGISLATION

As Turkey is not currently a member of the EU, MCBs are not UCITS-compliant and, therefore, are not compliant with the EU's Capital Requirements Regulation (CRR) and do not qualify for beneficial treatment under the CRR.

The EU opened accession negotiations with Turkey on 3 October 2005. As a candidate for EU membership, Turkey will be obliged to be compliant with EU Directives in case of full membership. Thus, in recent years Turkish authorities were strongly aligning banking regulations to EU standards. The revised Accession Partnership of the EU with the Republic of Turkey from 18 February 2008 foresees that Turkey adapts its regulations to the CRR.

The EU progress report on Turkey, published in October 2013, acknowledges that preparations in the area of financial markets are "advanced" and specifically mentions the newly adopted CML, which aims at "further aligning the legislative framework with the acquis", the whole body of EU law.

Issuers: VakifBank.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the Turkish market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.41 UNITED KINGDOM

By Ian Stewart, UK RCBC

The UK covered bond market has been established since 2003 and was initially based on general English law structured finance principles before the introduction by HM Treasury in March 2008 of a dedicated covered bond regulatory framework (the Regulated Covered Bonds Regulations 2008 (the "Regulations")). The Regulations overlaid the existing general law and contractual structures, providing the necessary underpinning for compliance under Article 52(4) of Directive 2009/65/EC (the "UCITS Directive") providing the UK structure with benefits including higher investment limits and higher investment thresholds for insurance companies. All UK regulated covered bonds also comply with the definition of covered bonds set out in Regulation (EU) 575/2013 (Capital Requirements Regulation, or "CRR") thereby qualifying for lower risk-weightings. The Regulations were further amended in November 2011 and November 2012 to further promote the "transparency of UK covered bonds and creating a more prescriptive regulatory framework"[1]. The amendments became effective for regulated programmes from 1 January 2013. Following the UK's departure from the EU in January 2021 the Covered Bond Directive will not be implemented in the UK until Third Country recognition is achieved. UK covered bond regulations are closely aligned to the Directive.

Regulated covered bonds are subject to special public supervision by the Financial Conduct Authority (FCA) as Special Public Supervisor, whose stated aims are to ensure a robust regulated covered bond market in the UK, and to ensure that quality is maintained to preserve investor confidence in the UK regulated covered bond market's reputation. The FCA has a wide range of enforcement powers under the Regulations, including the power to issue directions, de-register issuers or fine persons for any breaches of the requirements under the Regulations.

I. FRAMEWORK

Under the Regulations, in order to attain "regulated" status there are two general sets of requirements the issuers need to comply with: those relating to issuers and those relating to the covered bond programmes. Issuers are permitted (but are not required) to submit their covered bond programmes to the FCA for recognition. Those issuers and covered bonds that meet all of the criteria set out in the Regulations and are approved by the FCA are added to the register of regulated covered bonds maintained by the FCA[2]. The Regulations only apply to those covered bonds which have been admitted to the register. In practice, all programmes which are used for new primary public issuance are regulated under the RCB Regulations.

Most elements of the regulated covered bond structure are governed by contract, with the Regulations providing an overarching legislative and supervisory framework without prescribing the complete design and contractual arrangements for the product. Structures are, by and large, relatively homogenous among themselves as a consequence of a deliberate intention from relevant market stakeholders to ensure comparability between programmes. The Regulations do, however, prescribe certain key structural principles and requirements, including a minimum statutory overcollateralisation amount of 108%, the requirement that assets must always remain capable of covering claims attaching to covered bonds at all times, and priority of claims against the cover pool in a winding up scenario. The FCA also has a veto over material amendments to the contracts, broad powers to enforce its provisions and conducts its own rigorous ongoing review of regulated programmes.

1 All UK regulated covered bond key documents are available at the following link: https://www.fca.org.uk/firms/regulated-covered-bonds/key-documents.

2 The register may be found at https://www.fca.org.uk/firms/regulated-covered-bonds/register.

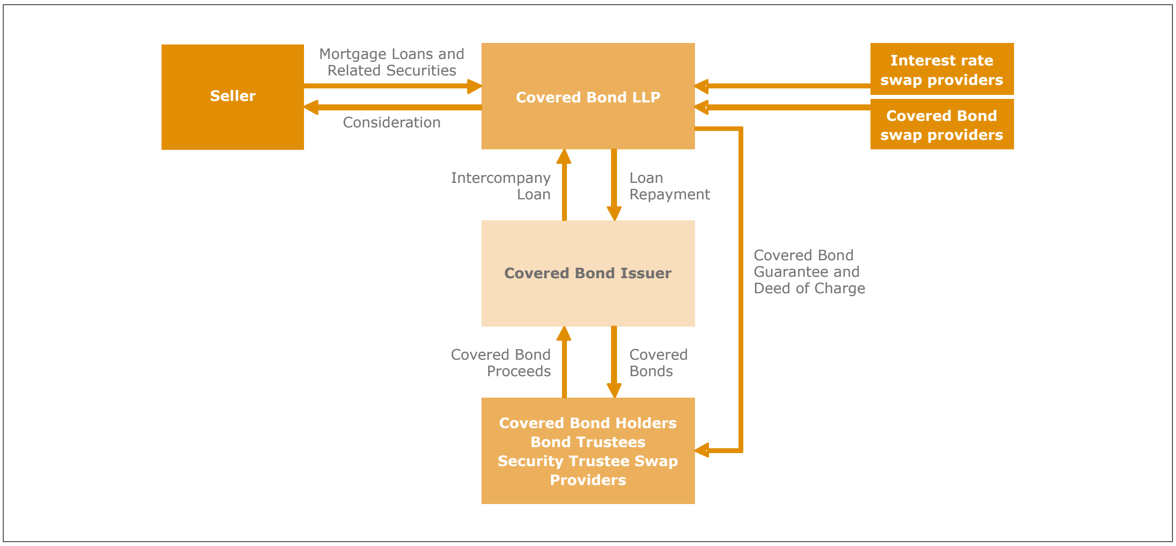
II. STRUCTURE OF THE ISSUER

The Regulations require the issuer to be a credit institution authorised in the UK to carry out regulated activities, such as deposit-taking. It must also have a registered office in the UK and meet certain additional criteria set out by the FCA.

Regulated covered bonds are direct, unconditional obligations of the issuer; however, investors also have a priority claim over a pool of cover assets in the event of the insolvency of or default by the issuer. The Regulations require all cover assets (including any substitution assets) to be segregated from the insolvency estate of the issuer by being sold to a special purpose entity (referred to in the Regulations as the "owner"), which guarantees the issuer's obligations under the bonds and provides security over the cover assets to a security trustee on behalf of the investors. All transactions to date have used a limited liability partnership (LLP) for this purpose, with the transfer effected via equitable assignment. The purchase price paid by the LLP for the cover assets is either cash (funded by an inter-company loan from the issuer) or a partnership interest in the LLP (a "capital contribution in kind").

If the guarantee is activated, the LLP will use the cash flows from the cover pool to service the covered bonds. If these cash flows are insufficient, or within a certain timeframe of the legal final maturity of the bonds, the LLP is permitted to sell cover assets, within certain defined parameters and subject to meeting certain tests to ensure equality of treatment of bondholders.

> Figure 1: Generic UK covered bond programme structure



Source: Programme Prospectuses

III. COVER ASSETS

The Regulations broadly allow the following asset types:

> Assets which are listed in Article 129 of the CRR, subject to the following restrictions:

> Exposures to credit institutions with ratings below Credit Quality Step 1 (AA-) as set out in the CRR are not permitted; and

> Securitisations are not permitted.

> Certain assets which are not permitted under the CRR – namely loans to registered social landlords and loans to public-private partnerships (and loans to providers of finance to such companies, and subject in each case to certain restrictions).

> Liquid or "substitution" assets up to the prescribed limit (10% in most cases to date).

Issuers are required to designate programmes as either "single asset type" or "mixed asset type". Mixed asset type programmes are allowed to include any of the assets set out above, whereas single asset type programmes would be required to select either residential mortgages, commercial mortgages, or public sector loans (including social housing and PPP loans, which are not CRR-eligible), in each case as defined in the CRR.

The Regulations include a narrow definition of liquid or "substitution" assets, which are defined as UK government bonds (or other government bonds which comply with the requirements set out in Article 129(1)(a) or

(b) of the CRR or deposits in GBP or another specified currency held with the issuer or with a credit institution which comply with the requirements set out in Article 129(1)(c) of the CRR.

Cover assets must be situated in the UK, EEA states, Switzerland, the US, Japan, Canada, Australia, New Zealand, the Channel Islands or the Isle of Man. If an issuer includes non-UK assets in its cover pool, it must get confirmation that the laws of the relevant jurisdiction would not adversely affect the rights of the LLP or the security trustee.

The Regulations require cover assets to be of high quality, and the FCA is permitted to reject any application for regulated status if it believes that the quality of the proposed assets will be detrimental to the interests of investors in regulated covered bonds or the good reputation of the regulated covered bonds sector in the United Kingdom.

In all of the programmes that have been registered to date, the cover pools consist of assets with narrower eligibility criteria than those allowed under the Regulations, and comprise only UK residential mortgages and the substitution assets described above.

IV. VALUATION AND LTV CRITERIA

The properties securing the mortgage loans are valued using UK mortgage market accepted practice. A surveyor is often used, although other methods (such as automated valuation models) are also accepted. Residential property values are indexed to either the ONS, Halifax or Nationwide real estate price indices, each of which reports quarterly on a region-by-region basis. Price decreases are fully reflected in the revaluation, while in the case of price increases a 15% haircut is generally applied.

The LTV limit for mortgages varies across the different programmes (see Figure 2), but in all existing programmes it is below the 80% level for residential mortgages required under the CRR and the Regulations. Loans with LTV above this limit may be included in the pool, but the amount of the loan which exceeds the limit is excluded from the Asset Coverage Test (ACT). Loans which are in arrears are either repurchased by the issuer or subject to additional haircuts (see Figure 2).

V. ASSET – LIABILITY MANAGEMENT

For UK regulated programmes, overcollateralisation (OC) levels are determined by the higher of:

(i) the regulatory minimum of 108% specified in the Regulations calculated on a nominal basis,

(ii) contractual minimum amounts specified in the legal agreements,

(iii) requirements imposed by the FCA, and

(iv) amounts required to pass the programme's ACT (in particular as required to support the given rating level from the relevant rating agencies).

However, the OC required by the rating agencies and/or FCA are typically higher.

A key principle of the Regulations is that they require the cover pool to be capable of covering all claims attaching to the bonds at all times. In addition to the amounts required either under the regulatory minimum or under the contractual requirements, the OC level for any programme is also considered by the FCA on a case-by-case basis, taking into account the quality of the cover assets, risk-mitigation measures (such as swaps and downgrade triggers) and asset-liability mismatches. The FCA has the power to require the issuer to add further assets to its cover pool.

The principal contractual requirement under UK structures is the presence of a dynamic ACT which is carried out on a monthly basis to ensure that minimum OC requirements are satisfied. The ACT requires the discounted value of the cover pool (after applying the haircuts listed below) to be equal to or exceed the principal amount outstanding of covered bonds. The following haircuts are applied:

> The adjusted value of the mortgage pool is calculated by taking the lower of: (i) balance of mortgages up to the indexed LTV limit specified in the programme documents, and (ii) the asset percentage multiplied by the balance of mortgages.[3] Performing mortgages get credit 60-75% while for non-performing mortgages (i.e. >3m in arrears) this is 0-40%, depending on the programme.

> Any cash or substitution assets are also included.

> Additional haircuts are applied to mitigate set-off risk, redraw risk on flexible mortgages (if appropriate), and potential negative carry.

The asset percentage is determined on an on-going basis by the rating agencies and is subject to a maximum as set out in the programme documents (which corresponds to the minimum contractual requirement, Figure 2).

The issuer is required to rectify any breach of the ACT within a specified timeframe by transferring additional cover assets to the LLP. If the breach is not rectified within the allowed remedy period, the trustee will serve a notice to pay on the LLP (see Section VIII below). The issuer may also become liable to enforcement action by the FCA.

An amortisation test is run on each calculation date after the delivery of a notice to pay (see Section VIII below), which is designed to ensure that the cover pool will be sufficient to make payments under the covered bonds as required under the guarantee. The amortisation test is similar to the ACT, but more simply tests whether the principal balance of mortgages is sufficient to make payments in full on covered bonds, taking into account negative carry. If the test is failed, the covered bonds will accelerate against the LLP.

Most UK covered bond transactions currently in the market have been issued with a soft-bullet maturity. Following the service of a notice to pay, the legal final maturity may be extended, typically by 12 months, in order to allow the realisation of the cover assets. It is important to note that the issuer does not have the option to extend the bond's maturity; failure by the issuer to repay the bond in full on the scheduled maturity date would result in an event of default.

Certain programmes include a hard bullet option, whereby a "pre-maturity test" is designed to ensure that the LLP has sufficient cash available to repay the bonds, in full, on the original maturity date in the event of the issuer's insolvency. If, in a specified period before a maturity date (6-12 months, depending on the issuer and the rating agency), the issuer's ratings fall below certain specified triggers (typically A-1 / P-1 / F1), the pre-maturity test requires the LLP to cash-collateralise (either via cash contributions from the issuer or by

3 For example: Let us assume a cover pool which contains two loans. Each loan has a principal balance of GBP 80 and is secured by a property worth GBP 100. If the ACT applies an LTV cap of 75% and an asset percentage of 90%, the issuer will get credit for GBP 144 of loans: applying the LTV cap would allow GBP 150 (maximum 75% LTV for each loan); but the asset percentage allows a lower amount (GBP 160 x 90% = GBP 144) and therefore takes precedence.

selling cover pool assets) its potential obligations under the guarantee. Following the implementation of the LCR Delegated Act and the consequent liquidity impact of a hard bullet option, most issuers only use the soft bullet (extendible) maturity option going forward and indeed certain programmes have converted legacy hard bullet issuances to soft bullets via investor consent solicitation processes.

All regulated covered bond programmes include a number of other safeguards. In particular, there are minimum rating requirements for the various third parties that support the transaction, including the swap counterparties and bank account providers, and an independent asset monitor is required to undertake an audit of the cash manager's calculations on a regular basis. Furthermore, if the issuer's short-term ratings are below certain trigger thresholds (typically A-1+/P-1/F1+), the LLP is required to establish and maintain (from the asset cash flows), a reserve fund which is the higher of (i) the next three months' interest payments on a rolling basis, and (ii) the next following interest payment, together with the relevant amount of senior costs including a buffer. This amount is retained in the LLP's bank account.

VI. TRANSPARENCY

UK regulated covered bond programmes benefit from extremely detailed investor reporting conventions. The market has conformed to a relatively high standard of reporting since inception, but in addition the FCA requires detailed reporting to be provided by regulated issuers in its capacity as special public supervisor.

Similarly, transparency is to a large extent driven by the eligibility criteria in the Bank of England (BoE) Sterling market operations, under which (among other things) issuers must publish transaction documentation, provide homogenised transaction summaries and investor reports, and publish loan level data.

FCA reporting requirements are closely aligned with the BoE criteria but also include certain additional items not included in the BoE criteria. Since the introduction of the updated amendments, all regulated issuers comply with both sets of rules.

In addition, seven of the fourteen UK regulated covered bond issuers (Clydesdale Bank, Coventry Building Society, Lloyds Bank, Nationwide Building Society, National Westminster Bank plc, Santander UK and Yorkshire Building Society) have adopted the ECBC label initiative and report in the UK National Transparency Template: https://www.coveredbondlabel.com/issuers/national-information-detail/27/.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

An applicant under the Regulations must be a credit institution authorised in the UK to carry out regulated activities, such as deposit-taking. Issuers must satisfy the FCA that their programmes comply with the criteria set out in the Regulations and provide, among other things:

- Details on the quality of cover assets and the ability of the assets on the issuer's balance sheet to satisfy substitution requirements;
- Details concerning the programme structure, such as the cover pool eligibility criteria, the formulae used to calculate compliance with minimum OC requirements, ability to meet payments on a timely basis and ratings triggers;
- Details concerning asset and liability management, audit and controls, risk management and governance framework;
- Details on the proficiency of cash management and servicing functions;
- Detailed analysis on the ability of the assets and the mitigants within the programme structure to address inherent interest rate, currency, asset and liability mismatch and market value risks;
- Arrangements for the replacement of key counterparties; and
- Independent legal and audit opinions on the compliance of the issuer and programme with the Regulations.

The issuer is responsible for monthly cover pool monitoring. The FCA must be notified by the issuer of any breaches of the ACT, and may also require the issuer to provide such additional information about the cover pool as it considers fit. All existing programmes have at least one internationally recognised rating agency who will also undertake detailed reviews both on a condition precedent to each issuance, and thereafter on at least a quarterly basis as part of ongoing transaction surveillance. The rating agencies may revise the asset percentage as part of these review processes, either due to variations in asset quality or embedded transaction risk factors, or due to periodic rating criteria change.

All programmes since inception have included an independent third party asset monitor within the existing contractual arrangements who are required to perform various functions within the transaction including an annual review of the ACT calculation, and periodic audit procedures to be undertaken with respect to the asset pool.

In November 2011, the Regulations were updated to formally codify the role of an independent "Asset Pool Monitor" which (i) must be eligible to act as an independent auditor (ii) is conveyed with certain powers to inspect books and records associated with the relevant programme, (iii) must conduct a biannual inspection of the issuer's compliance with its duties as set out in the Regulations, and (iv) must report to the FCA on an annual basis (or sooner if the issuer is found to be failing to comply with its duties). These additional requirements became effective on 1 January 2013 and regulated programmes have generally been updated to reflect the amendments.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

The Regulations require all cover assets (including any substitution assets) to be segregated from the insolvency estate of the issuer by being transferred to a special purpose entity (referred to as the "owner" in the Regulations), which guarantees the issuer's obligations under the bonds. All transactions to date have used an LLP for this purpose.

The Regulations require that the cover assets be recorded on a register maintained by or on behalf of the issuer and the LLP. The register must be available for inspection by the FCA. The issuer is responsible for ensuring that all cover assets meet the relevant eligibility criteria set out in the Regulations and, if applicable, any additional criteria set out in the programme documents.

The LLP becomes obliged to pay the covered bondholders under the guarantee upon delivery by the bond trustee of a notice to pay following the occurrence of an issuer event of default or other trigger event. The events which can trigger a notice to pay typically include:

> Failure by the issuer or any group guarantors to pay any interest or principal on the covered bonds when due;

> Bankruptcy or similar proceedings involving the issuer or any group guarantors;

> Failure to rectify any breach of the asset coverage test (in most cases); and

> Failure to rectify any breach of the pre-maturity test (if applicable).

To the extent that an issuer event of default has occurred, the bond trustee may commence proceedings against the issuer and any group guarantors on an unsecured basis on behalf of the covered bondholders. The delivery of a notice to pay does not however accelerate payments to noteholders, and the LLP will continue to make payments of interest and principal on the covered bonds on their originally scheduled payment dates (provided that an LLP acceleration event (as described below) has not occurred).

LLP acceleration events typically include:

> The LLP fails to pay any interest or principal when due under the guarantee;

> Bankruptcy or similar proceedings are commenced involving the LLP; and

> After delivery of a notice to pay, the LLP breaches the "amortisation test".

The occurrence of an LLP acceleration event causes the acceleration of payments by the LLP to covered bondholders and the redemption of the bonds at the relevant early redemption amount.

The LLP is reliant on the proceeds derived from the cover assets to make payments under the guarantee. Under the Regulations, in a winding up scenario, no claims against the cover assets can rank ahead of the claims of the regulated covered bondholders. If the proceeds from the cover pool are insufficient to meet the obligations to bondholders in full, investors will continue to have an unsecured claim against the issuer (and any group guarantors) for the shortfall.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The list of eligible assets under the Regulations is in some respects narrower than that set out in the CRR (particularly for single asset type programmes as described above). To date, all existing regulated covered bonds are contractually restricted to containing only residential mortgage assets (as well as substitution assets up to the prescribed limit), meaning they are CRR-compliant. However, certain assets which are excluded from the CRR – such as loans to UK housing associations – are technically permitted in the cover pool under the Regulations, and so it is possible that in future programmes could be structured which would not qualify. The UK departure from the EU has resulted in some regulatory changes for investors in the EU and the details have yet to be clari- fied at the time of writing.

> Figure 2: Overview – Regulated UK covered bond programmes

	BACR	BOS	CLYDES	COVBS	LEEDS	LLOYDS	NWIDE	NATWEST	SANUK	SKIPTON	TSB	YBS
Programme volume (bn)	EUR 35	EUR 60	EUR 7	EUR 7	EUR 7	EUR 60	EUR 45	EUR 25	EUR 35	EUR 7.5	GBP 5.0	EUR 7.5
Rating (M/F/S)	Aaa / AAA / AAA	Aaa / AAA / AAA	Aaa / AAA / nr	Aaa / AAA / nr	Aaa / AAA / nr	Aaa / AAA / nr	Aaa / AAA / AAA	Aaa / AAA / nr	Aaa / AAA / AAA	Aaa/AAA	Aaa / nr / nr	Aaa / AAA / nr
LTV cap	75%	60%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
House price index	Halifax	Halifax	Halifax	Nation-wide	ONS	Halifax	Nation-wide	Halifax	Halifax	Halifax	Halifax	Avg. of Halifax & Nation-wide
Maximum asset percentage	84.5%	86.5%	92.5%	90.0%	93.5%	92.0%	93.0%	90.0%	89.3%	92.5%	89.0%	88.0%
Minimum OC*	18.3%	15.6%	8.1%	11.1%	8.0%	8.7%	8.0%	11.1%	12.0%	8.1%	12.3%	13.6%
Current asset percentage	84.5%	86.5%	87.5%	87.0%	83.0%	92.0%	90.0%	90.0%	89.3%	90.0%	89.0%	88.0%
Current OC	66.1%	125.8%	68.8%	58.6%	16.3%	35.7%	17.3%	157.1%	16.4%	29.3%	28.3%	42.8%
Credit for loans in arrears (>3 months)	LTV<75: 40% LTV>75: 25%	No credit	LTV<75: 40% LTV>75: 25%	LTV<75: 40% LTV>75: 25%	LTV<75: 40% LTV>75: 25%	LTV<75: 40% LTV>75: 25%	LTV<75: 40% LTV>75: 25%	<3M: 75%, >3M: 25%	LTV<75: 40% LTV>75: 25%	LTV<75: 40% LTV>75: 25%	LTV<75: 40% LTV>75: 25%	LTV<75: 40% LTV>75: 25%
Can issue hard bullets? **	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No	Yes	No
Asset monitor	PWC	KPMG	KPMG	Deloitte	Deloitte	PWC	PWC	Deloitte	Deloitte	Deloitte	PWC	Deloitte

Source: Investor reports, FCA Register.

* OC = Overcollateralisation; minimum OC calculated as 1/maximum asset percentage, subject to regulatory minimum of 8%
** Hard-bullets possible only if pre-maturity test is in place and passed / soft-bullets issued with 12-months extension.

X. ADDITIONAL INFORMATION

There are currently 14 regulated covered bond issuers in the United Kingdom: Bank of Scotland Plc (BOS); Barclays Bank Plc (BACR); Clydesdale Bank Plc (CLYDES); Co-operative Bank plc (COOP); Coventry Building Society (COVBS); HSBC UK Bank plc (HSBC); Leeds Building Society (LEED); Lloyds Banking Group (LLOYDS), Nationwide Building Society (NWIDE); National Westminster Bank plc (RBS); Santander UK (SANUK); Skipton Building Society (SKIPTN); TSB (TSBLN) and Yorkshire Building Society (YBS).[4]

All are members of the UK Regulated Covered Bond Council (UK RCBC) and further details can be found at www.UKRCBC.org. Only 12 programmes had bonds outstanding at the end of 2021 and the details of those programmes are set out in figure 2. Two issuers (Bank of Scotland and Coventry) also had unregulated programmes at the end of 2020.

The outstanding volume of regulated covered bonds at the end of 2021 amounted to EUR 88.7 bn equivalent, with a further EUR 3bn of unregulated covered bonds, giving a total value of outstanding bonds of EUR 91.7 bn (see Figure 3). This was down from EUR 97.8bn at the previous year end.

New issuance of regulated bonds in 2021 amounted to EUR 9.8bn, of which EUR 6.2bn were privately placed and EUR 3.6bn were publically issued (see Figure 4). There was also an issue of EUR 1.2bn of unregulated bonds. This reflected the ongoing impact of the Coronavirus pandemic and the availability of funds from the Bank of England under the Term Funding Scheme.

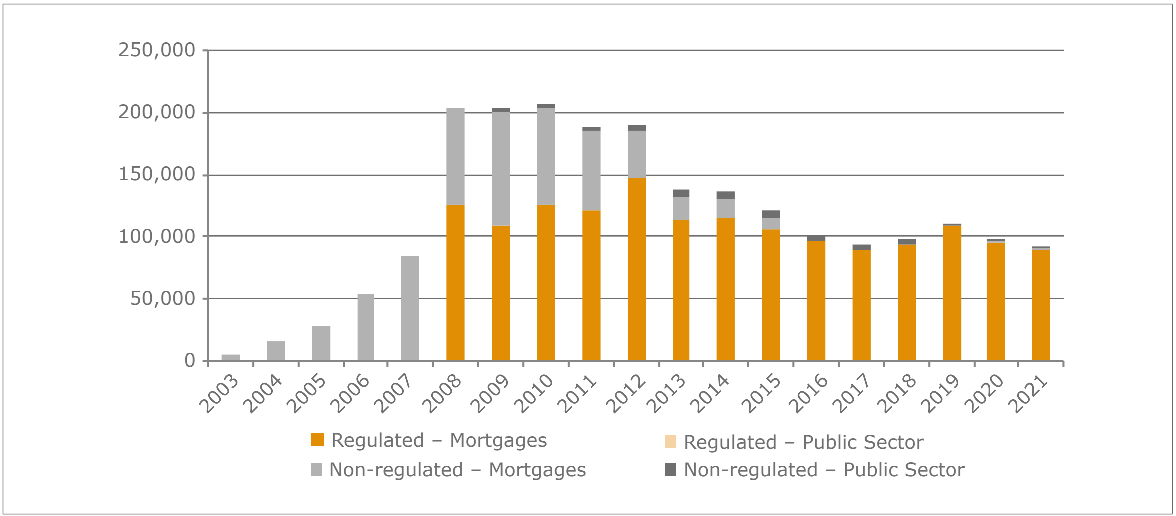
Redemptions during 2021 totaled EUR 17bn and exceeded new issuance, leading to the drop in outstanding bonds. This continued the trend observed in 2020. There were five active issuers in 2021 compared to six in 2020.

As at 2021 year end, 41% of all UK covered bonds were denominated in EUR, with GBP making up the majority of the balance at 55% and other currencies representing only 4% of market share. The amount of the market represented by GBP issuance has been steadily growing over recent years as an increasingly deep and efficient wholesale funding source for most issuers. GBP transactions issued since 2014 are almost exclusively 3-5 year floating rate bonds. Since 2018 this has been based on a compounded daily SONIA rate. In 2021 50% of public issuance by UK issuers was denominated in sterling, with the remaining half denominated in EUR. The privately placed bonds were all sterling denominated. The issuances in EUR tend to be fixed rate, with the vast majority in the 5-10 year tenor.

All new issuance for a number of years has been soft bullet maturities with under 3% of outstanding bonds having hard bullet maturities by the end of 2021.

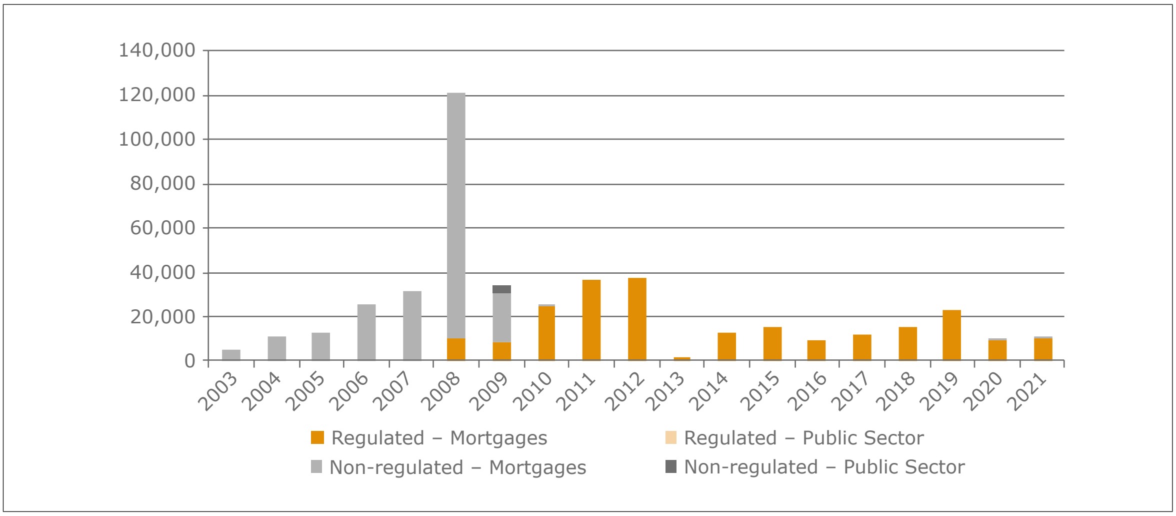
4 http://www.fca.org.uk/firms/regulated-covered-bonds/register.

> Figure 3: Covered Bonds Outstanding, 2003-2021, EUR m



Source: EMF-ECBC. Please note that this data includes private placements, floating rate covered bonds and self-retained issuances that may have been used to access central bank liquidity.

> Figure 4: Covered Bonds Issuance, 2003-2021, EUR m



Source: EMF-ECBC. Please note that this data includes private placements, floating rate covered bonds and self-retained issuances that may have been used to access central bank liquidity.

Issuers: There are 14 regulated issuers each with one regulated mortgage programme (some regulated issuers also have unregulated programmes). For more details, please refer to the FCA's website: http://www.fca.org.uk/firms/systems-reporting/register/use/other-registers/rcb-register.

Covered Bond Label : National Westminster Bank Plc (1 pool), Clydesdale Bank PLC (1 pool), Coventry Building Society (1 pool), Santander UK plc (1 pool), Lloyds Bank plc (1 pool), Nationwide Building Society (1 pool), Yorkshire Building Society (1 pool).[5]

5 https://coveredbondlabel.com/issuers/issuers-directory/.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the UK market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

3.42 UNITED STATES

By Steffen Dahmer, J.P. Morgan, Moderator of the ECBC Liquidity Task Force & Chairman of the ECBC Market Related Issues Working Group

To date, no covered bond legislation has been passed in the US despite several attempts in the post-crisis period. Moreover, the previously issued structured covered bonds by Bank of America and Washington Mutual (acquired by J.P. Morgan) have matured and there are currently no outstanding US covered bonds. The Federal Deposit Insurance Corporation (FDIC) published a Covered Bond Policy Statement back in 2008, which was supplemented by the US Treasury's Best Practices for Residential Covered Bonds. However, the covered bond market never took off on that basis, notably due to possible repudiation by the FDIC.

The last two legislation attempts, the United States Covered Bond Act in 2011 and the Protecting American Taxpayers and Homeowners (PATH) Act in 2013, aimed to address this concern together with other details but no proposal ultimately made it through the full legislative process. Within PATH, covered bonds were discussed as a consequence of Government Sponsored Enterprises (GSEs) reform, but as a secondary priority.

In the following years, covered bonds were again mentioned twice by legislators, alluding to the possibility of US covered bond legislation in the future. First, a speech on 26 June 2014 by Jack Lew, then the US Treasury secretary, suggested possible new avenues where covered bonds could have a role to play alongside the GSEs. Second, the oversight plan of the Committee on Financial Services for the 114th Congress, which commenced in January 2015, mentioned explicitly the examination of covered bonds.

Since that time, however, little progress related to the development of a US covered bond market has materialized.

The topic of large scale GSE reform did re-emerge on the political agenda under the previous Trump administration, when US Senator Mike Crapo published a Housing Reform Outline in February 2019, which was the subject of a two-part hearing by the United States Senate Committee on Banking, Housing, and Urban Affairs the following month. Additionally, the White House issued a Presidential *Memorandum on Federal Housing Finance Reform* at the end of March 2019 that instructed the Secretary of the Treasury to develop a Treasury Housing Reform Plan that would, among other objectives, end the GSEs conservatorships and "[increase] competition and participation of the private sector in the mortgage market."

Published in September 2019, Treasury's Housing Reform Plan set out multiple administrative and legislative proposed reforms to help accomplish these goals, including recapitalizing the GSEs with "significant first-loss private capital". Covered bonds were even briefly mentioned in the Plan as one potential alternative "mechanism" to achieve separation of interest rate and credit risk for 30-year fixed-rate mortgage loans – the most prevalent US mortgage product – in a privatized world, citing the integral role that the Danish covered bond market plays in that jurisdiction's mortgage finance system.

Consequently, in late 2020, then-FHFA Director Mark Calabria issued the *Enterprise Regulatory Capital Framework Final Rule* ('Final GSE Capital Rule'), following a proposal issued in May 2020. The Final GSE Capital Rule stipulated that the GSEs must increase their Adjusted Total Capital holdings collectively to ~$283bn (or 4.27% as at 30th June 2020), paving the way for an eventual exit from conservatorship, though that level of capital was generally viewed as excessively high. While the Enterprise Regulatory Capital Framework became effective in mid-February 2021, it has since been amended via a subsequent final rule published in February 2022 under FHFA Acting Director Sandra Thompson. Changes made under this final rule include the replacement of the fixed leverage buffer (1.5% of adjusted total assets) with a dynamic one (50% of the stability capital buffer), and a lower risk weight floor for retained credit risk transfer (CRT) exposures (5%, vs. 10% previously).

Following the establishment of the Enterprise Regulatory Capital Framework, in January 2021 Treasury and FHFA amended the terms of the Preferred Stock Purchase Agreements (PSPAs) between Treasury and the GSEs, which facilitates the GSEs' ability to retain additional capital, up to the amount required under the Final GSE

Capital Rule, by replacing the 'net worth sweep'; the amended PSPAs also allow for the GSEs to eventually issue common stock. However, the terms of the amended PSPAs state that the GSEs cannot exit conservatorship until "*all material litigation relating to the conservatorship is settled or resolved*" and until their common equity tier 1 capital reaches at least 3% of assets, a level which will likely still take years further to accumulate.

Ultimately, while steps have been taken to pave the way for the GSEs to eventually exit conservatorship, we believe that there is still significant uncertainty around the ultimate outcome – with the privatization of the GSEs not a priority, for the time being, under the current Biden administration. Thus, we expect that further discussions related to the establishment of a US covered bond legislation are unlikely to materialize for the foreseeable future.

I. WHAT IS CURRENTLY IN FORCE

The FDIC's Covered Bond Policy Statement

The FDIC Covered Bond Policy Statement, effective from 28 July 2008, aimed to clarify the treatment of covered bonds in a conservatorship or receivership. Under the Federal Deposit Insurance Act (FDIA), any liquidation of collateral of an Insured Depositary Institution (IDI) placed into conservatorship or receivership requires the consent of the FDIC during the initial 45 days or 90 days after its appointment, respectively. Under such conditions, covered bond issuers would need to hold extra liquidity to prevent any default during that time if the FDIC as a conservator or receiver were to fail to make payment or provide access to the pledged collateral. Conscious that this would impair the efficiency of covered bonds, the FDIC decided to grant consent for expedited access to pledged covered bond collateral for covered bonds meeting specific criteria.

Eligible covered bonds must be authorized by the IDI's primary federal regulator and cannot exceed 4% of total liabilities. They consist of non-deposit, recourse debt obligations of an IDI with maturity between one year and 30 years secured by eligible mortgages or AAA-rated mortgage-backed securities secured by eligible mortgages, if no more than 10% of the cover assets. Substitute assets may be included (namely US Treasury and agency bonds) as need be for prudent management of the cover pool. Eligible mortgages are defined as first-lien mortgages on one-to-four family residential properties underwritten at the fully indexed rate, relying on documented income and complying with the existing supervisory origination guidance. Issuers should also disclose LTVs for transparency purposes.

The FDIC consents include the following events: (1) if at any time after appointment the conservator or receiver is in default and remains so after actual delivery of a written request to the FDIC for 10 business days, the covered bond holders can exercise their contractual rights including the liquidation of the cover assets; (2) if the FDIC as a conservator or receiver of an IDI provides a written notice of repudiation of a contract to covered bond holders and the FDIC does not pay the damages due by reason of such repudiation within 10 business days after the effective date of the notice, covered bond holders can exercise their contractual rights including the liquidation of cover assets. The liability of a conservator or receiver in such circumstances shall be limited to the par value of the covered bond issued plus interest accrued following its appointment. The statement also highlights that these consents do not waive, limit or affect the rights or powers of the FDIC.

The US Treasury's Best Practices

The Treasury Best Practices issued in July 2008 supplement the FDIC's covered bond policy statement. Their purpose was to support the growth of a transparent and homogeneous covered bond market in the absence of dedicated US legislation. While targeting high-quality residential mortgages to safeguard market liquidity and stability, the US Treasury did not exclude at the time expansion of the covered bond market to other asset classes. As emphasized by the US Treasury, these best practices do not provide or imply any government guarantee but serve only as a template with the following key features:

- **Issuer:** can be (1) an IDI and/or a wholly owned subsidiary of this IDI (the so-called "direct issuance structure") or (2) a newly created bankruptcy SPV ("SPV structure"). Issuance authorization must be provided by the IDI's primary federal regulator. Only well-capitalizzed IDIs may issue covered bonds.
- **Cover assets:** are owned by the IDI and remain on balance sheet, but must be clearly identified and provide a first priority claim to covered bond holders. The issuer must enter into a Specified Investment contract with one or more financially sound counterparties which, in case of issuer default or FDIC repudiation, will continue to pay interest and/or principal accordingly as long as proceeds from cover assets at least equal the par value of covered bonds.
- **Covered bond terms:** must be between one and 30 years; issuance may be in any currency as long as currency risks are hedged; bonds can be fixed or floating. Interest rate swaps may be entered for hedging purposes with financially sound counterparties, which must be disclosed to investors. SEC registration is possible but not a requirement.
- **Eligible assets:** must be performing first-lien residential mortgages on one-to-four family residential properties with 80% maximum LTVs. Underwriting must be at the fully indexed rate, with documented income and in line with the existing supervisory origination guidance. Any loan that has been non-performing for more than 60 days should be replaced. A single Metro Statistical Area must be a maximum 20% of the cover pool.
- **Overcollateralization (OC):** must be at least 5% of outstanding covered bonds at all times. When calculating the cover pool value, loans with a LTV exceeding 80% are still eligible but up to the 80% LTV limit only. LTVs must be indexed on a quarterly basis using a nationally recognized, regional housing price index or other comparable measurement.
- **Issuance limit:** is capped at 4% of the IDI's liabilities after issuance.
- **Asset Coverage Test (ACT):** must be performed on a monthly basis by an independent Asset Monitor to safeguard the quality and adequacy of the cover pool. Results must be made public. The asset monitor must also periodically check the accuracy of the ACT. Any ACT breach must be remedied within one month. If not after one month, the Trustee may terminate the program and return principal and accrued interest to covered bond investors. During an ACT breach, no covered bond can be issued.
- **Disclosure:** must be monthly. If substitute assets account for more than 10% of the cover pool within any month (or 20% within any quarter), the issuer must provide updated information on cover assets to investors. Any material information on the IDI's or SPV's financial profile or on any other relevant area must also be made public.
- **Independent trustee:** must be designated by the issuer to represent the interests of covered bond investors and enforce their rights over the cover pool in case of issuer insolvency. All covered bond holders backed by a common cover pool rank pari-passu.
- **Insolvency procedures:** the FDIC has three options at its disposal: (1) covered bonds are repaid according to initial terms; (2) covered bonds are paid off in cash, up to the value of the pledged collateral; (3) liquidation of the pledged collateral is permitted to pay off the covered bonds. Options (2) and (3) occur in case of default or FDIC repudiation as mentioned above. In such cases, covered bond holders will recover up to the value of the collateral. Any collateral excess must be returned to the FDIC, while covered bond holders rank pari-passu with unsecured debt holders for the amount due in the event of a shortfall.

II. TWO KEY, PAST LEGISLATION ATTEMPTS

United States Covered Bond Act

The 112th Congress saw an active push for the establishment of covered bond legislation in the US during 2011. The United States Covered Bond Act of 2011 was the most concerted attempt yet in that respect, although it never completed the full legislative process. For legislation to become law, identical text needs to be approved by both the House of Representatives (HR) and the Senate, and the final legislative text then signed by the President. This was not the case as the Bill approved at the HR ("H.R. 940") contained some differences from that introduced at the Senate ("S. 1835") despite their similarities. These were as follows: an expansion of the definition of eligible issuers; for issuers that are not subject to the jurisdiction of a federal banking agency, the covered bond regulator would be the Board of Governors of the Federal Reserve System rather than the Secretary of the Treasury; a right afforded to the respective covered bond regulator and a majority of covered bond holders to replace the independent asset monitor; the omission of tax provisions. Furthermore, the start of the 113th Congress on 3 January 2013 meant that it needed to be re-introduced.

The US Covered Bond Act, whether in its "H.R. 940" or "S. 1835" format, contained major differences from the FDIC and US Treasury's foundations, especially with respect to the following points:

> **Covered bond regulators:** must be the Federal banking agency where appropriate, otherwise the Board of Governors of the Federal Reserve System ("S.1835") or the Secretary of the Treasury ("H.R. 940").

> **Eligible assets:** consist of any first-lien residential mortgage loan secured by a one-to-four family residential property but also (1) any residential mortgage loan insured or guaranteed e.g., under the National Housing Act; (2) commercial mortgage loans (including multi-family); (3) public sector assets – namely any bond or loan from or insured/guaranteed by a State, municipality or other governmental authority; (4) any auto loan or lease; (5) any student loan (guaranteed or unguaranteed); (6) any extension of credit to a person under an open-end credit plan; (7) any loan made or guaranteed by a small business administra tion; (8) any asset designated by the Secretary, by rule and in consultation with covered bond regulators.

> **Eligible issuers:** include any FDIC depository institution (or subsidiary), bank or savings and loan holding companies (or subsidiary) but also registered nonbank financial companies such as any intermediate holding company. "S.1835" widens eligible issuers to brokers or dealers and supervised insurers as well.

> **Substitute assets:** are limited to 20% of cover assets and may be cash, direct obligations of the US State or GSE of the highest credit quality.

> **Issuance limit:** must be established upon the soundness of the underlying issuer while the maximum amount of covered bond to be issued must be defined as a percentage of the issuer's total assets (with a possible review of this cap, whether up or down, on a quarterly basis).

> **Overcollateralization:** must meet the minimum defined by the Secretary for each asset class but no specific amount is mentioned. Cover pool must be single asset only.

> **Insolvency procedures:** gives specific powers to the FDIC which, if appointed as a conservator or receiver prior to a default event, shall have an exclusive right during the one-year period beginning on the date of the appointment to transfer any cover pool owned by the issuer in its entirety, together with all covered bonds and related obligations. During that year, the FDIC shall ensure the full and timely payment of covered bond holders. In case of default prior to conservatorship or receivership, a separate estate shall be created for each affected covered bond program which comprises all related cover as-sets and covered bonds. This estate is fully liable for covered and other secured obligations only. In case of collateral insufficiency, covered bond holders retain a residential claim against the issuer.

The PATH Act

In 2013, political interest in covered bond legislation emerged again as part of broader reform initiatives addressed in the Protecting American Taxpayers and Homeowners (PATH) Act. PATH aimed notably to reform the GSEs in order to prevent any future liability to taxpayers and increase mortgage competition, enhance transparency and maximize consumer choices. Details related to covered bonds in the PATH Act were similar to the US Covered Bond Act of 2011, with the Treasury being proposed as a regulator instead of the Fed. However, this bill, a Republican initiative, lacked bipartisan support unlike the previous one, notably as it foresaw the wind-down of the GSEs, and was ultimately unsuccessful.

III. WHERE DO WE STAND?

As discussed above, covered bonds have been mentioned at least a couple of times by legislators since both the Covered Bond Act of 2011 and PATH. First, a speech made in the summer 2014 by then US Treasury secretary, Jack Lew, revived hopes of US covered bond legislation as the US government was looking for private solutions to support mortgage lending. In a survey published by the US Treasury for market feedback, the emphasis was on residential mortgage-backed private label securities (PLS) and thus not directly targeted at covered bonds. However, they were seen as complementary with a new attempt at covered bond legislation possibly emerging from the political debate.

Second, the oversight plan of the Committee on Financial Services for the 114th Congress, which was released in January 2015, mentioned covered bonds. As stated in the document, "*The Committee will examine the potential for covered bonds to increase mortgage and broader asset class financing, improve underwriting standards, and strengthen U.S. financial institutions*." However, since this time, limited progress has been made regarding any further attempts to institute a covered bond framework in the US.

Though the complex topic of GSE reform re-emerged as a political priority under the former Trump adminis tration, following the release of a Presidential *Memorandum on Federal Housing Finance Reform* by the White House in late March 2019, subsequent Housing Reform Plan from the US Department of the Treasury in Sep tember 2019 (which briefly mentioned covered bonds), and the Final GSE Capital Rule in late 2020, substantive reform to US housing finance will take time, particularly as priorities under the new Biden administration have shifted. Thus, while covered bonds could still eventually have a role to play in the jurisdiction at some point in the future, we believe that the sizeable hurdle of GSE reform will continue to delay the establishment of a covered bond market in the US.

IV. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

US covered bonds are neither UCITS 52(4)-compliant nor CRR-compliant given the absence of EU membership.[1] Therefore, they do not benefit from preferred risk-weighting for regulatory capital purposes. Under the Standardized Approach, they are treated similarly to senior unsecured bank debt. That said, if denominated in EUR, US covered bonds are eligible for European Central Bank repo operations, conditional on an investment grade rating. Specific haircuts are applied depending on the rating and characteristics of the covered bond. However, since there are no outstanding US covered bonds, this is not currently applicable.

Issuers: JP Morgan, Bank of America Corporation.

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): https://hypo.org/ecbc/covered-bonds/.

For the most up-to-date information, please consult the new ECBC Covered Bond Comparative Database webpage on the Covered Bond Label website www.coveredbondlabel.com.

In the context of the transposition of the Covered Bond Directive (the final deadline for which was 8 July 2022), the ECBC has undertaken a full review and update of the Covered Bond Comparative Database to take account of the latest regulatory developments. This unique reference tool can be accessed via the link hosted on the Covered Bond Label website (www.coveredbondlabel.com/legislation/comparative_database).

For further national information on the US market, please see compare.coveredbondlabel.com/frameworks. To access the "Country Comparison" feature of the database, please see compare.coveredbondlabel.com/compare/select/frameworks.

CHAPTER 4 - RATING AGENCIES & METHODOLOGY

4.1 CREDIT RATING AGENCY APPROACHES: INTRODUCTION

By Elena Bortolotti, Barclays, Chairwoman of the ECBC Rating Agency Approaches Working Group

Looking back over the past 12 months, from the perspective of the Rating Agency Approaches (RAA) Working Group, it has turned out to be yet again uneventful. I am pleased to report that DBRS, Fitch, Moody's, Scope and S&P (the "Rating Agencies") have not made any significant changes to their methodologies nor to sovereign, bank or covered bond ratings as a consequence of the Covid-19 pandemic or the war in Ukraine.

In my introduction, I would like to start by sharing some of the amendments introduced by the Rating Agencies to their covered bond methodologies, including a summary of their environmental, social and governance (ESG) assessment factors and finally, some closing remarks on the transposition of the Covered Bond Directive.

With regards to covered bond rating methodologies, since the last edition of the ECBC Covered Bond Fact Book 2021, Fitch, Moody's, Scope and S&P introduced only minor changes to their rating methodologies/assumptions; these changes did not lead to any impact on the ratings of the covered bond programmes they rate. Please find below the amendments introduced:

> Fitch fine-tuned its framework revisiting the refinancing spread level assumptions. They aligned the concept of a severe liquidity squeeze with the maximum achievable rating defined in Fitch's Structured Finance and Covered Bonds Country Risk Rating Criteria.

> Moody's introduced two updates to its covered bond rating methodology. Firstly, it introduced criteria for applying further notching uplift to the issuer's Counterparty Risk (CR) Assessment in circumstances where the CR Assessment does not fully reflect the potential benefit resulting from bail-in. This amendment is particularly relevant to Swiss covered bonds, given that Moody's determines CR Assessments for Swiss banks on the assumption that junior deposits rank above all the obligations covered by the CR Assessment, including covered bonds. Secondly, Moody's clarified that the Q-scores used to estimate the default probability of certain unrated public sector exposures may be either individual or sector-wide.

> Scope introduced a minor change to its recently updated covered bond rating methodology. One of the key factors that supports the covered bond rating in their methodology has always been governance. This was defined as "Fundamental Support" and reflected governance aspects introduced by regulators (i.e. legal frameworks and supervision) and stakeholders – how they are incentivised to support covered bonds and how the systemic importance thereof might discipline the market. The definition was amended, with what was previously called Fundamental Support now being referred to as "Governance Support".

> S&P published a commentary providing for each covered bond programme they rate an overview of the assigned ESG credit indicators, which in turn reflect the impact of ESG credit factors on the programmes' creditworthiness.

DBRS is the only Rating Agency who has not made any amendments to its covered bond methodology this year. A summary of the key features of the Rating Agencies' methodologies can be found in Figure 1 below.

Another key theme that has become more and more relevant over the last few years, for the covered bond community, is the proliferation of green, social or sustainable covered bond issuances. As a consequence, all Rating Agencies have introduced ESG considerations in their covered bond rating methodology. Below a brief summary of the Rating Agencies' ESG assessment approaches.

> DBRS has developed an ESG assessment framework that encompasses up to 17 ESG risk factors which are considered in their rating analysis. Out of the 17 ESG risk factors, 8 are taken in consideration in their covered bond rating analysis. ESG considerations typically arise from either the collateral backing the covered bonds, from the transaction's counterparties or from the covered bond structure.

- Fitch assigns ESG Relevance Scores (ESG.RS) to debt instruments including covered bonds. They indicate whether an ESG factor is relevant to the credit rating. Individual E, S and G relevance scores range from '5' to '1'. A score of '5' indicates factors that have a direct impact on the rating on a standalone basis. A score of '1' indicates factors which have no credit impact or are irrelevant to the sector and the programme from a credit perspective.
- Moody's ESG methodology includes two frameworks which were implemented for analysing ESG exposures and credit impacts respectively. 1. The Issuer Profile Score (IPS) serves as input to the ratings and assesses the ESG exposures of an issuer or transaction on a numeric scale from E-1/S-1/G-1 (Positive) to E-5/S-5/G-5 (Very Highly Negative). The E and S IPS and related category scores incorporate asset-level mitigants (e.g. insurance and asset diversification), while the G IPS and related category scores incorporate both asset and transaction level mitigants. 2. The Credit Impact Score (CIS) explains the impact of ESG considerations on the rating of a given issuer or transaction and is expressed on a scale of 1 to 5, indicating materiality. The CIS is based on the impact of ESG considerations in the context of the other credit drivers that are material to the rating and indicates to which extent, if any, the rating of the issuer or transaction would likely be different if exposure to ESG risks did not exist.
- Scope's ESG factors are a vital and core element of Scope's bank rating methodology. The ESG-D factors assess a banks' long term sustainability and digital transition preparedness and can either notch-up or down the initial anchor rating. Furthermore, when rating a covered bond, governance factors (qualitative) as well as social and environmental factors (quantitative) become a relevant component of Scope's rating process.
- S&P incorporates ESG factors into its covered bonds rating analysis. This approach results in each covered bond programme being assigned an environmental, a social and a governance credit indicator – these indicators reflect the Rating Agency's opinion of how material (on a 1 to 5 scale) the influence of ESG factors is on the specific programme and are assessed on a net basis, meaning that both the exposure and any related mitigating factor are taken into account. Through the release of its ESG credit indicators, S&P aims to highlight the relevance of ESG factors to their credit analysis.

In the pages that follow this introduction, you can find the Rating Agencies' covered bond methodologies as well as their ESG assessment factors applied to covered bonds.

Last but not least, the RAA Working Group continues to monitor how member states intend to transpose the Covered Bond Harmonisation package. The Rating Agencies' views on the final Directive and Regulation remain positive. In particular, the introduction of minimum standards will likely prompt the development of covered bond markets and the improvement of legal frameworks in certain countries. Among the most credit positive features cited is the introduction of extension triggers, a mandatory liquidity buffer covering 180 days of net interest and principal outflows as well as a minimum overcollateralisation limit. It remains to be seen how some structural features, such as maturity extension triggers and liquidity buffer calculation, will be transposed and how they will impact legacy covered bonds/programmes that present contractual extension triggers and liquidity reserve requirements.

In conclusion, I would like to take this opportunity to thank all members of the ECBC RAA Working Group for their input and participation. Furthermore, I would like to thank Luca Bertalot and the ECBC team for coordinating, organising and keeping us abreast with all topics related to covered bonds.

> Figure 1: A Summary of the Rating Agencies' Covered Bond Ratings Building Blocks

Building Block Towards Rating	Fitch	Moody's	S&P	DBRS Morningstar	Scope
Minimum Rating (Starting Point):	IDR (Issuer Default Rating)	Counterparty Risk (CR) Assessment	ICR (Issuer Credit Rating)	CB AP (Covered Bond Attachment Point) = Critical Obligations Rating (COR); or Senior Unsecured Rating (SUR) + uplift	Issuer Rating (IR)
Additional Notches via: CB Law	–	–	–	–	–
EU's BRRD or equivalent	uplift 0-2 notches (resolution uplift) = Resolution Reference Point	uplift 1 notch	uplift 0-2 notches = RRL (Rating Reference Level)	Considered to determine the CBAP	Taken into account in Recovery Regime
Segregation/ Bankruptcy Remote **Systemic Importance/ Jurisdictional Support**	Payment Continuity Uplift (PCU) (max + 8 notches) Recovery Uplift (up to 2 notches; 3 NIG)	TPI (Timely Payment Indicator) (max +9 notches if also achievable by expected loss model)	RRL + max 3 notches (systemic importance; legal framework; sovereign credit capacity)	LSF (Legal and Structuring Framework) (max +10 notches)	Governance Support (max 6 notches) Legal Framework (+2 notches) Resolution Regime (+4 notches)
Cover Pool/ Asset Quality	Assessed as part of OC stress testing	Assessed to determine uplift over CR assessment +1	uplift of 1-4 notches +2 for credit risk; +2 for refinancing costs	CPCA (Cover Pool Credit Assessment) +up to 2 notches for recovery prospects	Cover Pool Analysis +0-3 notches
Maximal Rating Possible above Starting point: *(achievable with CPT Delinkage or appropriate liquidity mitigants)*	2+8+2 (12 notches possible for CPT)	Capped at country ceiling	2+3+4 notches (unlimited for CPT)	10+2 notches	6+3 notches (CPT assessed case by case)
Capped by Country Ceiling	✓	✓	✓	NO (considers country, redenomination and capital control risks in accordance with Global Sovereign rating methodology)	NO (Macroeconomic factors & credit quality main factors)
OC Commitment/ Counterparty risk/ Hedging	Level of OC relied upon (legal, contractual, used in ACT, lowest OC in last 12 months for issuers rated at least 'F2') is compared with the breakeven OC for a given rating. Counterparty risk mitigation considered	Uncommitted OC: gives credit where issuer highly rated, plus certain other criteria Committed OC: gives credit for contractually committed OC above min level required by legislation	*uncommitted OC:* max achievable rating -1 notch *counterparty or country risk* might limit max rating if adequately mitigated/hedged	gives credit for contractually *committed OC* above min level required by legislation and to uncommitted OC deemed sustainable	*IR ≥BBB:* Available OC; *<BBB: publicly communicated OC; ≤BB: contractual OC commitment*

Source: DBRS, Fitch, Moody's, Scope and S&P

4.2 DBRS MORNINGSTAR COVERED BOND RATING METHODOLOGY

By Ketan Thaker and Christian Aufsatz, DBRS Morningstar

INTRODUCTION

DBRS Morningstar "Rating and Monitoring Covered Bonds" global methodology involves the analysis of four building blocks:

1. Covered Bonds Attachment Point (CBAP);
2. Legal and Structuring Framework (LSF) Assessment;
3. Cover Pool Credit Assessment (CPCA); and
4. Credit for high recovery prospects provided by the cover pool (CP).

The assignment of ratings to covered bonds (CB) transactions involves determining the LSF-implied Likelihood (LSF-L) for the programme based on the CBAP, LSF assessment and CPCA. Once the LSF-L is determined, ratings are assigned by incorporating credit for the CP's ability to provide support following an assumed default of the CBs.

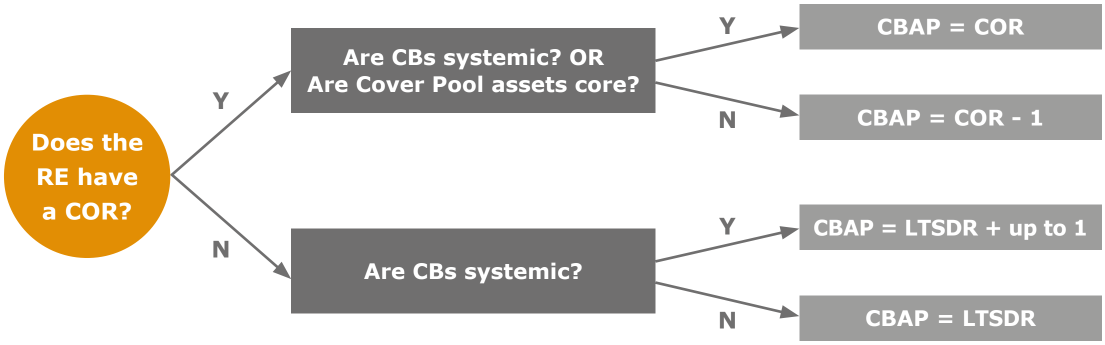
THE FOUR BUILDING BLOCKS

1. Covered Bonds Attachment Point

CBs have dual recourse. The payment obligation initially falls on the debtor of first recourse, called the Reference Entity (RE); failing that, the obligation falls on the CP.

The CBAP designates the RE's credit strength (i.e., the probability that the RE—not the CP—will fulfil the payment obligation). The CBAP comprises a reference rating and, when applicable, a notching uplift schedule. The Critical Obligations Rating (COR) or the Long-Term Senior Debt Rating (LTSDR)[1] of the RE is the basis for the CBAP. There are four scenarios under which DBRS Morningstar determines the CBAP:

A. For all European CB programmes where the RE is subject to the Bank Recovery and Resolution Directive (BRRD), DBRS Morningstar determines the CBAP as follows:



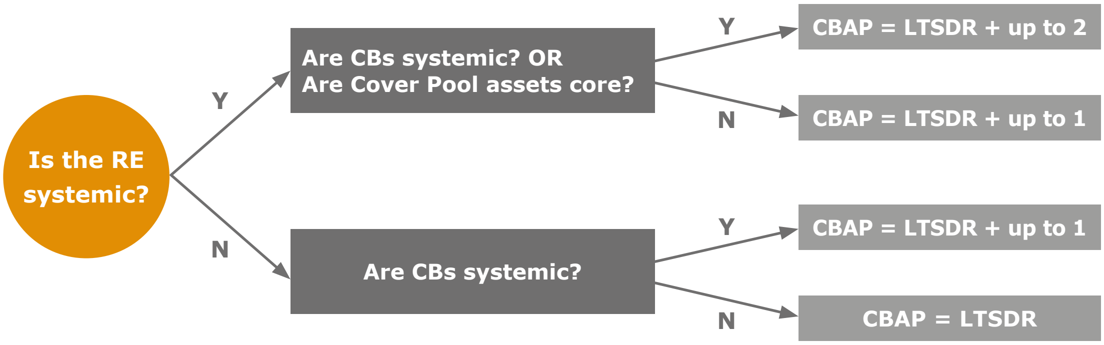
The COR addresses the default risk of particular obligations/exposures at banks that are more likely to be excluded from bail-in and remain in a bank in the event of the resolution of a troubled bank than other senior unsecured obligations. In cases where the bail-in tool is applied and the CB programme in its entirety remains with the going concern part of the RE in resolution, DBRS Morningstar expects that the COR will continue to be the base for the CBAP.

When the RE does not have a COR, and in cases where the bail-in tool is applied and the CB programme in its entirety remains with the going concern part of the RE in resolution, DBRS Morningstar expects that

1 Or the Long-Term Issuer rating if DBRS Morningstar does not assign a Long-Term Senior Debt rating to the RE.

the CBAP would decouple from the LTSDR. At that point, the CBAP is set at a level that DBRS Morningstar considers consistent with the ability of the new RE to continue to be the source of payments for the CBs.

B. For all European CB programmes where the RE is subject to a resolution regime that DBRS Morningstar deems equivalent to the BRRD, DBRS Morningstar determines the CBAP as follows:



C. For Canadian CB programmes, DBRS Morningstar sets the CBAP at the level of the LTSDR of the RE (for the REs that are subject to the Canadian Bank Recapitalization Regime, the LTSDR tracks the non-bailinable senior debt).

D. For CB programmes where the RE is not subject to the BRRD nor to a regime that DBRS Morningstar deems equivalent, DBRS Morningstar equalises the CBAP with the LTSDR.

2. Legal and Structuring Framework Assessment

The LSF assessment is programme-specific. It limits the number of notches a CB default risk assessment can achieve above the CBAP.

DBRS Morningstar's LSF assessment captures the likelihood that payment obligations under the CB will be efficiently transferred from a troubled bank to a performing bank or the CP, administered by a third party. This assessment takes three areas into consideration:

> Robustness of the CP segregation for the benefit of the CB holders;

> Accessibility of CP cash flows on a preferential and timely basis, the need and ability to liquidate the CP, including likelihood of systemic support;

> Contingency plans, including the involvement and responsibility of the regulator or the relevant Central Bank to facilitate the transfer, and regulator's support to the CB market, if applicable.

Cover Pool Segregation

DBRS Morningstar recognises that CB legislation is written to supersede the bankruptcy and insolvency laws within a jurisdiction. Legislations generally give CB holders privilege over the CP assets, taking preference over claims of any other creditor in the case of issuer insolvency. In the event of an insolvency, legislation typically allows the CP to be segregated from the bankruptcy estate.

DBRS Morningstar expects contractual CB programmes to largely address the issue of segregation. As such, DBRS Morningstar does not expect CP segregation to be a major constraining factor for its ratings. If there were serious doubts about effectiveness of segregation, the dual-recourse principle might be undermined, preventing the application of this methodology. However, DBRS Morningstar expects the issue to be addressed, either by law or the transaction's structural features. Nevertheless, instances where legal frameworks and structures have minor weaknesses in segregation mechanisms that are not effectively mitigated can have a limited impact on DBRS Morningstar's assessment.

Timely Access to Cover Pool Cash Flows

A reasonable expectation that the cover assets will be available to satisfy the claim of the CB holders following a default of the RE is a first step toward gaining comfort that the CB holders will be paid according to the terms of their investment. DBRS Morningstar performs qualitative analyses of the legal framework, structural features, specific characteristics of each CB programme and expectations of systemic support, in order to achieve this comfort.

In general, cover assets amortise over a time horizon beyond the scheduled amortisation of the liabilities. While the RE is able to meet payments on the CBs, the resulting mismatches in the maturity profile are unimportant, as the RE will use its own funding sources to meet maturing liabilities. Upon the failure of the RE, the source of payment switches to the CP. DBRS Morningstar consequently analyses the effective mismatches, as the conditions of the CB may provide for these to be modified conditionally to a default of the RE, and the manner in which they might be bridged.

The qualitative analysis aims at assessing the extent to which the CP composition, the programme's structural features and the legal framework interact to facilitate the CB investors' receipt of timely payments from the CP in a scenario where the RE is assumed to halt payments. This depends on the interaction of the constraints imposed by the programme structure and legal framework on how quickly the payments would need to be redirected to CB holders and how quickly financing sources become available to fund such needs. Other considerations in this analysis include the type of assets that may need to be liquidated and the time it takes to liquidate them; the presence of maturity extensions, prematurity tests or other features that give more time to explore alternative solutions; and how the programme structure foresees the CP detaching from the RE's influence in this timeframe.

Contingency Plans and Supervision

DBRS Morningstar views positively the regulator's involvement and the existence of contingency plans for the smooth transition from the RE to the CP as a source of payments to CB holders. Factors reviewed include but are not limited to the existence of a specific supervisor in charge of the CB programme in the normal course of operations, and the quality and content of the contingency plans in case of an issuer's default.

After reviewing these main factors under the LSF assessment, DBRS Morningstar assigns the CB one of five LSF assessments: Very Strong, Strong, Adequate, Average or Modest.

3. Cover Pool Credit Assessment and Overcollateralisation

Once a CBAP and an LSF assessment are assigned to a CB programme, DBRS Morningstar assesses the CP quality to determine the LSF-L of the programme. This assessment represents the likelihood that the CBs will be repaid according to their terms, provided there is sufficient overcollateralisation (OC) to which DBRS Morningstar could give credit.

DBRS Morningstar analyses the wind-down of the CP and the repayment of the liabilities according to their conditions. The aim is to determine whether the interest and principal can be paid on time solely from the CP (including any structural enhancement) for a given rating scenario.

The CPCA analysis is similar to the analysis performed for RMBS and SME CLOs transactions. It begins with an estimate of the probability of default (PD) and loss given default for each rating category based on the methodology applicable to the underlying assets, followed by an analysis of the stressed asset cash flows (including interest rates and exchange rates) from the underlying assets and an analysis of the way cash flows are allocated to liabilities based on the transaction documents.

Additionally, the CPCA accounts for the timing of RE discontinuing its payments. This warrants an analysis of the periodic defaults on the underlying collateral versus a lifetime default expectation; assumptions regarding principal amortisation and reinvestment; future interest levels, exchange rates[2] and senior costs; assumptions about collections in case of the RE's default under its obligations; and an estimate of the liquidation value of the underlying collateral in the event of the RE's default or inability to pay. In order to estimate liquidation values, DBRS Morningstar performs a net present value calculation based on projected cash flows generated by the CP and assumed interest rates stresses and market value spreads.

The CPCA is the rating stress scenario that the structure can withstand given the OC to which DBRS Morningstar gives credit.

Due to the very nature of the product, the OC level changes, for instance, as a result of the amount of CBs issued or amortised under the programme, and assets added to or removed from the CP. Generally, the only legal obligation of the issuer or RE is to maintain a level of assets such that the regulatory tests are satisfied, and the minimum level of OC legally or contractually required is maintained.

Therefore, DBRS Morningstar typically gives full credit to the level of OC required by the national legislation or the secondary regulation and regulators' guidelines, as well as to the level of OC included in the contractual undertaking of the issuer or RE, provided that non-compliance with such undertakings would cause the RE to be in breach of contract under the program documentation. This point seems to be supported by the BRRD. However, DBRS Morningstar's conclusion might be affected by the BRRD's implementation in the local legislative framework. For levels above those, or where there is no public announcement, DBRS Morningstar determines a sustainable OC level by reference to the minimum-observed OC level during the past 12 months, adjusted by any increase that DBRS Morningstar judges to be persistent. This figure is then reduced by the following scaling factors, which vary by rating:

CBs rating	Scaling factors (x) to observed OC
AA (low) and above	0.85x
A (low) to A (high)	0.90x
BBB (low) to BBB (high)	0.93x
Below investment grade	0.95x

Source: DBRS Morningstar

Issuers may publish an announcement for a target OC level (e.g., in the form of a press release, a statement in the investors' report or on the RE website). However, these announcements are not viewed as favourably as an issuer's legal or contractual obligation. Therefore, the analysis will typically apply the above-detailed scaling factors to the publicly announced OC level. However, when DBRS Morningstar holds the view that the announced OC level can be considered persistent based on historically observed levels, the analysis may give full credit to it.

4. Credit for High Recovery Prospects Provided by the Cover Pool

In consideration of the essentially senior secured position of CB holders, DBRS Morningstar may give up to two notches of uplift from the LSF-L if the CP analysis shows that it would provide substantial support following a default of the CBs.

DBRS Morningstar runs a wind-down cash flow simulation aimed at covering the funding cost under a stress scenario in line with the rating. Then, DBRS Morningstar determines the percentage of principal payments received under the CBs versus their nominal amount, and assign a rating with an uplift from the LSF-L according to the following scale:

2 The stresses to account for risk of unhedged currency risk are determined in line with the methodology – Currency Stresses for Global Structured Finance Transaction.

% of principal recovered	Notches uplift
>= 80%	+2
>= 60% but < 80%	+1
< 60%	0

Source: DBRS Morningstar

COVERED BONDS WITH PUBLIC SECTOR EXPOSURES

CBs with public-sector exposures (PSE) deserve, in certain circumstances, a different type of analysis because of the high correlation between public-sector assets and the domicile sovereign. When the CP of PSE is concentrated in a single domicile sovereign, this materially increases the tail-event risk such that the impact of an assumed default of that sovereign on the credit quality of the PSE pool cannot be sufficiently diversified.

DBRS Morningstar addresses this risk in its CPCA using its PSE tool. The *Modelling Assumptions for Portfolios of Public Sector Exposures* methodology provides further detail on this tool.

For CBs where 20% or more of the CP is composed of public-sector assets in the same sovereign where the RE is located (host sovereign), DBRS Morningstar considers the additional risks separately. The PSE in the host sovereign can increase the likelihood that the creditworthiness of both the debtor of fi recourse (the RE) and the CP will deteriorate concurrently, exposing the CB holders to higher risk. DBRS Morningstar considers that, when the host sovereign concentration is material, it can very rarely (if at all) be expected that the CB be rated over three notches above the host sovereign rating. However, it is possible that a higher rating could be achieved by disregarding the as-sets concentrated in the host sovereign. Furthermore, when the RE is an entity whose primary business focuses solely on the region where the assets are located, DBRS Morningstar reflects any additional risks and constraints to the rating.

SOVEREIGN STRESS

A sovereign downgrade may impact factors considered in a CB rating, resulting in ratings changes to the CBs:

1. CBAP: The LTSDR and the COR (where applicable) consider the operating environment of a banking organisation (including regulatory and supervisory regime). Accordingly, a sovereign downgrade may impact the CBAP by creating a more challenging operational environment. This can lead to downgrades of CB ratings. Moreover, the notching approach of the COR contemplates that the COR can surpass the sovereign rating by a maximum of two notches in certain cases, provided there is no systemic banking crisis, as that would likely put downward pressure on the CBAP.

2. LSF Assessment: The LSF assessment expresses the likelihood of a smooth transition from the issuer or RE to the CP as a source of payments on the CB. A downgrade of the domicile sovereign may affect the LSF assessment associated with a given programme and therefore cause its downgrade. In the case of a CP composed of sovereign exposures, a downgrade of the domicile sovereign may affect the LSF assessment as DBRS Morningstar assesses less favourably exposures to lower-rated sovereigns. In certain circumstances, a downgrade of the host sovereign may also affect the LSF assessment.

3. CP Credit Assessment: A downgrade of the domicile sovereign may cause a deterioration of the CP assets. It can also trigger greater volatility in the financial markets and result in DBRS Morningstar factoring in higher levels of market value spreads into its cash flow analysis. This would in turn increase the pass-OC level for a given rating scenario. DBRS Morningstar may then downgrade the CB even if the level of OC to which DBRS Morningstar can give credit is unchanged, but it is now lower than the new pass-OC level.

4. CP Support: A downgrade of the domicile sovereign may affect the notching granted above the LSF-L.

5. Sovereign Rating: For Public Sector CBs, when 20% or more of the CP consists of PSE concentrated in the host sovereign, a downgrade of the host sovereign may cause the CBs' rating to be downgraded.

DBRS MORNINGSTAR LSF MATRICES

DBRS Morningstar considers the PD of a CB to derive from the joint probability that both the RE and CP become unable to fulfil the transaction's payment obligations, assuming that there is usually a correlation between the two instances. Separately, DBRS Morningstar assumes a non-zero probability that the CB will not receive the full benefit of the cash flows from the CP rapidly enough to avert a CB default. Five LSF categories are assigned so that the probability of not receiving the CP's full benefit increases as the LSF weakens.

Accordingly, DBRS Morningstar has generated five LSF matrices for each of the LSF grades with a fixed assumption of a CB with a five-year weighted-average life (WAL). The output of the DBRS Morningstar matrixes (or the LSF-L) points to the rating level for each one of the CBAP and CP credit assessment levels for a given LSF assessment. The LSF-L does not reflect the prospect for high recoveries for the CP following a potential default of the CB, which may provide up to an additional two notches uplift to the LSF-L.

COUNTERPARTY RISK

DBRS Morningstar generally applies the same counterparty criteria to European CBs as stated under *Legal Criteria for European Structured Finance Transactions* (counterparty criteria) and *Derivative Criteria for European Structured Finance Transactions* (derivative criteria). Noticeable differences that reflect the nature of the product are detailed in this methodology.

COVERED BONDS SURVEILLANCE

Once DBRS Morningstar assigns a CB rating, the surveillance process begins and is continued for as long as the rating is maintained, via a periodic review and more frequent monitoring.

In cases where ongoing information is no longer deemed reliable or of sufficient quality, and DBRS Morningstar is unable to properly monitor the transaction, DBRS Morningstar may discontinue the existing rating(s).

ESG FACTORS

DBRS Morningstar has developed an ESG assessment framework that encompasses up to 17 ESG risk factors that DBRS Morningstar currently considers in its rating analysis. These factors are grouped into three categories—Environmental, Social, and Governance—representing the key considerations that DBRS Morningstar commonly analyses within its ESG assessment framework. All ESG risk factors are generally consistent with those that global ESG stakeholders use to assess ESG factors for sustainable investing and financial risks. DBRS Morningstar considers how ESG risks affect the issuer and transaction-specific ratings during the life of the transaction/rating. As with all of DBRS Morningstar's credit analysis, evaluation of the factors' impact is forward looking.

In general, DBRS Morningstar considers eight of the 17 factors in the structured finance and covered bonds' rating analysis. In addition to the eight risk factors that typically apply to covered bond transactions, investors may be exposed to other ESG risk factors based on whether the reference obligor or guarantor or counterparty is a government, corporate, or financial institutions entity.

ESG considerations typically arise from either the collateral backing the covered bonds, from transactions' counterparties, or from the covered bond structure.

ENVIRONMENTAL	SOCIAL	GOVERNANCE
Emissions, Effluents, and Waste (G/F/C/S)	Social Impact of Products and Services (F/C/S)	Bribery, Corruption, and Political Risks (G/F/C)
Carbon and Greenhouse Gas (GHG) Costs (G/F/C/S)*	Human Capital and Human Rights (G/F/C/S)	Business Ethics (F/C)
Resource and Energy Management (G/C)	Product Governance (F/C/S)	Corporate/Transaction Governance (F/C/S)
Land Impact and Biodiversity (G/C)	Data Privacy and Security (F/C/S)	Institutional Strength, Governance, and Transparency (G)**
Climate and Weather Risks (G/F/C/S)	Occupational Health and Safety (C)	Peace and Security (G)**
	Community Relations (F/C)	
	Access to Basic Services (G/F/C)	

*Denotes applicability to rating groups:
G = Governments, F = Financial Institutions, C = Corporate Finance, S = Structured Finance
**Exclusively Government risk factors.

RELATED RESEARCH

> "Rating and Monitoring Covered Bonds", June 2021.
https://www.dbrsmorningstar.com/research/379983/rating-and-monitoring-covered-bonds.

> "DBRS's Assessment of Jurisdictions for Which Covered Bonds are Systemically Important", June 2019.
https://www.dbrsmorningstar.com/research/347573/dbrss-assessment-of-jurisdictions-for-which-covered-bonds-are-systemically-important.

> "Rating and Monitoring Covered Bonds Addendum: Market Value Spreads", June 2021.
https://www.dbrsmorningstar.com/research/379985/rating-and-monitoring-covered-bonds-addendum-market-value-spreads.

> "Approach to Environmental, Social, and Governance Risk Factors in Credit Ratings", February 2021.
https://www.dbrsmorningstar.com/research/373262.

> "Derivative Criteria for European Structured Finance Transactions", September 2021.
https://www.dbrsmorningstar.com/research/384624/derivative-criteria-for-european-structured-finance-transactions.

> "Derivative Criteria for Canadian Structured Finance Transactions", July 2021.
https://www.dbrsmorningstar.com/research/380878/derivatives-criteria-for-canadian-structured-finance.

> "Currency Stresses for Global Structured Finance Transactions", February 2022.
https://www.dbrsmorningstar.com/research/391916/currency-stresses-for-global-structured-finance-transactions.

> "Legal Criteria for European Structured Finance Transactions", April 2021.
https://www.dbrsmorningstar.com/research/382171/legal-criteria-for-european-structured-finance-transactions.

> "Legal Criteria for Canadian Structured Finance Transactions", July 2021.
https://www.dbrsmorningstar.com/research/381134/legal-criteria-for-canadian-structured-finance.

> Modelling Assumptions for Portfolios of Public Sector Exposures", July 2021.
https://www.dbrsmorningstar.com/research/382155/modelling-assumptions-for-portfolios-of-public-sector-exposures.

> Commentary: "The Impact of COVID-19 on European Covered Bonds – Two Years On...", March 2022. https://www.dbrsmorningstar.com/research/393696/the-impact-of-covid-19-on-european-covered-bonds-two-years-on.

> Commentary: "The Updated Law on Spanish Covered Bonds: Well Aligned with the European Directive", November 2021. https://www.dbrsmorningstar.com/research/387729/the-updated-law-on-spanish-covered-bonds-well-aligned-with-the-european-directive.

> Commentary: "Spanish Public Sector Covered Bonds: Legal and Structuring Framework Review", March 2021. https://www.dbrsmorningstar.com/research/375709/spanish-public-sector-covered-bonds-legal-and-structuring-framework-review.

> Commentary: "Greek Covered Bonds: Legal and Structuring Framework Review", July 2017. https://www.dbrsmorningstar.com/research/313634/greek-covered-bonds-legal-and-structuring-framework-review.

> Commentary: "UK Covered Bonds: Legal and Structuring Framework Review", March 2017. https://www.dbrsmorningstar.com/research/307845/uk-covered-bonds-legal-and-structuring-framework-review.

> Commentary: "Dutch Covered Bonds: Legal and Structuring Framework Review", March 2017. https://www.dbrsmorningstar.com/research/307083/dutch-covered-bonds-legal-and-structuring-framework-review.

> Commentary: "Danish Covered Bonds: Legal and Structuring Framework Review", September 2016. https://www.dbrsmorningstar.com/research/299290/danish-covered-bonds-legal-and-structuring-framework-review.

> Commentary: "Swedish Covered Bonds: Legal and Structuring Framework Review", July 2016. https://www.dbrsmorningstar.com/research/296730/swedish-covered-bonds-legal-and-structuring-framework-review.

> Commentary: "German Covered Bonds: Legal and Structuring Framework Review", April 2016. https://www.dbrsmorningstar.com/research/293123/german-covered-bonds-legal-and-structuring-framework-review.

> Commentary: "Austrian Covered Bonds: Legal and Structuring Framework Review", October 2015. https://www.dbrsmorningstar.com/research/285343/austrian-covered-bonds-legal-and-structuring-framework-review.

> Commentary: "Belgian Covered Bonds: Legal and Structuring Framework Review", May 2015. https://www.dbrsmorningstar.com/research/279970/belgian-covered-bonds-legal-and-structuring-framework.

> Commentary: "French Covered Bonds: Legal and Structuring Framework Review", March 2015. https://www.dbrsmorningstar.com/research/277383/french-covered-bonds-legal-and-structuring-framework-review.

> Commentary: "Irish Covered Bonds Legal and Structuring Framework", December 2014. https://www.dbrsmorningstar.com/research/275028/irish-covered-bonds-legal-and-structuring-framework.

> Commentary: "Portuguese Covered Bonds: Legal and Structuring Framework Review", December 2014. https://www.dbrsmorningstar.com/research/275026/portuguese-covered-bonds-legal-and-structuring-framework-review.

> Commentary: "Italian Obbligazioni Bancarie Garantite Legal and Structuring Framework", December 2014. https://www.dbrsmorningstar.com/research/275023/italian-obbligazioni-bancarie-garantite-legal-and-structuring-framework.

> Commentary: "Spanish Mortgage Covered Bonds: Legal and Structuring Framework Review", December 2014. https://www.dbrsmorningstar.com/research/275018/spanish-mortgage-covered-bonds-legal-and-structuring-framework-review.

> Figure 1: Adequate LSF

		COVER POOL CREDIT ASSESSMENT											
		AAA	**AA (high)**	**AA**	**AA (low)**	**A (high)**	**A**	**A (low)**	**BBB (high)**	**BBB**	**BBB (low)**	**BB (high)**	**BB**
COVERED BOND ATTACHMENT POINT	**AAA**	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
	AA (high)	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AA (high)	AA (high)	AA (high)	AA (high)	AA (high)
	AA	AAA	AAA	AAA	AAA	AAA	AAA	AA (high)	AA	AA	AA	AA	AA
	AA (low)	AAA	AAA	AAA	AAA	AA (high)	AA (high)	AA	AA	AA (low)	AA (low)	AA (low)	AA (low)
	A (high)	AAA	AA (high)	AA (high)	AA (high)	AA	AA	AA	AA (low)	AA (low)	A (high)	A (high)	A (high)
	A	AA (high)	AA (high)	AA (high)	AA	AA	AA	AA (low)	AA (low)	AA (low)	A (high)	A	A
	A (low)	AA	AA	AA	AA (low)	AA (low)	AA (low)	A (high)	A (high)	A (high)	A	A (low)	A (low)
	BBB (high)	AA (low)	AA (low)	A (high)	A (high)	A (high)	A (high)	A	A	A (low)	A (low)	A (low)	BBB (high)
	BBB	AA (low)	A (high)	A (high)	A (high)	A	A	A	A (low)	A (low)	A (low)	BBB (high)	BBB (high)
	BBB (low)	A (high)	A (high)	A	A	A	A	A (low)	A (low	A (low)	A (low)	BBB (high)	BBB (high)
	BB (high)	A (low)	A (low)	A (low)	A (low)	A (low)	BBB (high)	BBB (high)	BBB (high)	BBB	BBB	BBB (low)	BBB (low)
	BB	A (low)	A (low)	A (low)	BBB (high)	BBB (high)	BBB (high)	BBB (high)	BBB	BBB	BBB (low)	BBB (low)	BBB (low)
	BB (low)	BBB (high)	BBB (high)	BBB (high)	BBB (high)	BBB (high)	BBB	BBB	BBB (low)	BBB (low)	BBB (low)	BBB (low)	BB (high)
	B (high)	BBB	BBB	BBB	BBB	BBB (low)	BBB (low)	BBB (low)	BBB (low)	BBB (low)	BBB (low)	BB (high)	BB (high)
	B	BBB (low)	BBB (low)	BBB (low)	BBB (low)	BBB (low)	BBB (low)	BBB (low)	BBB (low)	BB (high)	BB (high)	BB (high)	BB (high)
	B (low)	BBB (low)	BBB (low)	BBB (low)	BBB (low)	BBB (low)	BBB (low)	BB (high)	BB (high)	BB (high)	BB (high)	BB	BB
	CCC (high)	BB (high)	BB (high)	BB (high)	BB (high)	BB (high)	BB (high)	BB (high)	BB (high)	BB	BB	BB (low)	BB (low)
	CCC	BB (high)	BB (high)	BB (high)	BB (high)	BB (high)	BB (high)	BB (high)	BB	BB	BB	BB (low)	BB (low)
	CCC (low)	BB	BB	BB	BB	BB	BB (low)	BB (low)	BB (low)	BB (low)	BB (low)	B (high)	B (high)

Source: DBRS Morningstar

4.3 FITCH RATINGS COVERED BOND RATING METHODOLOGY

By Cosme de Montpellier and Hélène Heberlein, Fitch Ratings

INTRODUCTION

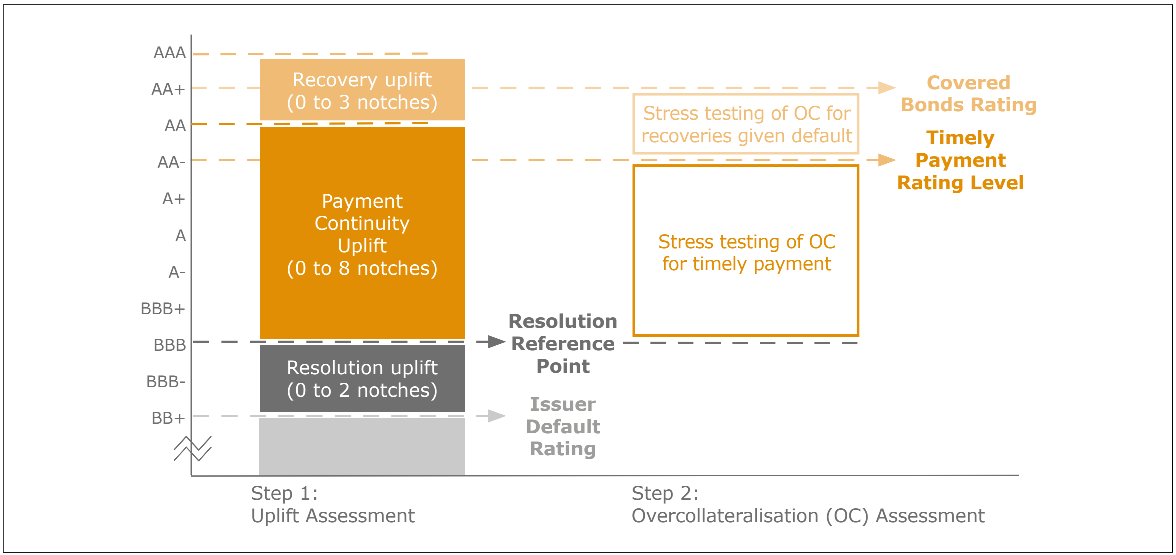
Fitch's Covered Bonds Rating Criteria focuses on the dual recourse nature of covered bonds: to a financial institution and to a pool of assets that can change over time. Our covered bond ratings address the bonds' probability of default (PD), and following their hypothetical default, recoveries from the cover pool.

The key rating drivers for covered bond programmes are the rating of the issuer (Long Term Issuer Default Rating, or IDR), the uplift granted above the IDR, and the overcollateralisation (OC) protection.

The IDR generally represents the default risk of senior unsecured debt to third-party creditors. Covered bonds can be rated above an issuing entity's IDR due to their privileged position over an issuer's senior debt in a resolution scenario (resolution uplift) and their collateralised nature which, in the event of an issuer default, may allow for ongoing covered bond payments (payment continuity uplift) as well as for recoveries on covered bonds assumed to be in default (recovery uplift). These form the basis of our uplift assessment above the IDR. The OC assessment consists of determining the break-even OC for a given rating and comparing it to the level of OC that can be relied upon for the programme. While the uplifts are granted irrespective of the level of OC, their use is subject to OC relied upon being sufficient to withstand the stress scenario associated with a given rating.

This is illustrated in the next graph. Often, not all notches of uplift are used. It could be because not all notches are needed to reach 'AAA', the highest rating on the Fitch scale, or due to a rating cap, such as a Country Ceiling. This creates a buffer against an issuer downgrade. In addition, the actual covered bond rating may be lower than the maximum achievable if the OC level that Fitch gives credit to in its analysis does not withstand higher stress scenarios.

> FIGURE 1: FITCH COVERED BOND RATING STEPS



Source: Fitch Ratings

STEP 1: UPLIFT ASSESSMENT

The IDR is the starting point of the analysis as covered bonds are a full recourse instrument against their issuer, so should be rated at least as high as their issuers. It also reflects that Fitch does not completely de-link the covered bonds rating from that of their issuers, as these typically retain significant flexibility in their programmes, notably in terms of cover pool replenishment, further issuances and OC levels.

Generally, Fitch only rates covered bonds if it maintains an IDR on the issuer or where a reference IDR can be determined based on expected support or guarantees. The IDR may be assigned privately, in which case Fitch will not disclose the uplift assessment when assigning the covered bonds rating.

Resolution Uplift

The resolution uplift reflects the lower vulnerability to default of covered bonds compared to senior liabilities in jurisdictions with a resolution regime that includes a bail-in tool from which covered bonds are exempt. It applies where Fitch believes payments will continue being made without recourse to the cover pool even if the issuer has defaulted on its senior debt. If covered bond exemption from bail-in is restricted to the value of the cover pool, a positive resolution uplift is subject to a sufficiently low risk of undercollateralisation.

The resolution uplift can be up to two notches. It is one notch for institutions with a support-driven IDR, and 0 notches for specialised lenders not operationally integrated with their parent, or institutions without debt buffer requirements (see figure 2 below). The combination of the IDR and the resolution uplift gives the "resolution reference point".

> Figure 2: Level of Resolution Uplift

Resolution uplift	Type of Issuers
Two notches	> Institutions with an IDR not driven by institutional or state support and their subsidiaries whose IDR is equalised with the parent's. > IDR based on their participation/integration in a mutual support scheme and equalised with group IDR.
One notch	> Institutions with an IDR driven by support and their subsidiaries.
None	> Specialised mortgage or public sector lenders that form part of a broader banking group and are not operationally integrated with the parent. > Institutions without debt buffers requirement such as Minimum Requirement for Own Funds and Liabilities and for which Fitch does not expect resolution to be applied in case of a failure or default.

Source: Fitch Ratings, Fitch Solutions

Payment Continuity Uplift (PCU)

The payment continuity uplift (PCU) expresses the degree of protection against payment interruption risk on the covered bonds if the issuer fails to meet its obligations. The PCU depends primarily on the length of the liquidity protection available in an enforcement scenario. It can be up to eight notches for programmes without refinancing risk, such as pass-through programmes. It is limited to six notches for programmes with maturity mismatches, and for which the liquidity protection for principal payments is at least for 12 months (see figure 3 below).

The most common protections are the inclusion of liquid assets in the cover pool or maturity extension provisions on the covered bonds. The type of liquid assets that Fitch gives credit to can be found in the appendix of Fitch's covered bonds rating criteria. It includes cash held with eligible banks and highly rated securities, notably the most liquid assets that can be held for LCR purposes.

> FIGURE 3: STANDARD PAYMENT CONTINUITY UPLIFT

Programme types	Effective liquidity protection for principal payments	Maximum PCU in notches
Pass-through programmes	Maturity date extends beyond the longest maturing asset in the cover pool[a]	Eight
Mortgage and public sector programmes[b]	At least 12 months	Six
Public sector programmes[b]	At least six months	Five
Mortgage programmes[b]	At least nine months	Four
Mortgage programmes[b]	At least six months	Three
Programmes with maturity mismatches	No protection	Zero

(a) Or if an immaterial part of the cover pool matures after the last covered bonds
(b) If predominantly exposed to developed banking markets. For the purpose of the PCU, developed banking markets are defined as countries where banking plays a fundamental role in channelling funds to the domestic economy and where several non-foreign-owned lenders are active, facilitating potential portfolio transfers/sales

Source: Fitch Ratings, Fitch Solutions

In addition to principal payment protection, Fitch expects some protection for timely interest payment to grant a PCU above zero notches. Also, we only grant a PCU above three notches if a programme has at least three months' protection for senior expenses and interest payments.

Payment continuity can be negatively influenced by asset segregation (for instance due to claw-back or commingling risks) and systemic or cover pool-specific alternative management (e.g. provisions for replacement and timing of the appointment of a substitute manager, scope of their responsibilities, transferability of relevant data and IT systems etc.) If Fitch considers that these risks could undermine a smooth transition from the issuer to the cover pool as a source of bond payments, it could grant a lower PCU than indicated above, depending on the materiality of the deficiency.

The combination of the IDR, the resolution uplift and the PCU gives the maximum timely payment rating level that can be tested in Fitch's cash-flows model. Fitch discloses the rating scenario corresponding to the expectation of timely payment on covered bonds as the "timely payment rating level".

Recovery Uplift

The recovery uplift reflects the recovery prospects on defaulted covered bonds. It can be up to two notches (three notches when applied to a non-investment grade timely payment rating level). It is limited to one notch where Fitch identifies material downside risks to recovery expectations, for instance when bonds are issued in a different currency than the assets and FX hedging agreements terminate upon a covered bonds default. Fitch only gives credit to recoveries from the cover pool, not to potential unsecured recoveries.

> FIGURE 4: RECOVERY UPLIFT

	If rating level corresponding to expectation of timely payment is:	
Recovery prospects	Investment grade	Non-investment grade
Outstanding	Two	Three
Superior	One	Two
Good	One	One
Average	Zero	Zero

Source: Fitch Ratings, Fitch Solutions

STEP 2: OC ASSESMENT

Fitch tests the timely payment of covered bonds up to the maximum level allowed by the IDR, the resolution uplift and the PCU and tests for recovery given default up to the granted recovery uplift.

OC Supporting Timely Payment

The use of the programme's resolution uplift is usually subject to an OC of at least 0%.

Fitch uses its Covered Bonds Cash-flows Model when testing timely payment on the covered bonds in rating scenarios above the resolution reference point (the floor for the timely payment rating level). It compares stressed incoming cash flows with payments due on covered bonds. The analysis assumes that the cover pool becomes static under the supervision of a third-party manager at a simulated date, following the hypothetical transition from the issuer to the cover pool as the source of payments on the covered bonds. Cash flows are considered post-swaps, provided that these are privileged obligations and contracted with eligible counterparties. We also model any contractual features included in programme documentation, notably the Asset Coverage Test found in some programmes.

Fitch will only stress open currency exposure if it represents a residual risk, using stresses published in "Fitch's Foreign-Currency Stress Assumptions for Residual Foreign-Exchange Exposures in Covered Bonds and Structured Finance – Supplementary Data File". If the risk is material, no credit is given to the exposure.

The OC supporting timely payment is the sum of two components:

> **The Credit Loss** is the stressed loss rate on the cover pool, expressed in terms of OC (i.e. as a percentage of the bonds). Fitch uses its asset models to calculate stressed loss rates on the cover assets, derived from lifetime default rates and recoveries given default assumptions stressed at different rating levels. For each asset type and country, the same model is used across structured finance and covered bonds.

> **The ALM Loss** corresponds to risks arising from asset and liability mismatches in a programme: prepayments, interest/FX mismatches and maturity mismatches between the cover assets and the covered bonds. Cash proceeds (after factoring in stressed defaults and recoveries) are compared to privileged payments due at each period. Excess cash is modelled to be reinvested at a stressed rate, while cash shortfalls are assumed to be bridged via asset sales. The cost of sales is calculated via the application of Fitch's Refinancing Spread Levels (RSL) on top of Fitch's stressed interest rate to discount cash flows of the cover assets. RSL are meant to cover mainly the liquidity cost and profit margin of the buyer. They can be found in "Fitch's Covered Bonds Refinancing Spread Level Assumptions – Supplementary Data File".

OC Supporting Recoveries Given Default

Fitch expects a good level of recoveries, commensurate with the use of a one-notch recovery uplift, in all rating scenarios for programmes fully secured by standard assets such as mortgage loans, i.e. with an OC of at least 0%.

If a programme has an OC which matches the cover pool's Credit Loss stressed in a given rating scenario, we expect the recoveries to be outstanding in the relevant rating scenario, leading to a recovery uplift of two (or three) notches.

Fitch does not stress test cash flows to assess the level of OC which sustains a given recovery uplift, because recoveries from the cover pool are not tied to any time horizon upon a covered bond default.

RELATIONSHIP BETWEEN OC AND RATING

Fitch's break-even OC for the rating is the lowest protection that supports timely payment of covered bonds in a stress scenario associated with the timely payment rating level and meets the threshold for the applied recovery uplift. It is compared with the level of OC that Fitch relies upon in order to assign the covered bonds rating.

Fitch gives credit to one of the following levels of OC:

> Legal and contractual commitments legally binding and enforceable against the issuer;

> Non-contractual public statements and/or covenants;

> The lowest level of OC recorded during the preceding 12 months, provided that the issuer's IDR is at least 'BBB-' or 'F3' and the programme is not in wind-down (i.e. when the issuer no longer focuses on eligible cover assets as part of its normal business activity).

Fitch assesses the reliability and sustainability of the OC. Furthermore, we may use another OC benchmark where OC levels over the past 12 months are not considered to be consistent with their current levels or not indicative of expected OC levels.

OTHER CONSIDERATIONS: COUNTRY RISK AND COUNTERPARTY RISK

Covered bond ratings are capped at zero to six notches above the sovereign Local Currency IDR, depending on the country. In addition, the timely payment rating level of covered bonds denominated in a foreign currency is generally capped at the Country Ceiling of the country of the assets or the issuer, unless transfer and convertibility risk is mitigated (in which case the ratings cannot be higher than four notches above the Country Ceiling). If it is not mitigated, Fitch may still grant a one-notch recovery uplift above the Country Ceiling in certain circumstances (see Structured Finance and Covered Bonds Country Risk Rating Criteria).

The timely payment rating level of covered bonds can also be limited by counterparty risk considerations if the counterparties in the programme do not include minimum rating and replacement language in line with Fitch's Structured Finance and Covered Bonds Counterparty Rating Criteria. In that case, the timely payment rating level will be capped at the higher of the counterparty's rating and the resolution reference point.

PROGRAMMES WITH LIMITED RATING UPLIFT

Fitch will rate covered bonds at or near the IDR if material limitations exist in analysing the cover pool. This will also apply when an issuer has a limited record in originating and servicing the cover assets or if there is limited visibility on its business model, raising concerns regarding asset generation to maintain OC.

In these cases, Fitch would focus its analysis on the legal or contractual framework, analysing whether assets are sufficiently ring-fenced from the rest of the issuer's balance sheet. The break-even OC for the rating would be the minimum legal or contractual OC, with a floor at 0%. The recovery uplift will be limited to one notch.

COVERED BONDS SURVEILLANCE

Fitch publishes individual surveillance workbooks for covered bond programmes and multi-issuer of cédulas hipotecarias (MICH) transactions on a quarterly basis. They include the list of information specified by the European Central Bank (ECB) in its guidelines on the implementation of the Eurosystem monetary policy framework (ECB/2016/31).

Each surveillance file for a given covered bond programme or MICH transaction can be accessed from the issuing entity's page on www.fitchconnect.com, under the Covered Bonds File tab.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) RISKS FOR COVERED BOND RATINGS

ESG RELEVANCE SCORES

ESG Relevance Scores (ESG.RS) indicate whether an ESG factor is relevant to the credit rating. Individual E, S and G relevance scores range from '5' to '1'. A score of '5' indicates factors that have a direct impact on the rating on a standalone basis. A score of '1' indicates factors which have no credit impact or are irrelevant to the sector and the programme from a credit perspective.

Governance Main Risk for Covered Bonds

For covered bonds, the assessment of asset segregation and payment continuity is of particular relevance. High scores are generally driven by structural issues such as lack of liquidity protection or payment continuity risks.

Social Factors Secondary Driver

High social ESG.RS for covered bonds relate to positive influences on ratings from government-sponsored social lending schemes due to demonstrated lower loss rates, resulting in lower credit losses.

Low Environmental Risk

Environmental aspects have not, to date, heavily influenced covered bond ratings. Financial incentives favouring sustainable or "green" assets over less sustainable assets remain under-developed.

More information is available at www.fitchratings.com in Fitch's ESG section.

ESG RATINGS

ESG Ratings are assigned by Sustainable Fitch to assess an entity's or debt instrument's ESG performance and commitment. ESG Ratings are independent from credit ratings.

The ESG Ratings suite is composed of three major pillars:

ESG Entity Ratings (ER1-5): Evaluate the entity's activities from an environmental and social perspective, as well as the quality of overall environmental, social and governance policies, procedures and outcomes.

ESG Instrument Ratings (IR1-5): Evaluate the ESG characteristics of a debt instrument in the context of the ESG rating for the entity that has issued the debt. This enables an absolute comparison of the ESG characteristics of all instruments (labelled or conventional).

ESG Framework Ratings (FR1-5): For labelled or KPI-linked debt instruments, we evaluate the quality of the debt instrument framework use of the proceeds raised from the issuance as well as the strength of the framework.

The ratings are on a scale from one to five, where one is the best outcome. They are derived from a more granular score from zero to 100, which is available as a dataset to investors wanting to take a more quantitative based approach.

More information is available at www.sustainablefitch.com.

Fitch Ratings' Main Criteria Applicable to Covered Bonds

> Covered Bonds Rating Criteria (8 August 2022)
> Originator-Specific Residential Mortgage Analysis Rating Criteria (25 February 2022)
> European RMBS Rating Criteria (23 May 2022)
> Covered Bonds and CDOs of Public Entities' Asset Analysis Rating Criteria (24 September 2021)
> Structured Finance and Covered Bonds Country Risk Rating Criteria (15 July 2022)
> Structured Finance and Covered Bonds Counterparty Rating Criteria (29 July 2022)
> Structured Finance and Covered Bonds Counterparty Rating Criteria: Derivative Addendum (1 August 2022)
> Structured Finance and Covered Bonds Interest Rate Stresses Rating Criteria (20 September 2021)

4.4 MOODY'S COVERED BOND RATING METHODOLOGY

By Jane Soldera, Nicholas Lindstrom and Juan Pablo Soriano, Moody's Investors Service

This chapter presents a high-level summary of certain aspects of Moody's covered bond methodology and ESG methodology.[1] For a full explanation of the methodologies, please refer to "Moody's Approach to Rating Covered Bonds", 16 December 2021 and "General Principles for Assessing Environmental, Social and Governance Risks Methodology", 19 October 2021, both available at www.moodys.com.

OVERVIEW

We determine our rating for a covered bond by applying a two-step process:

> Moody's Expected Loss Covered Bond Model (*EL model*): Our EL model provides an initial rating based on a largely quantitative calculation of expected loss, taking into account (1) the probability (the *CB anchor*), expressed as a point on our alpha-numeric rating scale, that the issuer will cease making payments on the covered bonds (a *CB anchor event*) and (2) the estimated losses that will accrue to covered bondholders should a CB anchor event occur. Note that a CB anchor event does not imply a failure to pay under the covered bonds; the cover pool will typically be managed with a view to continuing payments due on the bonds.

> Timely Payment Indicator (*TPI*) Framework: We refine the maximum potential rating from the EL model to account for certain risks that arise when a CB anchor event occurs, in particular refinancing risk. We use our TPI framework to limit the maximum rating that covered bonds may achieve over and above the CB anchor, so that the final covered bond rating may be lower than the maximum potential rating under the EL model.

Ratings are assigned by a rating committee. The final covered bond rating is typically the lower of: (i) the rating output of the EL model and (ii) if applicable, the maximum rating permitted under the TPI framework.

However, the rating committee may assign a lower rating due to other credit-relevant features. For example, ratings are subject to sovereign risk considerations, so would not typically exceed the sovereign ceiling.[2]

MOODY'S EXPECTED LOSS (EL) MODEL

The EL model assumes that covered bondholders have recourse, first, to the issuer and, second, to the cover pool. The model calculates the expected loss as a function of (1) the probability the issuer will cease to make payments, giving rise to a CB anchor event (also referred to as *issuer default*); and (2) after a CB anchor event, the losses (if any) incurred on the cover pool taking into account over-collateralisation.

We determine the level of losses on the cover pool after a CB anchor event by assuming a stressed environment where the bank that originated the cover pool assets has failed. We assume losses on the cover pool will mainly arise from:

> credit losses on the assets in the cover pool;

> refinancing risk, because funds need to be raised to refinance the cover pool as covered bonds mature; and

> exposures to interest rate and currency mismatches between cover pool assets and liabilities.

Our EL model calculates expected loss on a month-by-month basis from the issue of a covered bond through to its final maturity. For each monthly period, the model calculates the probability of a CB anchor event, taking into account (1) the issuer's credit strength, based on the CB anchor, and (2) the estimated loss on the collateral (if any) assuming the issuer has ceased making payments on the covered bonds. The results are then summed and discounted back to reach a net present value of the overall expected loss on the covered bond.

1 Information in this chapter is up to date as of 1 April 2022 except for the "References" on page 535, which are up to date as of 3 August 2022.
2 See "Assessing the impact of Sovereign Credit Quality on Other Ratings", 20 June 2019, available at Moodys.com.

MOODY'S EL MODEL

The main factors that contribute to our EL model are:

1. Prior to a CB anchor event, the credit strength of the issuer; and
2. After a CB anchor event:
    a. the value of the cover pool, which is the expected value at the time of the CB anchor event, adjusted for:
        > credit quality, that is, credit losses on the assets; and
        > the cost of refinancing the cover pool and losses resulting from interest rate and currency mismatches in the cover pool.

We look at these factors in more detail below.

Other factors we take into account in our EL model, where relevant, include legal risks and the value of any over-collateralisation.

MOODY'S EL MODEL – CREDIT STRENGTH OF THE ISSUER

CB anchor is based on the issuer's credit strength. Before issuer default, the issuer's credit strength will be the most important influence on the covered bond programme's performance. We assume that as long as the issuer is performing its obligations under the covered bonds there should be no loss to covered bondholders. Therefore, our CB anchor is a measure of the risk that the issuer will cease performing its covered bond obligations. We typically derive the CB anchor from the issuer's counterparty risk (CR) assessment.[3]

CR assessment measures probability of issuer continuing to pay key obligations. When a European Economic Area (EEA) bank is under resolution[4], certain of its key payment obligations are likely to be honoured even while losses are imposed on unsecured debt, senior or otherwise, or junior deposits. The CR assessment measures the probability of default on those key payment obligations, taking into account the effect of resolution and tools available under resolution procedures.

European CB anchor is typically CR assessment plus one notch. For EEA covered bonds, we typically position the CB anchor at the CR assessment plus one notch, and may do so for non-EEA covered bonds if the legal / regulatory framework means authorities are particularly likely to take steps to support covered bonds. However, for the majority of covered bonds outside the EEA the CB anchor is at the same level as the CR assessment. In some cases we may add more than one notch if covered bonds benefit from bail-in-able debt not fully captured by the CR assessment.

In exceptional cases we may use a different measure instead of the CR assessment or, for an EEA covered bond, decline to incorporate any notches of uplift to the CR assessment. For example, we might do this if the covered bond does not fall under a recognised legal regime, or if the covered bond collateral is of low quality and/or insufficient.

Other issuer benefits for covered bonds. Our EL model also takes into account various issuer and issuer group-related benefits in addition to the issuer's CB anchor. For instance,

1. Following a CB anchor event covered bondholders may have a senior unsecured claim on the issuer that may improve recoveries.

3 For EEA banks the CR assessment is typically positioned at the issuer's adjusted baseline credit assessment (BCA) plus zero to three notches. For more details see the "Banks" methodology referenced at the end of this article. If the issuer has no CR assessment, we may use the CR assessment of another entity in the issuer's group with a sufficiently robust obligation to provide financial support to the issuer, or we may use an alternative rating such as the issuer's senior unsecured or deposit rating.

4 In the context of the EEA we refer here to the possibility of resolution proceedings and use of the bail-in tool under the EU Bank Resolution and Recovery Directive, adopted 15 April 2014, and its equivalent in Norway and other non-EU members of the EEA.

2. The issuer will normally actively manage the cover pool to the benefit of the covered bondholders: this may include replacing defaulted assets with performing assets, or replacing high loan-to-value (LTV) loans with lower LTV loans, particularly if this is required by law. This kind of support from the issuer explains why the issuer's role is more important than that of a simple guarantor.

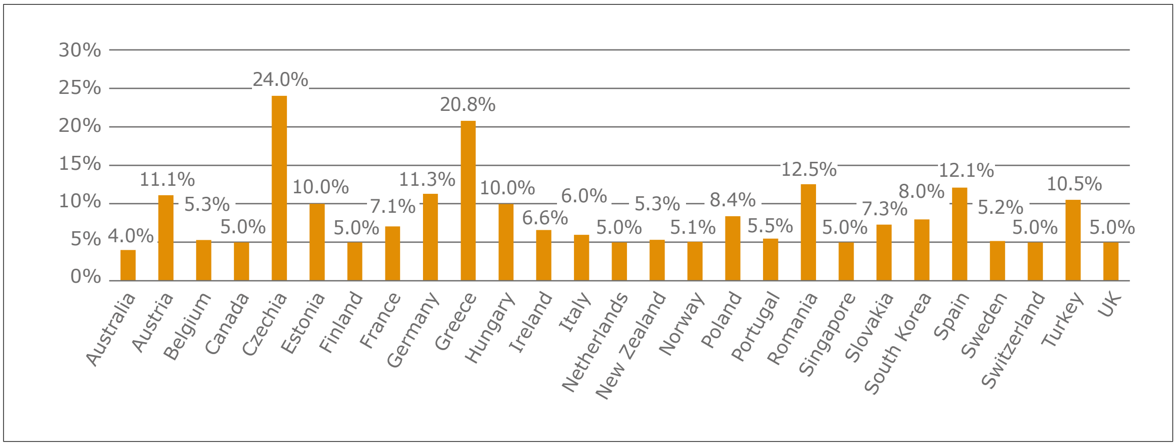
MOODY'S EL MODEL – VALUE OF THE COVER POOL AFTER A CB ANCHOR EVENT

To avoid losses on covered bonds following a CB anchor event, the realisable value of the cover pool, including any over-collateralisation, will need to be sufficient to cover the principal and interest payable on the covered bonds and any other equal or senior-ranking obligations. In our analysis, there are three key factors affecting the value of the cover pool: (1) the credit quality of the collateral; (2) the cost of refinancing of the cover pool; and (3) interest rate and currency mismatches. We describe the combined risk of refinancing the cover pool and interest rate and currency mismatches as *market risk*. For certain covered bonds we may make additional adjustments; for example, legal risk considerations might include the risk that cover pool funds will be commingled with the issuer's funds at or after issuer default, or that cover pool assets might be clawed back from the cover pool into the issuer's insolvency estate.

Credit quality of the cover pool

The credit quality of the cover pool is based on our estimate of borrower loan losses that will occur in a highly stressed environment after a CB anchor event. The collateral score measures the actual level of loss, so that the lower the collateral score, the better the credit quality of the cover pool (see Figure 1). Factors that affect the collateral score vary, but the quality of a pool of mortgage loans will normally be affected by (1) the range and distribution of LTVs; and (2) the quality of the loan underwriting and, in particular, the calculation of whether the borrower can afford the loan. The quality of a pool of public sector loans will normally be affected by the credit strength of the public-sector borrowers and the concentration levels of the loans. The credit quality of a cover pool may vary over time, as issuers typically have discretion to add and remove assets, but we monitor this by re-calculating the collateral score for most programmes on a quarterly basis.

> FIGURE 1: COLLATERAL SCORE OF MORTGAGE-BACKED COVERED BONDS: WEIGHTED-AVERAGES BY COUNTRY AND ASSET TYPE (Q4 2021)



Note: Programmes where mortgage loans are the majority of assets in the cover pool. Averages weighted by outstanding volumes. Data typically taken from performance overview reports published in fourth quarter of 2021.

Source: Moody's Investors Service

Refinancing of the cover pool

The assets in the cover pool will generally have a natural amortisation period that is longer than the maturity of the covered bonds. This mismatch means that, following a CB anchor event, funds may need to be raised against the cover pool to enable timely payment of principal on the covered bonds. Moody's EL model assumes that when funds must be raised against the cover pool this will be done at a discount to the notional value of the cover pool. The refinancing environment for the assets at this time is likely to be stressed and we take this into account in the level of discount we build into our loss assumptions.

Our calculation of the expected losses to the cover pool from refinancing risk is based on three factors:

(1) The refinancing margin, which is the annualised discount rate necessary to sell or refinance the cover pool assets;

(2) The portion of the cover pool exposed to refinancing risk, which we typically assume is at least 50%; and

(3) The average life of the refinancing risk, i.e., the average amount of time a purchaser would have to hold the cover pool assets before they either repay or re-price. We typically assume this is at least five years.

Refinancing margins are set by reference to each jurisdiction and then adjusted for individual programmes. Factors that influence the refinancing margins in our analysis vary, but key factors include (i) on a jurisdiction level, the margins observed for covered bonds in a given market; (ii) on programme and/or jurisdiction level, the mitigants to refinancing risk; and (iii) on a programme level, the collateral quality.

Interest-rate and currency mismatches in the cover pool

Following a CB anchor event, investors in covered bonds may be exposed to interest rate and currency mismatches. These mismatches result from different interest rates on cover pool assets and covered bonds, the duration of those rates, and the different currencies in which cover pools and covered bonds may be denominated. We consider the risk of mismatches initially during the period after issuer default, and subsequently at the point of refinancing the cover pool.

Under Moody's EL model, the potential mismatches are estimated by taking into account:

(1) The size of the possible interest rate (or currency) movement over the relevant period, for example looking at the impact of increasing and decreasing interest rates and taking the path that leads to the harshest expected loss on the covered bonds;

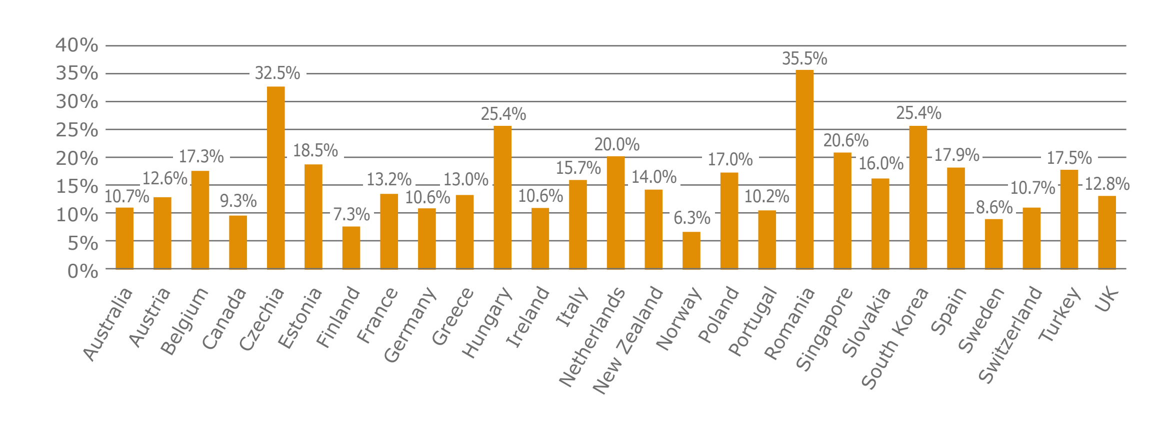
(2) The portion of the assets with interest-rate (or currency) mismatches; and

(3) In the case of interest-rate risk, the average duration of the mismatch based on how quickly the rates or margins on the assets in the cover pool may be adjusted.

Our EL model takes into account whether derivatives hedging is in place at the point of a CB anchor event and the probability of the covered bonds subsequently becoming unhedged. After a CB anchor event the transaction may become un-hedged following a default of either the swap counterparty or the issuer. We assess the risk of counterparty default by applying the principles outlined in our cross-sector methodology for assessing swap counterparties in structured finance.[5] We assess the risk of issuer default under a swap by assuming that if the issuer is unable to make payments on covered bonds it will similarly lack capacity to pay the swap, typically based on the two being equal-ranking in law. The risk of non-payment can therefore be estimated by the TPI (see next section). However, in no case do we currently assume that derivatives used to hedge interest rate and currency risk completely remove these risks from a covered bond.

5 "Moody's Approach to Assessing Counterparty Risks in Structured Finance", 28 June 2022, available at Moodys.com.

> FIGURE 2: MARKET RISK OF MORTGAGE-BACKED COVERED BONDS: WEIGHTED-AVERAGES BY COUNTRY AND ASSET TYPE (Q4 2021)



Note: Programmes where mortgage loans are the majority of assets in the cover pool. Averages weighted by outstanding volumes. Data typically taken from performance overview reports published in fourth quarter of 2021.

Source: Moody's Investors Service

MOODY'S TIMELY PAYMENT INDICATORS (TPIs): LINKAGE AND DELINKAGE

TPIs link the issuer, via the CB anchor, to the covered bond rating

TPIs measure payment continuity risk. A "timely payment indicator" or "TPI" is our assessment of the likelihood of timely payment of interest and principal to covered bondholders following a CB anchor event. Following a CB anchor event, we assume the issuer can no longer make payments on the covered bonds from its general resources. Instead, we assume that the entity responsible for servicing the cover pool (which, from an operational viewpoint, may continue to be the issuer) will attempt to make payments due to bondholders using funds deriving from, or proceeds raised against, the cover pool. As an alternative, timely payments might also be facilitated by third-party support for the covered bonds.

Higher TPIs mean reduced linkage to issuer. We express the likelihood of timely payment as a TPI level denoted as: Very High, High, Probable-High, Probable, Improbable and Very Improbable. The higher the TPI, the higher the potential uplift of the covered bond rating over the issuer CR assessment. We publish TPI tables setting out the expected maximum covered bond ratings for different combinations of CB anchor and TPI level (see our covered bond rating methodology report referred to at the end of this chapter).

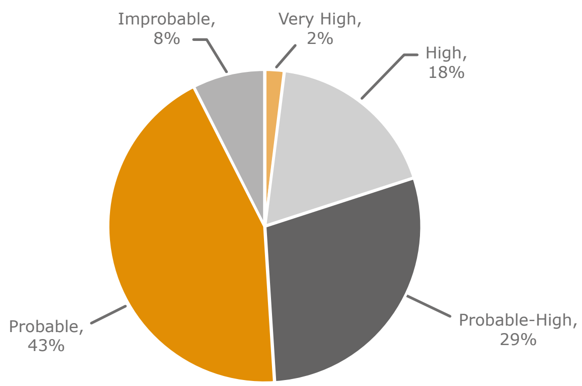
TPI level is based on qualitative assessment. We determine TPI levels by considering a range of qualitative factors that support or threaten timely payment. In this analysis the most important consideration – and the biggest risk to timely payment for most covered bonds – is the existence of refinancing risk. Refinancing risk is highly volatile, which is why our highest ratings cannot be maintained on covered bonds that are materially subject to refinancing risk unless the bonds are also backed by a highly-rated issuer. If the issuer fails, a key consideration for refinancing risk is whether other market participants or the financial authorities might provide or facilitate liquidity that would prevent a default on the covered bonds. Important considerations here are the strength of the covered bond market and regulatory framework.

TPIs consider jurisdiction and programme-level factors. We determine a benchmark TPI for the issuer's jurisdiction and the type of cover pool assets. We may then adjust TPIs for individual programmes to reflect particular aspects of the programme.

Factors that we consider relevant to TPI levels at the programme level include (1) arrangements for continuity of servicing and cash management; (2) the risk that any relevant swaps might be terminated; (3) the risk of acceleration of the covered bonds; (4) overcollateralisation levels; (5) possibility of principal maturity extensions; and (6) the issuer's ability to change the programme (in particular to add new assets that may be more/less liquid and enter into new hedging arrangements).

We will normally determine a rating ceiling based on the TPI table but we may make further adjustments, particularly if the issuer's CR assessment is low- or below-investment grade. For CR assessments below investment grade, the TPI table provides a range of potential outcomes, with the final rating depending on case by case analysis.

> FIGURE 3: TPI DISTRIBUTION ACROSS COVERED BOND PROGRAMMES



Source: Moody's Investors Service, Sector Update - Q2 2022

TPI de-linkage

Covered bonds can be TPI "de-linked". TPI de-linkage implies a reduced level of credit linkage between the issuer and the covered bonds that is broadly analogous to the credit linkage between a securitisation originator and senior securitisation notes. For us to consider a covered bond as TPI de-linked we would consider whether refinancing risk and the risks around the role of the issuer have been reduced sufficiently to minimise the impact of those risks on the covered bonds. For example, we have observed issuers materially reducing refinancing risk by replacing a hard or soft bullet principal repayment on their covered bonds with a pass-through or conditional pass-through repayment from the cover pool cash-flows.

INTEGRATION OF ESG RISKS

We seek to incorporate all material credit considerations into our covered bond ratings and this includes environmental, social and governance (ESG) risks. We endeavor to take the most forward-looking perspective that visibility into ESG risks and related mitigants permits. The materiality, time horizon and credit impact of ESG risks may vary widely, and issuer and cover pool credit strengths or vulnerabilities can mitigate or exacerbate ESG credit impacts.

A number of ESG considerations identified in our ESG methodology categories[6] could impact covered bonds. Key environmental risks that may be relevant include carbon transition risks and physical climate risks – such as flooding or heat stress – that could affect mortgage collateral. Key social risks could include the impact of

6 For details on ESG categories see our ESG rating methodology report referred to at the end of this chapter.

demographic changes on demand for housing and the issuer's handling of data security and responsible selling of financial products. Governance risks would likely focus on the strength of transaction control mechanisms and parties' adherence to contractual or regulatory requirements.

Our ESG methodology describes two frameworks we are currently implementing for analyzing ESG exposures and credit impacts respectively:

> *Issuer profile scores* (IPS) indicate the respective E, S or G exposures of an issuer or transaction. IPS function as inputs to our ratings. IPS are expressed on a numeric scale from E-1/S-1/G-1 (Positive) to E-5/S-5/G-5 (Very Highly Negative). The scale is asymmetric – only a score of 1 is positive – reflecting our view that ESG issues are more typically a source of credit risk than strength.

> The *credit impact score* (CIS) explains the impact of ESG considerations on a given issuer or transaction rating and is expressed on a scale of 1 to 5, indicating materiality. The CIS is based on our qualitative assessment of the impact of ESG considerations in the context of the other credit drivers that are material to the rating, and is an output of the rating process. For example, a score of CIS-2 would indicate that ESG attributes have an overall neutral-to-low (i.e. non-material) impact on the current rating.

References (all available at www.moodys.com):

> Rating Methodology – Moody's Approach to Rating Covered Bonds; 16 December 2021

> General Principles for Assessing Environmental, Social and Governance Risks Methodology; 19 October 2021

> Rating Methodology – Banks Methodology; 9 July 2021

> Covered bonds – Sector update, published quarterly

> Country Ceilings Methodology; 7 December 2020

> European Covered Bond Legal Frameworks: Moody's Legal Checklist; 9 December 2005

4.5 S&P GLOBAL RATINGS COVERED BOND RATING METHODOLOGY

By Barbara Florian and Antonio Farina, S&P Global Ratings

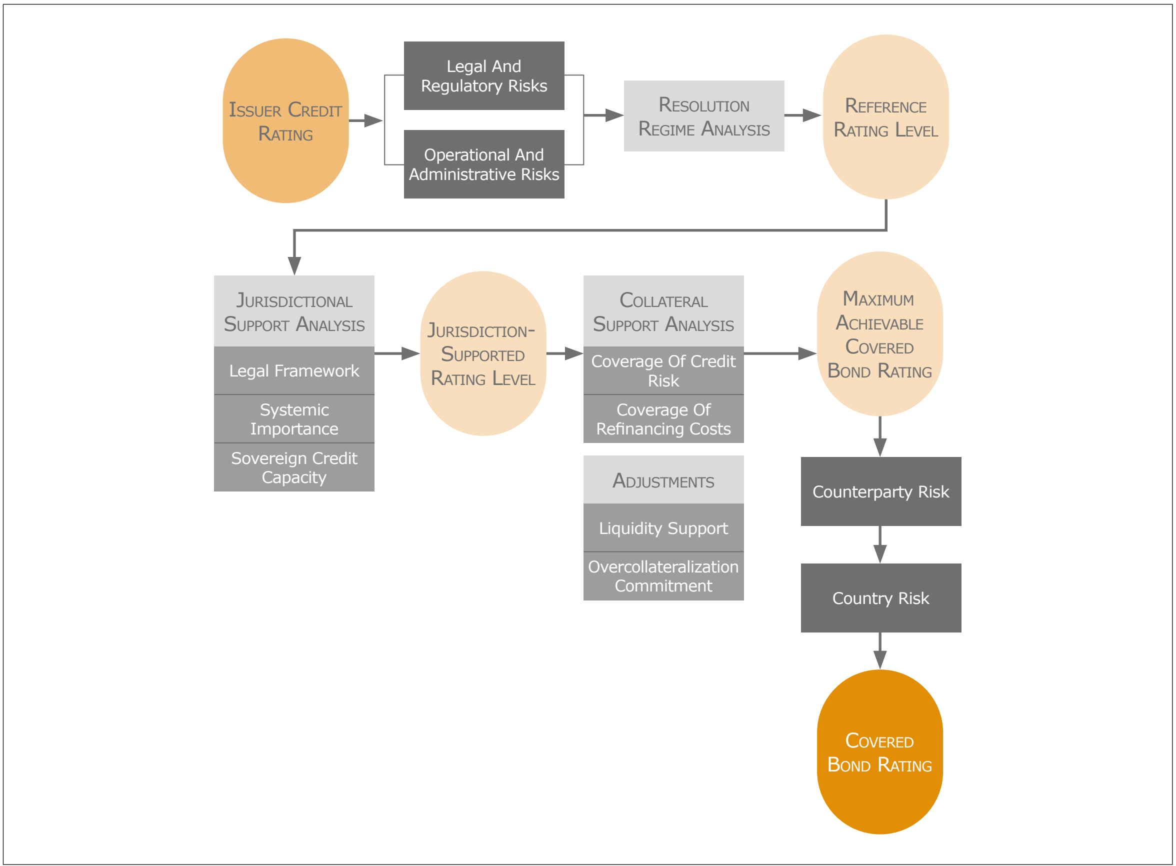
S&P Global Ratings' covered bonds rating approach is explained in the criteria "Covered Bonds Criteria," published on 9 December 2014, and "Covered Bond Ratings Framework: Methodology and Assumptions," published on 30 June 2015. These articles are available on RatingsDirect on the S&P Capital IQ platform and at www.spratings.com. While this paper summarises certain covered bond criteria and rating methodologies, these articles remain S&P Global Ratings' definitive treatment of the subject.

S&P Global Ratings organises the analytical process for rating covered bonds into four stages (see Figure 1):

1. Performing an initial analysis of legal and regulatory risks and operational and administrative risks specific to the issuing bank (issuer) which contribute to our assessment of whether the covered bond programme is sufficiently "distanced" from the credit risk of the issuer so as to permit the ratings on the programme (and on the covered bonds) to be higher than the issuer's own credit rating (ICR).
2. Assessing the starting point for the analysis of the potential uplift above the ICR, based on the relevant resolution regime.
3. Determining the potential bond rating solely based on cover pool-specific factors and jurisdictional support.
4. Combining the results of the above and incorporating any additional factors, such as counterparty risk and country risk, to assign the final covered bond rating.

The outcome of S&P Global Ratings' rating analysis is a rating on the covered bond programme and the bonds issued under the programme. The quarterly publication "Global Covered Bond Insights" gives an overview on the key rating factors, including credit and cash-flow indicators of the programmes that S&P Global Ratings rates (see www.spratings.com).

> Figure 1: Covered Bond Ratings Framework



Source: S&P Global Ratings

COVERED BOND ISSUER – SPECIFIC FACTORS

We conduct our initial analysis of covered bond ratings with the primary aim of determining whether the covered bond rating may exceed the ICR. Due to the dual-recourse nature of covered bonds, the covered bond rating is typically no lower than the relevant rating on the covered bond issuer. A bank's resolution counterparty rating (RCR), where we have assigned one, reflects its creditworthiness in reference to the timely fulfillment of the terms of certain financial obligations that may be protected from default within an applicable bail-in resolution process. For that reason, if we assess that covered bonds would be protected in such a process, the covered bond rating can also not be lower than the RCR on the issuing bank (if we have assigned one).

Legal and regulatory risks

The assessment of legal and regulatory risks focuses primarily on the degree to which a covered bond programme isolates the cover pool assets from the bankruptcy or insolvency risk of the issuer. If the asset isolation analysis concludes that covered bonds are not likely to be affected by the bankruptcy or insolvency of the issuer, then we may assign a rating to the covered bonds that is higher than the rating on the issuer.

S&P Global Ratings typically reviews the following legal aspects when assigning a rating to a covered bond programme:

> The nature of the segregation of the assets and cash flows if the issuer becomes insolvent;

> Whether there is any acceleration of payments to noteholders if the issuer becomes insolvent – whether payments of interest and principal will continue in accordance with the original terms of the covered bonds;

> Whether there is any payment moratorium or forced restructuring of the programme or the covered bonds if the issuer becomes insolvent; Whether there are any limits to overcollateralisation levels, i.e., if a programme may overcollateralise its covered bonds above the minimum limit defined under the legislation or the programme documents, and whether this additional overcollateralisation is available to the covered bondholders, notwithstanding any issuer insolvency;

> The treatment of any hedging agreements if the issuer becomes insolvent;

> Whether the programme can access funding if the issuer becomes insolvent; and

> The management of the cover pool both before and after the issuer becomes insolvent.

Operational and administrative risks

The analysis of operational and administrative risks focuses on individual transaction parties to assess whether they are capable of managing a covered bond programme while bonds remain outstanding.

The primary transaction party in a covered bond programme is the issuer which it is why we perform a risk analysis on its origination, underwriting, and servicing operations.

RESOLUTION REGIME ANALYSIS

Our criteria recognise that effective resolution regimes that exempt covered bonds from bail-in like the EU's Bank Recovery and Resolution Directive (BRRD) can increase the likelihood that an issuer can continue to service its covered bonds despite its own insolvency and defaulting on its senior unsecured obligations. Should an issuer become insolvent and thereupon be subject to a resolution regime that excludes covered bonds from the issuer's insolvency proceedings, our assessment of the likelihood that the issuer would still service the programme's covered bonds without receiving support from the jurisdiction or reverting to a sale of programme assets determines the reference rating level (RRL).

In countries subject to effective resolution regimes, depending on the systemic importance of the covered bond programmes to that country, our criteria provide that we may add up to two notches above the ICR. This RRL reflects our view of the increased likelihood that the issuer will service its covered bonds even if insolvent. For countries without an effective resolution regime that exempts covered bonds from bail-in, our criteria specify that we set the RRL at a level equal to the issuer's ICR.

JURISDICTIONAL SUPPORT ANALYSIS

If the issuer becomes insolvent, fails to return to being a going concern following resolution proceedings, and is unable or unwilling to service the programme, the programme administrator would turn to sources other than the issuer to meet payments due and mitigate the refinancing risk. In our opinion, jurisdictional support would likely be forthcoming in countries with a robust covered bond statutory and regulatory framework and where covered bonds play a systemically important role in government policy.

The criteria reference the support of a "jurisdiction" rather than a "government." That is because we believe support may come through direct government intervention such as from a central bank; indirect intervention such as a government's use of private-sector mechanisms to provide support; or through trustees, administrators, or other parties acting to protect covered bonds according to specific laws or other requirements.

Under S&P Global Ratings criteria, we consider the likelihood for the provision of governmental support when the cost of a failed covered bond programme to an economy and financial system would be considered greater than the cost of providing support. To assess this, we analyse: 1. the strength of the legal framework, 2. the systemic importance of the covered bonds in the country, and 3. the credit capacity of the sovereign to support the covered bonds (see Figure 2). Based on these specific factors, the criteria establish a four-point classification of jurisdictional support of "very strong," "strong," "moderate," and "weak". Depending on our assessment, the criteria provide for a potential rating uplift of up to three notches above the covered bond's RRL. This rating uplift reflects the strength of jurisdictional support that we believe might be forthcoming.

This jurisdictional-supported rating level (JRL) is our assessment of the creditworthiness of a covered bond programme once we have taken into consideration jurisdictional support for the programme, but before giving benefit to the programme administrator's ability to access other refinancing sources.

> FIGURE 2: ASSESSING JURISDICTIONAL SUPPORT

Assessments	Factors			Jurisdictional support uplift
	Legal framework	Systemic importance	Sovereign credit capacity	
Very Strong	Robust legal framework that establishes a minimum level of overcollateralisation, and sets out a dedicated public supervision and eligibility criteria for high-quality cover pool assets. The framework rests solely on the specific covered bond legislation.	Covered bonds play a material role as a funding source for the financial system, with material economic impact.	Sovereign has sufficient financial resources to support covered bonds, not subject to third-party conditions, and its foreign currency rating is 'BBB-' or above.	Very strong: up to three notches of uplift above the RRL
Strong	Robust legal framework that establishes a minimum level of overcollateralisation and provides eligibility criteria that allow only high-quality assets in the cover pool.	Covered bonds play an important role as a funding source for the financial system, with important economic impact.	Sovereign has sufficient financial resources to support covered bonds (subject to third-party conditions) and its foreign currency rating is 'BBB-' or above.	Strong: up to two notches of uplift above the RRL
Moderate	Same as for strong.	Covered bonds play a modest role as a funding source for the financial system, with modest economic impact.	Sovereign has sufficient financial resources to support covered bonds (subject or not to third-party conditions) and its foreign currency rating is 'BB-' or above.	Moderate: up to one notch of uplift above the RRL
Weak	Meets minimum legal provisions but does not meet all of the characteristics of a moderate legal framework.	Does not meet the characteristics of at least moderate support.	Does not meet the characteristics of at least moderate support.	Weak: no uplift above the RRL

Source: S&P Global Ratings

COLLATERAL SUPPORT ANALYSIS

We then consider to what extent overcollateralisation enhances the creditworthiness of a covered bond issuance by allowing the programme cover pool to raise funds from a broader range of investors and so address its refinancing needs. This overcollateralisation may cover the credit risk only, that is the expected losses incurred by the cover pool in a stressed scenario such as where defaults on underlying assets in the cover pool exceed assumed amounts, or such credit risk plus the refinancing costs, that is, the additional collateral required to raise funds against its assets to repay maturing covered bonds (due to the mismatch between assets and liabilities). We refer to this as "collateral-based uplift".

Our analysis starts with the calculation under our criteria of the credit enhancement for each notch of collateral-based uplift to meet a specific rating level for the programme. This is a function of the maximum number of notches of uplift for collateral, i.e., the maximum collateral-based uplift, and the "target credit enhancement" (TCE), which is the level of overcollateralisation that is commensurate with this maximum collateral-based uplift (see Figure 3).

We then compare the required credit enhancement with the available credit enhancement to calculate the "potential collateral-based uplift". We adjust this uplift for liquidity risk and uncommitted overcollateralisation to arrive at the maximum achievable covered bond rating.

The "maximum collateral-based uplift" for a given covered bond programme depends on our view about the presence of active secondary markets for the assets in the cover pool. In particular, we may allow up to four notches of collateral-based uplift above the JRL for overcollateralisation covering credit risk and refinancing costs where we believe active secondary markets exist to enable the covered bond to raise funds against its assets. Alternatively, we may allow up to two notches of collateral-based uplift above the covered bond's JRL for overcollateralisation to cover credit risk only, in jurisdictions that we believe do not have a sufficiently active secondary market to enable the covered bond to raise funds against its assets.

Figure 3 below shows the credit enhancement necessary to achieve each additional notch of uplift above the RRL, before adjusting for liquidity risk and uncommitted overcollateralisation.

> FIGURE 3: CREDIT ENHANCEMENT FOR UPLIFT ABOVE THE RRL

Assigned jurisdictional uplift	**Notches of uplift above the issuer's RRL**						
	1	**2**	**3**	**4**	**5**	**6**	**7**
No jurisdictional uplift	Credit risk at RRL plus 1 rating category	Credit risk at RRL plus 2 rating categories	Credit risk at 'AAA' and 75% of the refinancing costs	Credit risk at 'AAA' and 100% of the refinancing costs	N/A		
1 notch of jurisdictional uplift	Legal minimum	Credit risk at RRL plus 2 rating categories	Credit risk at 'AAA' and 50% of the refinancing costs	Credit risk at 'AAA' and 75% of the refinancing costs	Credit risk at 'AAA' and 100% of the refinancing costs	N/A	
2 notches of jurisdictional uplift	Legal minimum	Legal minimum	Credit risk at 'AAA' and 25% of the refinancing costs	Credit risk at 'AAA' and 50% of the refinancing costs	Credit risk at 'AAA' and 75% of the refinancing costs	Credit risk at 'AAA' and 100% of the refinancing costs	N/A
3 notches of jurisdictional uplift	Legal minimum	Legal minimum	Legal minimum	Credit risk at 'AAA' and 25% of the refinancing costs	Credit risk at 'AAA' and 50% of the refinancing costs	Credit risk at 'AAA' and 75% of the refinancing costs	Credit risk at 'AAA' and 100% of the refinancing costs

Color coding	Notches of uplift allocated on the basis of regulatory minimum overcollateralization, or, in order to achieve a 'AAA' rating on the covered bond, the higher of regulatory minimum and credit risk at a 'AAA' level of stress	Notches of uplift allocated on the basis of coverage of credit risk only	Notches of uplift allocated on the basis coverage of 'AAA' credit risk and refinancing costs

Note: This applies to programms with no adjustments for liquidity or uncommitted overcollateralisation and assuming that a secondary market for the cover pool assests exists to cover refinancing costs. N/A—Not applicable.

Source: S&P Global Ratings

Credit risk analysis

S&P Global Ratings analyses the underlying cover pools to form a view on the expected stressed asset performance using jurisdiction- and asset-specific assumptions. These cover pool assets typically contain residential mortgage loans, public sector bonds and loans, or some other form of high credit-quality collateral. The credit analysis also incorporates issuer-specific aspects, such as the impact of its underwriting policies or its collateral management.

Refinancing risk analysis

S&P Global Ratings models refinancing risk by applying an additional asset dependent "spread shock" when calculating a stressed net-present value of the cash flows of the assets to be sold. In its calculation of the target credit enhancement, we also incorporate asset default stresses (including any amounts for counterparty risks that are not structurally mitigated) and any interest and currency stresses that are not appropriately hedged.

After comparing the required credit enhancement with the available credit enhancement to calculate the "potential collateral-based uplift", we adjust this uplift for liquidity risk and uncommitted overcollateralisation to arrive at the maximum achievable covered bond rating.

We reduce the collateral-based uplift by one notch if the programme does not benefit from at least six months of liquidity. This adjustment reflects our view that accessing the market to raise funds against the assets may take time, during which the bonds may be exposed to payment disruption.

S&P Global Ratings considers the issuer's commitment on overcollateralisation levels, reducing the potential collateral-based uplift when we believe there is a risk that the overcollateralisation level, on which we base our analysis, may decrease over time.

EXTERNAL FACTORS

Finally, in addition to the analysis of the risks outlined above, S&P Global Ratings reviews any counterparty or country risk exposures. These risks might constrain the achievable covered bond rating even if sufficient overcollateralisation to cover other risks exists. Therefore, we analyse whether these risks would limit the maximum achievable covered bond rating as determined, based on the previous steps of the analysis.

Counterparty risks

If a programme benefits from interest rate or currency hedges to mitigate interest rate or currency mismatches, S&P Global Ratings reviews the underlying agreements to assess whether they conform with its counterparty criteria. Deviations can result in either incorporating the unhedged risks into the sizing of the target credit enhancement or capping the maximum achievable covered bond rating.

In its analysis, S&P Global Ratings also assesses how other counterparties that provide support to the transaction could affect the rating. This also includes whether account bank risk is adequately mitigated or whether, if the issuer becomes insolvent, cash flows could become commingled and ultimately lost. The loss of cash flows, in our view, must also be seen as an asset default related risk. If not mitigated in accordance with our counterparty criteria, we typically incorporate any such risk in our analysis of the cover pool's payment structure and cash flow mechanics, alternatively, the covered bond rating will be further constrained.

Country risks

We also analyse the underlying assets' and transaction's sensitivity to sovereign risk and the asset portfolio's diversification by jurisdiction. For covered bonds exposed to refinancing risk, we assign up to five notches of uplift above the sovereign rating.

We determine the maximum rating differential between sovereign and covered bond ratings based on the sovereign rating level and the covered bond programme's country-risk exposure. This assessment caps any potential further uplift typically available under our criteria for rating covered bonds.

DELINKING COVERED BOND RATINGS

A covered bond rating is delinked from the RRL of the issuing bank when the programme structurally has no mismatch between assets and liabilities and the covered bond's overcollateralisation is legally or contractually committed. In this case, we determine the rating according to whether the available credit enhancement is sufficient to pass our stress scenarios. In other words, we do not cap it as a function of the issuer's RRL or a predetermined level of rating uplift.

The assignment of outlooks

Under its criteria for rating covered bonds, S&P Global Ratings assigns an outlook to all covered bond ratings that are linked to the issuer's creditworthiness. These outlooks provide a view of a programme's potential for a rating change and its direction over the intermediate term. The covered bond outlooks take into account S&P Global Ratings' views on the outlook on the issuer, the level of ratings uplift achieved, as well as potential rating changes due to the performance of the collateral.

ESG CREDIT FACTORS

In our environmental, social, and governance (ESG) credit ratings criteria (see "Environmental, Social, And Governance Principles In Credit Ratings," published on Oct. 10, 2021), we articulate the principles that we apply to incorporate ESG credit factors into our credit ratings analysis. In those criteria, we define ESG credit factors as those factors that can materially influence the creditworthiness of a rated entity or issue and for which we have sufficient visibility and certainty to include in our credit rating analysis. We note that when sufficiently material to affect our view of creditworthiness, ESG credit factors can influence credit ratings.

In our commentary "ESG Credit Indicator Definitions And Application," published on Oct. 13, 2021, we discuss the introduction of ESG credit indicators as a complement to our existing credit rating analysis. Whereas our ESG criteria seek to enhance transparency in how and where we capture ESG factors in credit ratings, our ESG credit indicators provide additional disclosure by reflecting our opinion of how material the influence (on a 1-5 scale) of ESG factors is on our credit rating analysis. We assess these indicators on a net basis, meaning that we take a holistic view of exposure to ESG factors and related mitigants on the credit rating analysis (see "ESG Credit Indicator Report Card: Covered Bonds," published on April 7, 2022). They are not a sustainability rating or an S&P Global Ratings ESG evaluation[1].

We assess ESG factors through our applicable criteria, including our covered bonds criteria. Under these criteria, we uplift the covered bond rating from the issuer credit rating (ICR) on the issuing entity, which may be affected by financial and nonfinancial factors, including ESG considerations (see "ESG Credit Indicator Report Card: EMEA Banks," published on Jan. 19, 2022). We then determine the maximum achievable covered bond rating from an analysis of jurisdictional and cover pool-specific factors. Therefore, the issuer's ESG factors constitute the starting point for our assessment of the ESG factors affecting rated covered bond programs. We may apply ESG credit indicators for covered bonds that differ from the ESG credit indicators for the issuing entity, because ESG credit indicators for covered bonds will also reflect the effect that ESG factors have on our

1 ESG credit indicators are separate and distinct from S&P Global Ratings ESG evaluations. An S&P Global Ratings ESG evaluation is not a credit rating or component of our credit rating methodology. Rather, it indicates our view of an entity's relative exposure to observable ESG-related risks and opportunities, and our qualitative opinion of the entity's long-term sustainability and readiness for emerging trends and potential disruptions. Moreover, the ESG evaluation considers the impacts and dependencies on the environment and society across the value chain for a wide range of stakeholders, regardless of current credit materiality. (For more on ESG evaluations, see "Environmental, Social, And Governance Evaluation Analytical Approach," published on Dec. 15, 2020.)

analysis of jurisdictional and cover pool-specific factors. So, for example the lack of committed liquidity at the covered bond program level will affect our credit analysis of covered bonds but not of the ICR, and therefore it will be reflected in the ESG credit indicators for the covered bond program but not for those on the issuer.

Although ESG credit factors can influence our assessment of any analytical component in our ratings analysis, they are most likely to influence (when material) our collateral support analysis and the ICR on the issuing entity. ESG factors can influence ratings, outlooks, the credit enhancement required for the assigned rating, and the number of unused notches--the number of notches the issuer rating can be lowered without resulting in a downgrade of the covered bonds. Environmental and social factors typically affect the quality of the assets in the cover pool and the results of our collateral analysis. Therefore, we would typically not identify any positive or negative environmental or social factors in our covered bond analysis if we are not assigning any collateral-based uplift, as our analysis would be based on other factors such as the issuing entity's credit quality and the analysis of the resolution regime or jurisdictional support. Governance factors, on the other hand, usually affect the uplift that we assign to a covered bond program above the ICR on the issuing entity.

We are typically not applying ESG credit indicators to entities – such as certain mortgage banks – that do not have a stand-alone credit profile, because we do not undertake a stand-alone analysis on those entities. Where the issuer is not rated but belongs to a group with a rated parent and we determine the ICR using our "Group Rating Methodology," published on July 1, 2019, we would typically consider the ESG factors relevant to the parent company as the starting point for the influence of ESG factors in our covered bond rating analysis.

S&P Global Ratings' Criteria

- S&P Global Ratings Definitions, Nov. 10, 2021
- Counterparty Risk Framework: Methodology and Assumptions, March 8, 2019
- Incorporating Sovereign Risk in Rating Structured Finance Securities: Methodology and Assumptions, Jan. 30, 2019
- Global Methodology and Assumptions: Assessing Pools of Residential Loans, Jan. 25, 2019
- Structured Finance: Asset Isolation and Special-Purpose Entity Methodology, March 29, 2017
- Covered Bond Ratings Framework: Methodology and Assumptions, June 30, 2015
- Methodology and Assumptions: Analyzing European Commercial Real Estate Collateral in European Covered Bonds, March 31, 2015
- Covered Bonds Criteria, Dec. 9, 2014
- Methodology and Assumptions for Assessing Portfolios of International Public Sector and Other Debt Obligations Backing Covered Bonds and Structured Finance Securities, Dec. 9, 2014

4.6 SCOPE RATINGS COVERED BOND RATING METHODOLOGY

By Karlo Fuchs, Mathias Pleißner and Reber Acar, Scope Ratings

SUMMARY

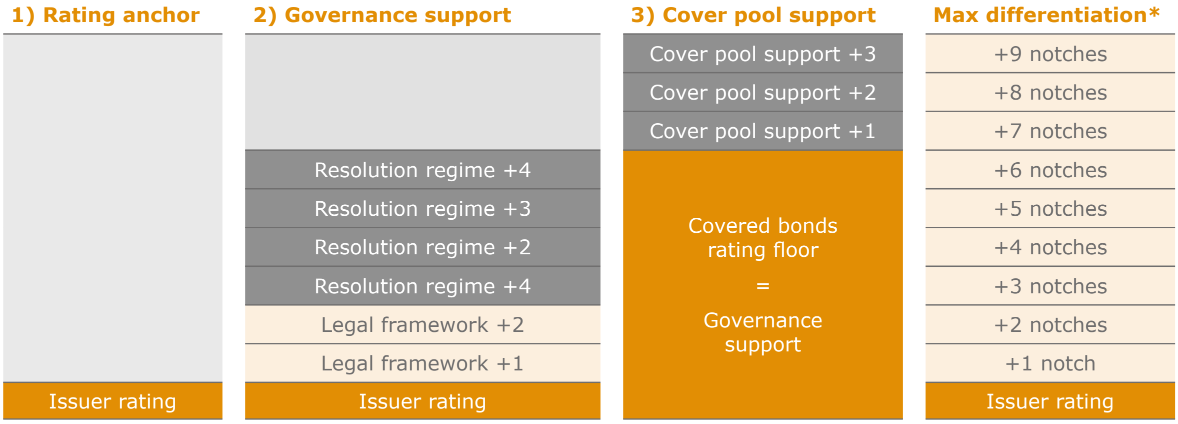
Our covered bond rating methodology[1] reflects the strong prudential metrics and enhanced regulatory and supervisory framework for banks. This has made a scenario in which a covered bond relies solely on a cover pool for repayments extremely remote. Our expected loss-based ratings reflect:

1) The importance of the issuer rating as the anchor for the covered bond analysis.

2) The governance support provided by the applicable legal and bank resolution frameworks, which can further elevate the covered bond rating. The strength of governance factors provides a minimum credit uplift and establishes the anchor for the additional support provided by the cover pool.

3) Cover pool credit support reflecting the availability of a second recourse if the issuer becomes insolvent (after resolution). The maximum uplift also reflects the interplay between complexity and transparency.

> FIGURE 1: BUILDING BLOCKS OF SCOPE'S COVERED BOND METHODOLOGY



*except for conditional pass-through programmes
Source: Scope Ratings

The **anchor point** for our covered bond rating, our bank rating, represents our opinion on a bank's ability to meet its contractual financial commitments and the extent to which credit fundamentals and other factors assessed during the rating process influence the probability that regulatory action would lead to default-like events.

Governance support reflects the fact that covered bonds receive preferential treatment in a resolution scenario, are likely to remain a going concern funding instrument and that a sole recourse to a clearly defined standalone cover pool would only materialise if: i) early supervisory intervention has not helped to stabilise the bank; ii) regulatory capital is fully depleted and significant amounts of bailinable debt converted into capital or written down are insufficient to ensure the continuation of the issuer; and iii) the restructured or resolved bank becomes insolvent. Governance factors can support a credit enhancement of up to six notches above the rating of a resolvable bank that has sizeable bailinable debt and is a regular and visible covered bond issuer in a covered-bond-supportive country.

1 More details can be found in 'Rating Methodology: Covered Bonds', available at www.scoperatings.com.

Cover pool support can further improve credit quality by up to three additional notches above that suggested by governance support.

In general, our covered bond ratings are linked to the bank's, except when features similar to that of a structured finance transaction override the issuer's influence on a covered bond's risk and refinancing structure. For example, the cover pool benefit for covered bonds that become pass-through is not likely to be capped at three notches above our covered bonds rating floor.

GOVERNANCE SUPPORT ANALYSIS

The legal framework and resolution regime analysis in our methodology covers relevant aspects before and after an issuer becomes insolvent and can provide a credit uplift of up to two and four notches, respectively, to the bank rating (i.e. a total of six notches for governance aspects).

The legal framework analysis provides a credit differentiation based on the clarity of provisions behind the ongoing maintenance of a high-credit-quality cover pool, as well as when the cover pool is the sole source of repayment for a covered bond.

The resolution regime analysis also addresses how well statutory provisions avoid negative repercussions on the covered bond in a resolution scenario. Systemic importance might mobilise regulators, supervisors or the private sector to support and proactively avoid uncertainty among covered bond investors during resolution. The resolution regime assessment also identifies the importance of relevant covered bond types in each country in order to understand incentives for market-led solutions. We also reflect whether a proactive and cohesive stakeholder community is actively working together to preserve the credit quality of covered bonds.

For highly rated banks, covered bond ratings can primarily be driven by the governance benefits from regulatory frameworks applicable to banks and their covered bonds. Therefore, benefits from the cover pool only become relevant for such covered bond ratings when the bank's credit quality and ratings start to shift downward.

Legal framework analysis

A supportive legal framework can provide a covered bond rating with up to two notches of credit uplift from the issuer rating. Our legal framework assessment identifies whether the covered bond structure can transition away from the insolvent issuer smoothly. The transition should avoid acceleration and allow the cover pool to be maintained. Preserving the cover pool upon the restructuring or insolvency of the issuer helps to ensure that full and timely payments on outstanding covered bonds continue. Programme enhancements, in particular overcollateralisation, should remain available, valid and enforceable to creditors, and neither a regulatory action nor an issuer event of default should impact the ability to manage the covered bond structure in the best interests of investors.

The framework should also advise on how to contain credit, market and liquidity risks before insolvency. Proactive liquidity management before and after insolvency, which helps with timely payment to covered bond holders, should also be possible. Furthermore, we seek to understand how well a legal framework resolves potential conflicts of interest between covered bond holders and other debtors in the case of regulatory action or insolvency. Lastly, we identify whether a supervisor or special trustee monitors the programme's structure independently and regularly (asset composition/structural risk) and whether this function can effectively act as a gatekeeper against any adverse cover pool management by the issuer.

If the above elements only apply partially, credit differentiation will be limited. For instance, if covered bonds were to accelerate upon the issuer's insolvency, because of either contractual or statutory provisions, the legal framework analysis may only warrant a maximum uplift of one notch for the covered bond rating. Similarly, weak covered bond oversight, or the absence of it, will likely prevent the highest credit differentiation.

The European covered bond harmonisation provides minimum standards for the legal frameworks applicable to covered bonds. However, differences between common and civil law systems, mortgage markets and national discretion still persist and mean that our legal framework analysis remains specific to the country and, possibly, the issuer.

Resolution regime analysis

We assign up to four notches of uplift for a supportive resolution framework to reflect a high likelihood that an issuer can maintain its covered bonds as a going-concern funding instrument. The uplift reflects the extreme unlikelihood that an investor would need to rely solely on the cover pool if its issuer operates in a framework similar to the Bank Recovery and Resolution Directive (BRRD). We analyse the following factors that would prevent an issuer's regulatory intervention from affecting the covered bond's credit quality:

> whether statutory provisions in resolution regimes explicitly address the fact that covered bonds will generally not be impacted upon a regulatory intervention in the issuer (no bail-in);

> whether the issuer's business model and balance sheet structure suggest that regulators will very likely use available resolution tools to restructure the issuer to maintain the covered bond programme as a going concern;

> whether covered bonds are a systemically important funding tool used by most banks in the country, the covered bond type is used to refinance cover pool assets that are important for the economy, and the covered bond issuer is actively and visibly using the product; and

> whether an active domestic stakeholder community (regulators, issuers and investors) proactively monitors market developments, maintains confidence in the product and encourages improvements to relevant regulations. We further assess the clarity and predictability of relevant statutory provisions, their interpretation as well as the track record of relevant authorities.

COVER POOL ANALYSIS

In the cover pool support analysis, we evaluate the expected loss of the covered bonds. We determine the maximum rating uplift by assessing the interplay between the complexity of a covered bond programme and the transparency provided to investors by the issuer. This translates into the cover pool complexity (CPC) category. Our credit risk analysis identifies relevant asset risks arising from the cover pool. As part of our cash flow risk analysis, we test the resilience of the covered bond's cash flow structure to credit, market and refinancing risks. The quantitative analysis is complemented with auxiliary risk considerations.

CPC category

For programmes where issuers provide full transparency on asset credit risk, market risk and where management is highly predictable, additional support from the cover pool can provide up to three notches of uplift – provided that identified risks are sufficiently mitigated e.g. by overcollateralisation. Programmes for which the issuer only provides industry best practice transparency reports, but which also exhibit high concentration or noticeable foreign currency risk, may only achieve one additional notch of uplift.

Assuming the highest level of transparency, the maximum credit differentiation between the bank and the covered bonds can be as high as nine notches. The highest covered bond ratings can in principle be supported by a strong cover pool, provided the covered bonds are issued by a resolvable and visible investment-grade issuer (at least BBB-) located in a covered-bond-supportive country.

The quantitative cover pool analysis indicates how specific characteristics of the covered bond structure, including the supporting overcollateralisation, may affect the instrument's loss given default as well as the rating stability the cover pool adds to the covered bonds.

Asset credit risk analysis

We use market-standard approaches to establish cover pool default distributions. Concentrated cover pools, typical for public sector or commercial real estate-backed covered bonds, are analysed with Monte Carlo simulation tools. For homogenous, granular cover pools, typical for residential-mortgage loan portfolios, we use a portfolio approximation approach, typically derived based on issuer-specific performance data, but which can also be conservatively established with country- and asset-specific assumptions.

Cash flow risk analysis

This analysis takes the scheduled cash flows of the cover pool assets, outstanding covered bonds and related derivatives into account. We identify the maximum level of credit differentiation a cover pool can support by increasing the severity of stresses for credit, market and refinancing risks. We complement our static cash flow analysis with forward-looking views on the potential evolution of risk factors.

Assessing the covered bonds' repayment risk is important for their ratings. Timely repayment of bullet maturities is often the highest risk covered bonds can be exposed to. Structural features may mitigate, but in most cases not fully eliminate, refinancing risk. Our assessment of how much refinancing risk impacts the credit quality of covered bonds also reflects their role in the financial system. We reflect in the quantitative assessment the options available to generate liquidity to repay maturing covered bonds. Generally, we recognise that proceeds from asset sales will be higher in countries where the product is systemically important and where there is an established covered bond market, compared to countries where covered bonds are only used occasionally.

Auxiliary credit considerations

Availability of overcollateralisation: The assessment of an issuer's ability and willingness to provide such protection is essential for the rating analysis. In the absence of contractual commitments, we assume that the lower the bank rating falls, the more likely an issuer's management no longer provides adequate overcollateralisation.

If the issuer has a rating of at least BBB, our analysis considers currently available overcollateralisation. If the rating is below BBB, our decision to take available overcollateralisation into account depends on whether the issuer engages in sufficiently robust communication to capital markets on overcollateralisation and whether this falls in line with expectations. We adjust the level of overcollateralisation downwards if there are no such statements, reflecting past volatility and our forward-looking view on expected levels. We only consider the legal minimum for issuers rated BB and below, unless strongly legally protected.

Counterparty risk: The guiding principles when assessing whether key counterparties could impact the cover pool analysis is their materiality and whether they can introduce additional financial or operational risk.

The analysis indicates whether the credit strength of external counterparties could impact and ultimately constrain the performance and creditworthiness of a covered bond. Effective replacement frameworks or other structural risk-mitigating mechanisms for key agents can typically prevent a negative impact.

Sovereign risk: We do not mechanistically limit the maximum rating achievable by a covered bond to the credit rating of the country in which the issuing bank is based or where cover pool assets are originated in.

However, macroeconomic and country specific factors remain important and are included in the asset and cash flow stresses that support covered bond ratings. The weight given to these factors may differ in both the covered bond and the bank analysis, as the cover pool's composition and risk profile may exhibit different risk characteristics than the rest of the balance sheet. As a result, sovereign considerations will differ in significance among issuers, even between different covered bond types from the same issuer.

ESG risk factors: ESG factors, especially governance considerations, play a major role for a covered bond's credit quality.

Starting at the determination of the bank rating, the issuer-specific ESG assessment can already result in positive or negative adjustments to the bank rating (for further details see the ESG-D(igital) analysis in our bank rating methodology).

Then, when establishing the additional covered bond uplift, our 'Governance support' uplift considers factors such as strength of supervision as well as the prudent management of a covered bond programme's risk and protection structure. We also analyse the stringency of internal and external monitoring of the programme and the governance impact of regulatory oversight and an active stakeholder community.

In addition, ESG factors can also impact our cover pool support analysis from a qualitative and quantitative angle. Governance factors such as the potential imbalance between complexity and risk versus transparency establish the maximum uplift. Further, in the quantitative part of the analysis, well established and prudent risk management guidelines can mitigate potential losses.

We can also include energy efficiency considerations and their potential impact on the default probability of the borrowers and recovery values of the collateral. Similarly, the beneficial increase in liquidity and demand for ESG covered bonds ('greenium') could, for instance, positively impact secondary market prices of the supporting collateral and ultimately require lower levels of supporting overcollateralisation.

Related criteria:

> Covered Bond Rating Methodology, April 2022
> Financial Institutions Rating Methodology, January 2022
> General Structured Finance Methodology, December 2021
> Methodology for Counterparty Risk in Structured Finance, July 2021

Related research:

> Covered Bond Outlook 2022, January 2022
> Scope's Covered Bond Quarterlies and thematic commentaries

The above are all available at www.scoperatings.com.

CHAPTER 5 - COVERED BOND STATISTICS

5.1 INTRODUCTION AND METHODOLOGY

By Joost Beaumont, Chairman of the ECBC Statistics & Data Working Group, ABN AMRO Bank N.V

The ECBC Statistics and Data Working Group has been collecting statistics on the outstanding volume and annual gross supply of covered bonds since 2003. The aim is to provide a complete and consistent set of numbers that can serve as a reliable source of data for interested parties, ranging from issuers to investors and regulators.

The collection of statistics is a significant undertaking each year, which is only possible thanks to the cooperation of the Working Group members, in close cooperation with covered bond issuers and banking associations. One representative per country (the list of country representatives can be found in the list of author section at the beginning of the Fact Book) undertakes the initial data collection by approaching each issuer separately in most countries. These figures are then cross checked on the basis of publicly available data by a small number of Working Group members. The 2021 numbers were cross checked by Florian Eichert and Steven Ly from Crédit Agricole, Agustin Martin from BBVA, Karsten Rühlmann from LBBW, Max Thissen from ABN AMRO, as well as myself. A special thanks also goes to José Díaz Martínez and Daniele Westig of the ECBC for all their support during the exercise.

GENERAL REMARKS ON THE 2021 STATISTICS

The aim of the ECBC statistics is to provide the most reliable data on the size and issuance of covered bonds globally. As such, it paints as realistic a picture of developments and trends in the covered bond market. In 2016, a breakdown by maturity structures was added to the statistics, while in 2019, we started to collect statistics on sustainable covered bonds, reflecting their rising importance. This year, the statistical annex will include data on a country-by-country level about the total amounts outstanding and issued of sustainable covered bonds and the number of existing as well as new sustainable issuers, if applicable. Sustainable covered bonds include a formal commitment by the issuer to use the bonds' proceeds to (re)finance loans in clearly defined environmental, social, governance (ESG) or a combination of these (sustainable) or similar criteria. The data is based on self-certification by issuers. In coming years, we will try to further enhance the quality of these data, as we expect that the importance of sustainable covered bonds will continue to grow over time.

As always, we continue to try to improve the quality of the data even for previous years. It is always possible that we miss a bond or still include a bond that has been repaid early (just think of retained covered bonds). Wherever we realize that there was a mistake in last year's data we amend the numbers. As a result of this, there could be some slight differences between this year's numbers and those published in previous years.

Before going into the actual statistics, please find below some general remarks about the figures, which should help to interpret them correctly:

> Covered bonds are divided into those denominated in euro, those in domestic currency (if not the euro), and those in a currency other than the euro and the domestic currency. The tables are all in euro, with the end-of-year exchange rates published by the European Central Bank used to convert all non-euro denominated figures into euro for the respective year. This adds an exchange rate component to the volumes of non-euro covered bond markets. However, the aim is to show volumes that allow a potential investor to get a feel for the relative size of the various countries rather than the funding volumes obtained by issuers, which typically are swapped back into their domestic currency at issuance.

> Another breakdown is the public placement of covered bonds, which splits the bonds by their size (EUR1 bn and above, EUR500m – below 1 bn, below EUR 500m). This is to provide a feeling for how large liquid benchmark markets are relative to the overall market size. For non-euro issuance we have introduced waivers, as for example USD500m is a benchmark size in USD markets but when converting it to EUR would fall into the EUR<500m bucket. The amounts relevant for the three buckets are as follows.

AUD: AUD1bn, AUD500m, AUD<500m
USD: USD1bn, USD500m, USD<500m
GBP: GBP500m, GBP250m, GBP<250m

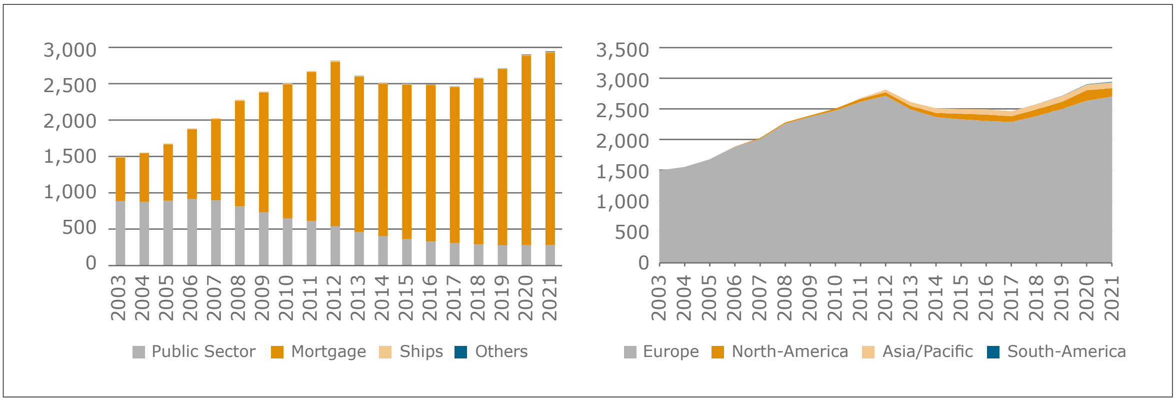
- For the purpose of counting the number of issuers and of new issuers the following applies: 1) Issuers are entities with at least one outstanding covered bond at year-end. 2) Issuers with multiple programmes still only count as one. The only exception to this rule is French covered bonds. In case of France, the actual issuer is a specialised bank rather than the mother company. As a result, one mother company with two covered bond programmes also counts as two issuers as the issuance actually comes from two separate legal entities. 3) New issuers are entities with at least one outstanding covered bond at year-end, but with no outstanding covered bond at the prior year-end.
- Spain: Spain's covered bond statistics are based on the data provided by Spain's AIAF (Asociación de Intermediarios de Activos Financieros). We have complemented this with registered unlisted covered bonds from the ECBC Covered Bond Label Database. The breakdown into public and private placements as well as the breakdown into fix and floating coupons in Spain is entirely based on non-AIAF sources.
- Sweden: Sweden's covered bond statistics exclude retained transactions used for the purpose of accessing central bank liquidity, and include only converted bostadsobligationer (mortgage bonds) and säkerställda obligationer (covered bonds).

FACT BOOK VERSUS LABEL STATISTICS

Before turning to the results of the exercise, we like to highlight the relation between the Fact Book statistics and those published by the ECBC Covered Bond Label. The Label has become a widely used tool with 119 issuers disclosing information on 156 cover pools across 23 countries by 21 July 2022, covering roughly EUR 2 tn of covered bonds, i.e. around 70% of the total outstanding market. When comparing the Covered Bonds listed in the Label statistics to those presented in the Fact Book there might be some discrepancies, especially regarding public-private classification in Denmark and Sweden.

The reason for these discrepancies is the different market structure those two countries have where bonds are frequently tapped, repurchased and then tapped again. The Label as well, as the ECBC statistics definitions requires a bond to be listed and syndicated to be classified as public. Although Danish and Swedish covered bonds are listed, the way they are issued does not comply with the syndication requirement. In the ECBC statistics presented below, we try to capture the "liquid" part of the market with our classifications and in justified cases can be more flexible than the Covered Bond Label database. We have therefore tried to eliminate the differences between both data sets wherever possible. But we have granted Denmark and Sweden an exception and consider bonds that for the ECBC label database are classified as private as public as long as we are talking about liquid benchmarks by these two countries' standards.

> Figures 1-2: Total outstanding covered bond per type (left) as well as region (right), EUR bn



Source: ECBC, ABN AMRO

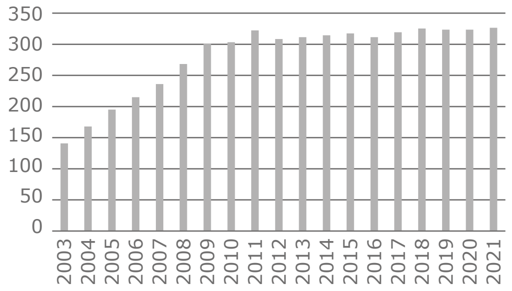
OUTSTANDING AMOUNT OF COVERED BONDS ROSE FOR FOURTH CONSECUTIVE YEAR, NEW RECORD SET

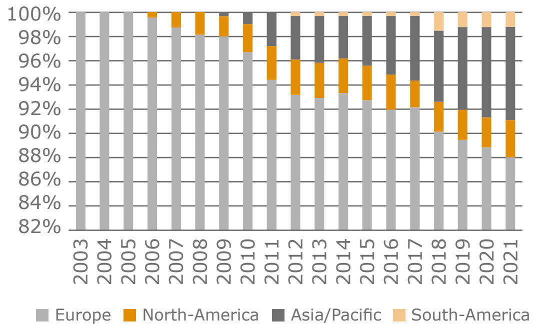
The outstanding amount of covered bonds rose by EUR 31 bn to EUR 2.94 tn at the end of 2021. This was the fourth consecutive year of growth and sets a new record, taking over the helm from 2020. However, the pace of growth in the amount outstanding slowed to 1.1% last year, down from 7.4% and 5.1% growth in 2020 and 2019, respectively. In contrast to 2020, the increase largely stemmed from issuance of publicly placed covered bonds (+EUR 32 bn) in 2021, with issuance of privately placed covered bonds (which includes retained covered bonds) declining by EUR 1.3 bn. This clearly reflects that, in 2021, banks started to rely more heavily on capital market funding, rather than cheap central bank borrowings offered after the outbreak of the COVID-19 pandemic. Overall, the figures once more underline the significant importance of covered bonds as bank funding tool across the globe.

The breakdown by collateral type shows that all types of covered bonds contributed to the rise in total volume outstanding. The largest nominal increase in the outstanding amount of covered bonds was that of mortgage backed bonds (+EUR 29 bn, +1.1%), while the volume of covered bonds in the 'other' category increased by EUR 1.1 bn to EUR 8.8 bn. This largely reflected issuance of export-finance covered bonds in Spain. Meanwhile, the outstanding amount of covered bonds backed by public sector assets rose by 0.2% to EUR 286 bn, with covered bonds backed by ship loans rising by 4% to EUR 8.2 bn, following a decrease one year prior (2020). Overall, mortgages remain the dominant asset class backing covered bonds with a share of 89.7% in the total amount outstanding, followed by public sector backed covered bonds (9.7%), and those backed by ships/other assets (both around 0.3%). Finally, the share of sustainable covered bonds rose further to 1.8% of the total, up from 1.1% in 2020.

At the end of 2021, 334 covered bond issuers were active around the globe, of which 54 also issue sustainable covered bonds. The number of issuers rose slightly last year, which is the balance between issuers leaving the market (mainly due to mergers and take-overs) and new issuers joining the market. A total of 13 new issuers entered the covered bond market, while the number of sustainable covered bond issuers alone increased by 23. Meanwhile, the total number of countries with outstanding covered bonds stood at 34 at the end of 2021, a similar number as in 2020, but up from 28 ten years ago. The regional breakdown shows that the majority (88%) of all 326 issuers are located in Europe, while the share of Asia/Pacific rose to 7.7% last year (2020: 7.4%). The share of North America rose by 0.6% to 3.1%, while that of South America remained roughly stable at 1.2%. It is worth noting that the volume of South American covered bonds outstanding more than doubled in 2021 compared to 2020, mainly driven by Brazilian banks. Finally, there were 452 covered bond programmes at the end of the year, as some issuers have public sector as well as mortgage covered bond programmes while some are using multiple mortgage backed ones.

> FIGURES 3-4: NUMBER OF COVERED BOND ISSUERS (LEFT) AND THEIR REGIONAL SHARE (RIGHT)





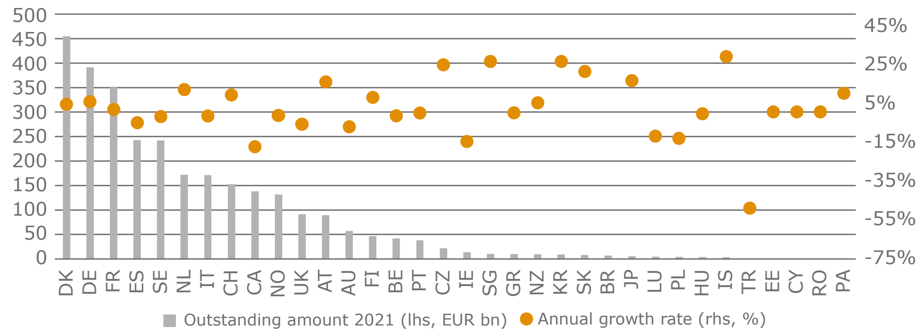
Source: ECBC, ABN AMRO

A breakdown by country shows that 15 countries had fewer covered bonds outstanding at the end of 2021 compared to 2020, although their decline was more than compensated for by the 13 countries that saw an increase in the outstanding amount of covered bonds.

Zooming in on specific countries shows that the volume of outstanding covered bonds rose by more than EUR 10 bn in Germany, the Netherlands, Denmark, Switzerland, and Austria, with Germany leading the ranks with an EUR 19 bn increase. In contrast, Canada saw a decline in outstanding covered bonds of EUR 30 bn. However, this follows a very strong increase in 2020. The decline in 2021 likely reflects the fact that the Canadian central bank withdrew its liquidity support measures for banks following the outbreak of the pandemic in 2020, under which banks were allowed to place large amounts of retained covered bonds at the central bank. In relative terms, the Canadian market declined by 18% last year, although the drop was largest in Turkey (-49%). Besides Brazil (see above), the countries that posted the strongest increase were South Korea and Singapore, which grew by 26% each. Meanwhile, the Icelandic market increased by 28%. Nevertheless, these markets are still comparatively small. Overall, 14 countries had the highest outstanding amounts at the end of 2021 since the start of the series in 2003.

The top five countries ranked by size did not change in 2021, with Denmark (EUR 455 bn) still taking the top spot, followed by Germany (EUR 391 bn) and France (EUR 350 bn). Although the top ten countries remained the same as well, there were some changes in rank. The Netherlands jumped two ranks to the 6th place, while Switzerland moved up one rank to the 8th place. In contrast, Canada moved down two positions, ending 2021 in 9th place. Furthermore, Italy moved down from the 6th to the 7th place.

> FIGURE 5: TOTAL AMOUNT OF OUTSTANDING COVERED BONDS BY COUNTRY AND ANNUAL CHANGE



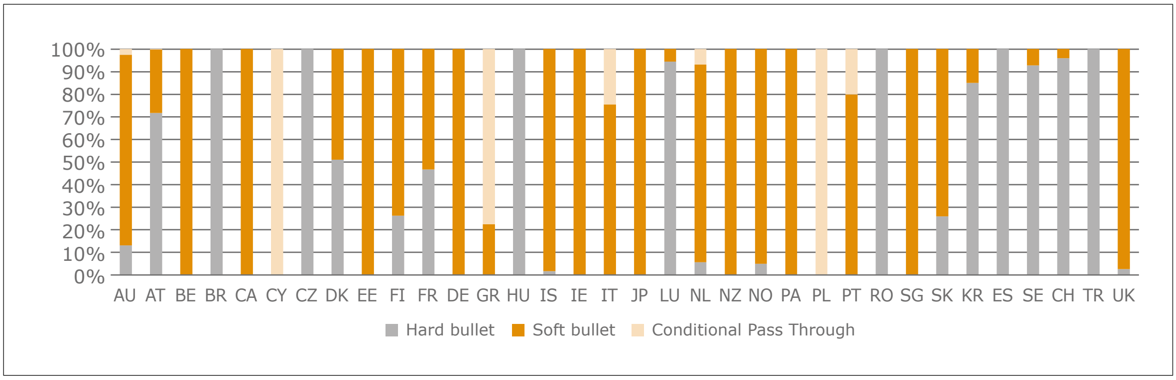
Source: ABN AMRO (growth rate of Brazil is 138%, not shown in graph)

SOFT BULLETS, DOMINANT STRUCTURE IN 2021

One of the biggest changes in the statistics compared to last year is that soft bullet covered bonds became the dominant structure in 2021. This is due to the fact that German covered bonds are now to be classified as soft bullets, following the implementation of the new Covered Bond Directive in Germany. As a result, the share of soft bullet covered bonds rose to 57.7% of outstanding covered bonds at the end of 2021, up from 44% in 2020. At the same time, the share of hard bullet covered bonds dropped to 39.6%, down from 54%. Conditional Pass Through covered bonds remain niche, with a share of 2.6%.

The graph below shows that in seven countries, hard bullet structures still represent at least 95% of the outstanding amount of covered bonds, while this is the case for soft bullet covered bonds in 12 other countries. However, the transposition of the new EU Directive is likely to change the picture in favour of soft bullet covered bonds in the coming years.

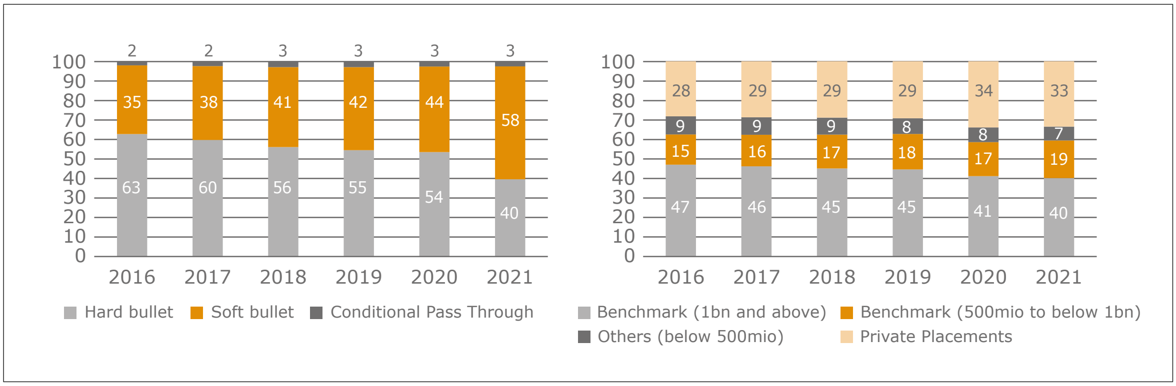
> Figure 6: Outstanding covered bonds by structure and country (%)



Source: ECBC, ABN AMRO

The breakdown by public and private placements (also see Figure 7) shows that the volume of outstanding covered bonds rose only for publicly placed covered bonds with a size between EUR 500mn and below EUR 1 bn (+58 bn), with outstanding amounts in all other categories declining. Still, the majority of covered bonds is publicly placed and has a size of at least EUR 1 bn, accounting for 40% of all outstanding covered bonds. Covered bonds with a size between EUR 500 mn and below EUR 1 bn have a 19% share, while private placements represent roughly one third of outstanding covered bonds.

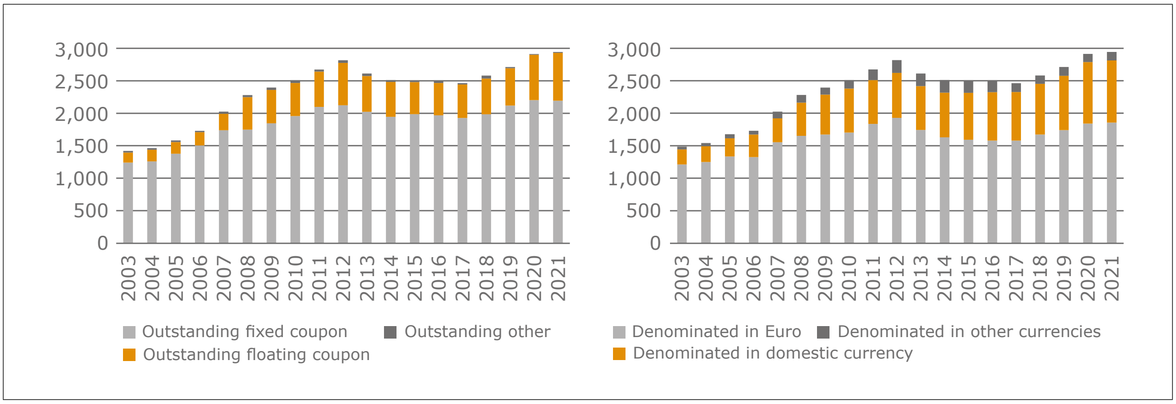
> Figures 7-8: Outstanding covered bonds by structure (left) and issue type (right)



Source: ECB, ABN AMRO

The breakdown of outstanding covered bonds by coupon type as well as by currency type again remained fairly stable in 2021. The fixed rate coupon remained the standard (75%), reflecting that almost all publicly placed benchmark covered bonds in EUR have a fixed coupon. Floating rate covered bonds had a share of 25% last year, indicating that most retained covered bonds have floating rate coupons. Meanwhile, the euro remains the dominant currency (share of 63% in the total), followed by domestic currencies (32%). These markets saw an increase in volumes outstanding of EUR 15 bn and EUR 12 bn, respectively.

> FIGURES 9-10: OUTSTANDING COVERED BONDS BY COUPON TYPE (LEFT) AND CURRENCY (RIGHT), EUR BN



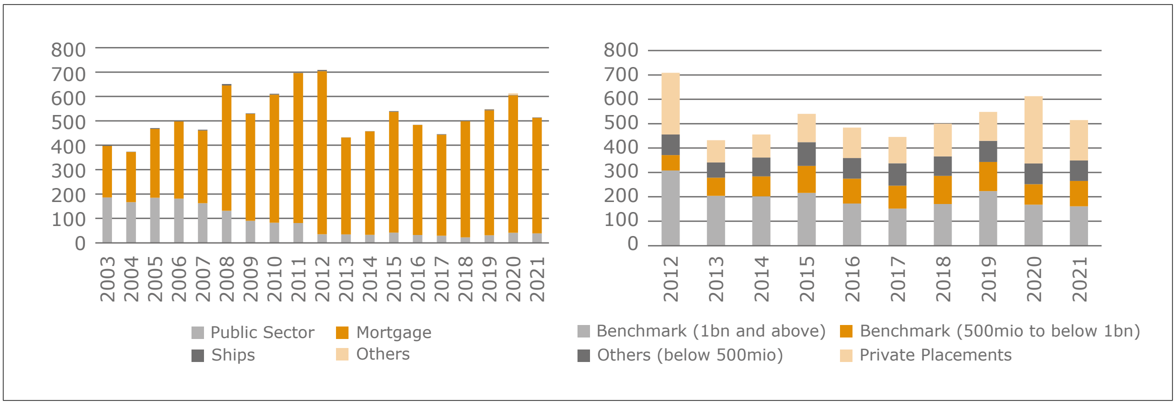
Source: ECBC, ABN AMRO

NEW ISSUANCE SLOWED IN 2021, AMID LESS ISSUANCE OF RETAINED COVERED BOND

New issuance of covered bonds was EUR 515 bn last year, almost EUR 100 bn less than the EUR 612 bn issued in 2020. This marked a 16% decrease in issuance, which was largely due to much less issuance of privately place covered bonds (-40%). This, in turn, again reflects the fact that banks reduced issuance of retained covered bonds following the heavy use of retained covered bonds in support measures by central banks in 2020. In fact, issuance of publicly placed covered bonds rose by EUR 12 bn in 2021, showing that banks started to increasingly rely on wholesale market funding last year.

Meanwhile, all types of covered bonds saw a reduction in issuance in 2021, except for ship covered bonds, which posted a 20% increase. Still, mortgage backed covered bonds remained by far the dominant type, accounting for 92% of total issuance. They were followed by public sector covered bonds, which had an 8% share in total issuance in 2021.

> FIGURES 11-12: NEW ISSUANCE OF COVERED BONDS BY TYPE (LEFT) AND SIZE (RIGHT), EUR BN

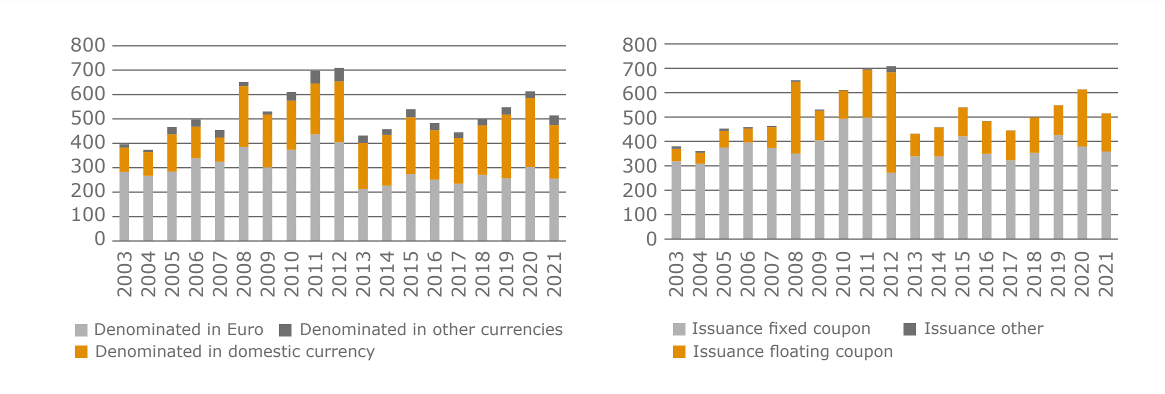


Source: ECBC, ABN AMRO

A breakdown by other categories showed that the issuance of floating rate covered bonds fell sharply in 2021 (-77% compared to 2020), which mirrors reduced issuance of private placements. However, fewer covered bonds with fixed coupons were also issued (-5%), although the pace of decline was less than that of total issuance, reflecting the rise in issuance of publicly placed covered bonds (which tend to have a fixed rate).

Overall, fixed rate covered bonds accounted for 70% of total issuance last year, up from 62% in 2020. The share of floating rate covered bonds dropped to 30%, down from 38% in 2020. Meanwhile, the breakdown of issuance by currency shows that EUR 266 bn of new issues were in euros, while EUR 219 bn was in domestic currencies. However, the share of new issuance in other currencies rose to EUR 40 bn in 2021, sharply up from EUR 27 bn in 2020 and almost doubling its share (7.8%) in total issuance of covered bonds. The latter suggest that issuers increasingly use covered bonds as a funding tool across currencies (and therefore also across the globe). This is especially true for Canadian issuers, which saw a rise in issuance in other currencies of around EUR 8 bn in 2021.

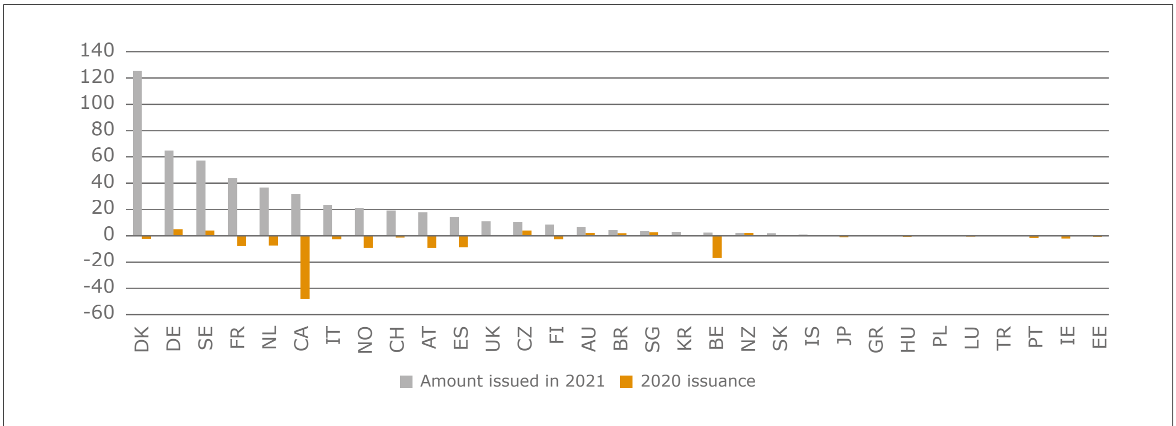
> Figures 13-14: Issuance of covered bonds by currency (left) and coupon type (right), EUR bn



Source: ECBC, ABN AMRO

A country breakdown reveals that Denmark maintained its leading position in terms of new issuance, with issuance in 2021 (EUR 125 bn) roughly equal to that in 2020. The country that posted the largest move within the top 10 issuance countries was Canada. It moved down four places, finishing in 6th place, for the reasons already mentioned above. As a result, Germany (EUR 65 bn), Sweden (EUR 57 bn), France (EUR 44 bn) and the Netherlands (EUR 37 bn) closed one place higher last year, taking the second to fifth position, respectively.

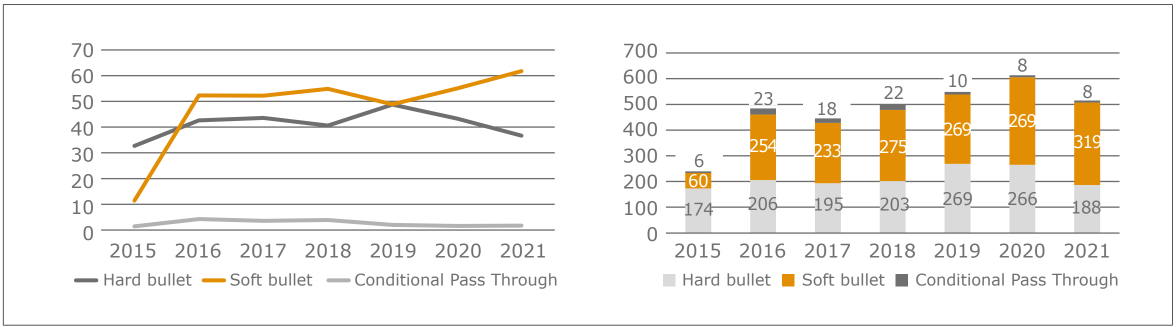
> Figure 15: Covered bond new issuance by country as well as change versus 2020



Source: ECBC, ABN AMRO

The new issuance data also show the rising share of soft bullet covered bond issuance in 2021, now that all German covered bonds need to be classified as soft bullets. As a result, the drop in total new issuance (EUR 98 bn) was largely due to a decline in issuance of hard bullet covered bonds (-78 bn) and to a lesser extent that of soft bullet covered bonds (-19 bn). Issuance of Conditional Pass Through covered bonds declined by only EUR 0.5 bn, but this type of covered bonds holds a small share in total issuance (1.5%). Indeed, soft bullet covered bonds accounted for 62% of total issuance in 2021, up from 55% in 2020 and reaching the highest share since the start of the data collection. The mirror image is that the share of hard bullet covered bonds dropped to 36% of total issuance, down from 43% in 2020. It is likely that the share of soft bullet covered bonds will continue to rise in the coming years, as most countries allow for extendable maturity structures following the transposition of the Covered Bond Directive. Meanwhile, the share of CPT covered bonds is likely to drop, given that some CPT issuers have shifted to soft bullets.

> Figures 16-17: Share of covered bonds outstanding in total (left, %) and new issuance by maturity type (EUR bn, labels are EUR bn)



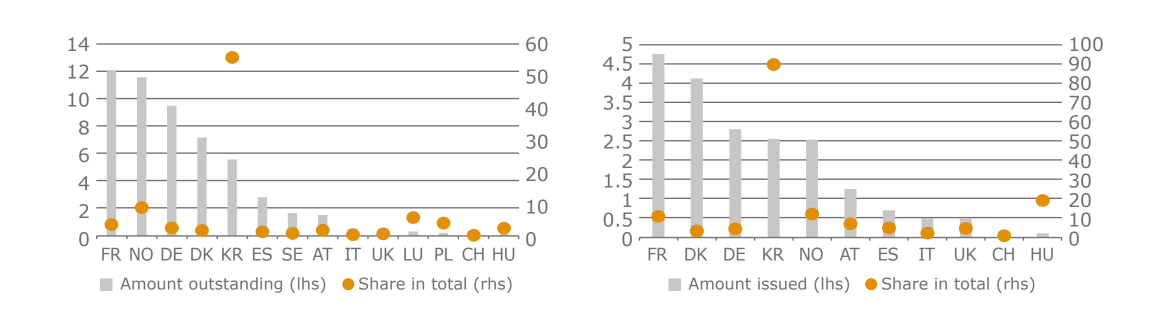
Source: ECBC, ABN AMRO

SUSTAINABLE COVERED BOND GAINED FURTHER MOMENTUM IN 2021

The market for sustainable covered bonds, i.e. covered bonds that have a green or social angle, has been steadily growing since the first sustainable covered bond was issued in 2014. As a result of their increasing relevance, we decided to start collecting data on sustainable covered bonds in 2019. The volume of outstanding sustainable covered bonds increased by more than EUR 20 bn to EUR 53 bn in 2021. This translates into an annual growth rate of 68%. It took the share of sustainable covered bond to just below 2% of total covered bonds outstanding, indicating that the market is still relatively small. In 2021, issuers from Italy, the UK, Switzerland and Hungary joined the sustainable covered bond market, taking the total number of countries with sustainable covered bonds outstanding to 14. France, Norway, and Germany remained the countries with the largest volumes of sustainable covered bonds, while Korea had the highest share of sustainable covered bonds versus the total market size.

Issuance of sustainable covered bonds also picked up noticeably last year, as EUR 20 bn of sustainable covered bonds were issued in 2021 compared to EUR 12 bn in 2019 (+66%). Issuance of sustainable covered bonds exceeded the EUR 1 bn in six countries, while in France and Denmark more than EUR 4 bn of sustainable covered bonds were issued last year. Overall, 23 issuers entered the sustainable covered bond market last year, taking the total number of sustainable covered bond issuers to 54. Looking forward, we expect this market to continue to grow, as financial markets will likely play an increasingly important role in the path towards net zero.

> FIGURES 18-19: BREAKDOWN OF SUSTAINABLE COVERED BONDS OUTSTANDING (LEFT) AND NEW ISSUANCE (RIGHT) (EUR BN AND % MARKET SHARE)



Source: ECBC, ABN AMRO

DEVELOPMENTS IN 2022: SURGE IN ISSUANCE

This year, the covered bond market has been characterised by a surge in new supply, with the amount of euro benchmark covered bonds already exceeding total issuance in 2021 as a whole. Covered bonds have proved their crisis-proof nature so far this year, which has been characterised by volatile market conditions. Meanwhile, most banks can no longer rely on cheap central bank funding, while some issuers rushed to the market ahead of the new Covered Bond Directive entering into force as well as the Eurosystem ending net covered bond purchases in Q3. Meanwhile, issuance in other currencies has been strong as well, with issuers being rather active in the AUD, CHF, GBP, and USD-denominated covered bond markets as well so far this year. This would indicate that issuers continue to issue covered bonds in non-domestic (and non-euro) covered bond markets, further expanding the geographical scope of the industry. This is particularly the case of Canadian banks, which have been very active in the covered bond market so far this year. As such, it is likely that they will climb up the ranks in next year's statistical exercise.

Meanwhile, issuance of sustainable euro benchmark covered bonds is still somewhat behind last year's total at the time of writing, despite the fact that this market has welcomed again some new entrants and new jurisdictions. The share of sustainable covered bond issuance against total issuance stood at around 10% at the start of August, which compares to 17% for 2021 as a whole.

5.2 STATISTICS

5.2.1 TOTAL

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total CB Outstanding										
Public Sector	543,977	464,761	408,617	371,530	335,525	312,458	294,007	282,709	285,328	285,990
Mortgage	2,254,388	2,131,211	2,088,468	2,116,116	2,146,478	2,140,271	2,275,873	2,414,816	2,607,960	2,636,571
Ships	13,571	11,306	9,824	10,379	8,295	7,367	6,524	8,814	7,892	8,198
Others	506	506	1,006	1,006	1,006	505	505	1,500	7,697	8,822
Total Outstanding	2,812,442	2,607,784	2,507,915	2,499,031	2,491,304	2,460,601	2,576,909	2,707,839	2,908,877	2,939,580
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	19,674	31,797	53,400
Public Placements										
Benchmark (1bn and above)	1,438,710	1,302,543	1,239,657	1,203,034	1,174,136	1,139,513	1,163,672	1,209,209	1,198,991	1,182,513
Benchmark (500mio to below 1bn)	218,255	232,511	289,337	356,990	385,000	395,844	446,008	491,996	507,218	565,565
Others (below 500Mio)	338,884	335,427	272,288	244,317	231,165	219,442	223,951	217,875	218,541	208,672
Private Placements	816,593	737,303	706,634	694,688	701,003	705,802	743,279	788,758	984,129	982,832
Total	2,812,441	2,607,783	2,507,916	2,499,030	2,491,304	2,460,601	2,576,911	2,707,839	2,908,879	2,939,580
Denominated in EURO	1,928,952	1,743,184	1,630,760	1,592,989	1,580,921	1,578,519	1,673,721	1,740,274	1,841,579	1,856,110
Denominated in domestic currency	690,151	671,345	682,550	719,529	740,994	744,982	776,216	833,668	941,393	953,435
Denominated in other currencies	193,337	193,254	194,606	186,513	169,388	137,099	126,973	133,897	125,906	130,035
Total	2,812,441	2,607,784	2,507,915	2,499,031	2,491,304	2,460,600	2,576,911	2,707,839	2,908,878	2,939,580
Hard Bullet	n.a.	n.a.	n.a.	n.a.	1,563,697	1,470,119	1,446,146	1,477,159	1,557,164	1,164,825
Soft Bullet	n.a.	n.a.	n.a.	n.a.	875,176	929,033	1,052,425	1,149,151	1,271,938	1,697,159
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	52,431	61,448	78,339	81,530	79,776	77,596
Total	2,812,441	2,607,783	2,507,916	2,499,030	2,491,304	2,460,600	2,576,911	2,707,840	2,908,878	2,939,580
Outstanding fixed coupon	2,121,714	2,022,352	1,944,713	1,985,153	1,967,187	1,926,775	1,984,668	2,116,694	2,200,314	2,191,475
Outstanding floating coupon	650,616	548,442	534,912	493,133	496,811	515,098	547,978	572,918	696,787	734,992
Outstanding other	40,111	36,989	28,291	20,745	27,306	18,728	44,266	18,228	11,776	13,113
Total	2,812,441	2,607,783	2,507,916	2,499,031	2,491,304	2,460,601	2,576,913	2,707,840	2,908,877	2,939,580
Number of Programmes	50	412	422	436	427	427	440	447	448	452
Number of Issuers	308	311	314	317	311	318	325	323	330	334
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	23	37	54

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total CB Issuance										
Public Sector	36,495	36,096	34,537	43,486	33,554	30,510	23,841	32,179	42,418	40,189
Mortgage	666,391	395,348	421,705	493,214	449,384	412,580	475,057	510,880	562,341	471,718
Ships	4,643	761	1,319	3,163	883	2,524	1,193	3,473	1,492	1,794
Others	506	-	500	-	-	-	-	1,500	6,197	880
Total Issuance	708,034	432,205	458,061	539,863	483,821	445,614	500,092	548,032	612,448	514,580
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	500	8,754	12,028	19,942
Public Placements										
Benchmark (1bn and above)	308,776	204,900	202,950	217,361	173,759	153,174	171,719	224,614	168,756	162,246
Benchmark (500mio to below 1bn)	62,773	74,031	81,969	110,252	101,371	93,021	114,846	118,650	83,953	103,319
Others (below 500Mio)	84,084	62,678	76,357	96,787	84,188	91,636	79,838	86,251	84,719	84,059
Private Placements	252,401	90,594	94,838	115,465	124,505	107,783	133,689	118,516	275,019	164,955
Total	708,034	432,204	456,114	539,864	483,822	445,614	500,092	547,832	612,448	514,580
Denominated in EURO	405,271	213,868	227,734	275,003	252,062	235,355	271,813	257,712	303,679	255,958
Denominated in domestic currency	248,382	188,399	207,133	232,050	202,150	186,637	201,570	259,621	281,684	218,725
Denominated in other currencies	54,381	29,937	23,193	32,811	29,609	23,622	26,707	30,700	27,084	39,897
Total	708,034	432,205	458,060	539,864	483,821	445,614	500,091	547,832	612,448	514,579
Hard Bullet	n.a.	n.a.	n.a.	174,045	206,369	194,598	202,903	269,200	265,833	187,536
Soft Bullet	n.a.	n.a.	n.a.	59,810	254,023	233,403	275,420	268,613	338,406	319,340
Conditional Pass Through	n.a.	n.a.	n.a.	6,201	23,429	17,613	21,688	10,219	8,209	7,704
Total	708,034	432,205	458,060	539,864	483,821	445,614	500,012	547,832	612,448	514,580
Issuance fixed coupon	272,029	339,953	339,104	421,494	349,268	323,802	353,880	426,544	379,799	359,195
Issuance floating coupon	411,133	91,461	117,878	117,198	133,323	120,841	144,230	121,065	232,338	155,190
Issuance other	24,872	790	1,079	1,171	1,231	971	1,980	422	311	194
Total	708,034	432,205	458,061	539,863	483,822	445,614	500,091	547,832	612,448	514,580
Number of New Issuers	20	8	9	14	8	14	16	14	12	13
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	9	7	23

Note: Please note that a few changes were undertaken in 2013 to the way data is grouped and shown. These changes impact the figures from 2012 onwards. A number of them, especially the size and placement type category changes, are substantial to how data is displayed. Backdating data to fit the new categories and maintaining consistent data history for previous years is a major challenge. Therefore, there is a full dataset going back to 2003 for some countries while there is only data from 2012 going forward for others. Consequently, on the aggregate covered bond market level, only data for the new categorisation for 2012 and 2013 is shown. The old categories together with the historic data can be found on the 2012 edition of the ECBC Fact Book. For further information on these changes, please see the Statistics introduction of the Fact Book.

Please note that the statistics contain "n.a." when data is not available, "-" when the value is zero and "*" indicates that the figure in question does not correspond to the sum of the above sub-components due to the unavailability in some countries of these breakdowns. In addition, please note that totals are calculated using available data only, and that any fluctuations of values in this table over time may be partly due to one or more countries' data becoming available or unavailable from one year to the next. In order to be sure about what causes changes in the totals, please see the individual country statistics. Finally, please also note that any small difference between Totals in the same year is due to rounding.

Source: EMF-ECBC

5.2.2 TOTAL 2021 STATISTICS BY TYPE OF ASSETS

COVERED BONDS OUTSTANDING 2021 in EUR million						
	Public Sector	Mortgage	Ships	Others	Mixed Assets	TOTAL
Australia	-	57,864	-	-	-	57,864
Austria	18,725	71,142	-	-	-	89,866
Belgium	1,211	41,462	-	-	-	42,673
Brazil	-	7,609	-	-	-	7,609
Canada	-	138,436	-	-	-	138,436
Cyprus	-	650	-	-	-	650
Czechia	-	22,548	-	-	-	22,548
Denmark	14,778	433,812	6,110	-	-	454,700
Estonia	-	850	-	-	-	850
Finland	-	47,119	-	-	-	47,119
France	70,103	226,893	-	-	53,144	350,141
Germany	125,263	264,016	2,088	-	-	391,366
Greece	-	10,840	-	-	-	10,840
Hungary	-	4,483	-	-	-	4,483
Iceland	-	4,270	-	-	-	4,270
Ireland	-	14,433	-	-	-	14,433
Italy	3,575	168,099	-	-	-	171,674
Japan	-	6,174	-	-	-	6,174
Latvia	-	-	-	-	-	-
Luxembourg	5,022	-	-	300	-	5,322
The Netherlands	-	172,181	-	-	-	172,181
New Zealand	-	10,151	-	-	-	10,151
Norway	1,953	130,030	-	-	-	131,983
Panama	-	46	-	-	-	46
Poland	49	5,000	-	-	-	5,049
Portugal	600	38,150	-	-	-	38,750
Romania	-	200	-	-	-	200
Singapore	-	11,087	-	-	-	11,087
Slovakia	-	8,851	-	-	-	8,851
South Korea	-	9,966	-	-	-	9,966
Spain	17,544	216,808	-	8,522	-	242,874
Sweden	-	242,018	-	-	-	242,018
Switzerland	-	152,825	-	-	-	152,825
Turkey	-	895	-	-	-	895
United Kingdom	595	91,090	-	-	-	91,685
United States	-	-	-	-	-	-
Total	**259,418**	**2,609,999**	**8,198**	**8,822**	**53,144**	**2,939,580**

COVERED BONDS ISSUANCE 2021 in EUR million						
	Public Sector	Mortgage	Ships	Others	Mixed Assets	TOTAL
Australia	-	6,825	-	-	-	6,825
Austria	2,371	15,553	-	-	-	17,924
Belgium	-	2,500	-	-	-	2,500
Brazil	-	4,366	-	-	-	4,366
Canada	-	31,820	-	-	-	31,820
Cyprus	-	-	-	-	-	-
Czechia	-	10,415	-	-	-	10,415
Denmark	2,428	121,724	1,194	-	-	125,346
Estonia	-	-	-	-	-	-
Finland	-	8,587	-	-	-	8,587
France	14,150	29,865	-	-	-	44,015
Germany	18,314	45,812	600	-	-	64,726
Greece	-	600	-	-	-	600
Hungary	-	541	-	-	-	541
Iceland	-	988	-	-	-	988
Ireland	-	-	-	-	-	-
Italy	1,000	22,500	-	-	-	23,500
Japan	-	750	-	-	-	750
Latvia	-	-	-	-	-	-
Luxembourg	375	-	-	-	-	375
The Netherlands	-	36,705	-	-	-	36,705
New Zealand	-	2,450	-	-	-	2,450
Norway	551	20,466	-	-	-	21,017
Panama	-	-	-	-	-	-
Poland	-	454	-	-	-	454
Portugal	-	-	-	-	-	-
Romania	-	-	-	-	-	-
Singapore	-	3,702	-	-	-	3,702
Slovakia	-	2,000	-	-	-	2,000
South Korea	-	2,847	-	-	-	2,847
Spain	1,000	12,720	-	880	-	14,600
Sweden	-	57,240	-	-	-	57,240
Switzerland	-	19,297	-	-	-	19,297
Turkey	-	16	-	-	-	16
United Kingdom	-	10,973		-	-	10,973
United States	-	-	-	-	-	-
Total	**40,189**	**471,718**	**1,794**	**880**	**-**	**514,580**

Source: EMF-ECBC

5.2.3 AUSTRALIA

Outstanding (in EUR million)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-		-	-	-	-
Mortgage	35,962	51,831	64,741	69,312	70,796	64,001	65,855	64,630	62,592	57,864
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	35,962	51,831	64,741	69,312	70,796	64,001	65,855	64,630	62,592	57,864
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	15,160	18,160	24,846	27,005	46,350	38,911	41,307	35,795	36,841	32,995
Benchmark (500mio - below 1bn)	3,061	7,285	8,945	11,151	6,887	8,587	7,341	12,023	9,082	9,155
Others (below 500Mio)	3,529	3,832	4,241	3,756	303	-	599	2,229	370	590
Private Placement	14,212	22,554	26,710	27,400	17,256	16,504	16,609	14,584	16,299	15,124
Total	35,962	51,831	64,741	69,312	70,796	64,001	65,855	64,630	62,592	57,864
Denominated in EURO	10,243	14,355	21,415	26,119	28,814	31,199	35,935	37,710	35,711	34,110
Denominated in domestic currency	8,427	9,677	10,694	10,728	10,146	6,344	7,712	7,650	8,750	7,639
Denominated in other currencies	17,293	27,799	32,633	32,465	31,836	26,459	22,208	19,270	18,131	16,115
Total	35,962	51,831	64,741	69,312	70,796	64,001	65,855	64,630	62,592	57,864
Hard Bullet	30,423	30,772	31,897	30,849	17,544	13,032	7,678	3,139	4,334	7,622
Soft Bullet	5,539	21,058	32,844	38,464	53,252	50,469	57,678	60,491	56,786	48,770
Conditional Pass Through	-	-	-	-	-	500	500	1,000	1,472	1,472
Total	35,962	51,831	64,741	69,312	70,796	64,001	65,855	64,630	62,592	57,864
Outstanding fixed coupon	28,940	43,309	55,503	61,902	63,995	58,777	60,836	59,142	53,915	50,250
Outstanding floating coupon	7,022	8,522	9,238	7,410	6,801	5,224	5,019	5,488	8,678	7,615
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	35,962	51,831	64,741	69,312	70,796	64,001	65,855	64,630	62,592	57,864
Number of Programmes	5	5	5	5	6	7	8	8	8	8
Number of Issuers	5	5	5	5	6	7	8	8	8	8
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	33,484	15,868	13,253	10,004	11,382	7,351	11,075	9,511	4,594	6,825
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	33,484	15,868	13,253	10,004	11,382	7,351	11,075	9,511	4,594	6,825
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	15,160	3,000	6,686	3,250	5,392	2,814	7,155	6,431	3,650	4,045
Benchmark (500mio - below 1bn)	3,061	4,224	1,660	2,790	3,026	2,144	500	1,554	472	1,826
Others (below 500Mio)	2,581	303	409	1,090	-	-	-	154	-	184
Private Placement	12,682	8,342	4,499	2,873	2,965	2,393	3,420	1,372	472	770
Total	33,484	15,868	13,253	10,004	11,382	7,351	11,075	9,511	4,594	6,825
Denominated in EURO	10,243	4,112	7,060	4,705	4,445	4,885	5,736	4,955	-	3,980
Denominated in domestic currency	8,427	1,250	1,359	34	2,227	1,473	2,004	524	944	640
Denominated in other currencies	14,814	10,506	4,834	5,265	4,710	993	3,335	4,032	3,650	2,205
Total	33,484	15,868	13,253	10,004	11,382	7,351	11,075	9,511	4,594	6,825
Hard Bullet	27,945	349	1,125	2,250	100	-	-	-	-	-
Soft Bullet	5,539	15,519	12,128	7,754	11,282	6,851	10,995	9,011	4,122	6,825
Conditional Pass Through	-	-	-	-	-	500	-	500	472	-
Total	33,484	15,868	13,253	10,004	11,382	7,351	10,995	9,511	4,594	6,825
Issuance fixed coupon	26,462	14,369	12,195	9,245	9,453	6,255	9,466	8,518	1,426	5,789
Issuance floating coupon	7,022	1,500	1,058	759	1,929	1,096	1,609	993	3,168	1,036
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	33,484	15,868	13,253	10,004	11,382	7,351	11,075	9,511	4,594	6,825
Number of New Issuers	2	-	-	-	1	1	1	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: Westpac Institutional Bank, ECBC

5.2.4 AUSTRIA

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	25,831	23,682	19,279	17,620	17,155	17,590	16,926	16,574	18,348	18,725
Mortgage	17,010	18,854	22,450	27,345	30,894	31,915	42,001	49,124	59,601	71,142
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	42,841	42,536	41,729	44,965	48,049	49,505	58,928	65,699	77,949	89,866
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	300	300	1,500
Public Placement										
Benchmark (1bn and above)	7,087	5,000	3,000	4,087	3,000	3,000	4,000	4,000	4,000	3,000
Benchmark (500mio - below 1bn)	11,328	12,870	13,050	14,550	16,800	20,050	23,100	27,192	29,500	30,500
Others (below 500Mio)	5,897	87	-	600	600	1,003	1,761	2,695	2,280	3,547
Private Placement	18,529	24,579	25,679	25,728	27,649	25,452	30,067	31,812	42,169	52,819
Total	42,841	42,536	41,729	44,965	48,049	49,505	58,928	65,699	77,950	89,866
Denominated in EURO	39,068	39,184	39,287	43,065	46,119	48,444	57,742	64,766	77,255	89,139
Denominated in domestic currency	-	-	-	-	-	-	1	-	-	-
Denominated in other currencies	3,773	3,352	2,442	1,900	1,930	1,061	1,185	932	695	726
Total	42,841	42,536	41,729	44,965	48,049	49,505	58,928	65,699	77,950	89,866
Hard Bullet	42,841	42,536	41,729	44,715	47,769	49,315	55,848	59,074	63,991	64,420
Soft Bullet	-	-	-	-	-	-	2,800	6,161	13,654	25,150
Conditional Pass Through	-	-	-	250	280	190	280	463	305	295
Total	42,841	42,536	41,729	44,965	48,049	49,505	58,928	65,699	77,949	89,866
Outstanding fixed coupon	32,696	34,793	29,680	31,611	47,769	33,794	40,256	48,777	50,348	51,993
Outstanding floating coupon	7,750	7,342	12,049	12,720	-	15,200	17,169	16,708	27,437	37,644
Outstanding other	2,395	402	-	634	280	511	1,503	214	164	229
Total	42,841	42,536	41,729	44,965	48,049	49,505	58,928	65,699	77,949	89,866
Number of Programmes	n.a.	39	45	48	48	48	49	46	46	43
Number of Issuers	26	27	28	27	26	26	27	27	26	26
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	1	3

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	6,882	3,373	5,146	3,177	2,355	3,115	2,040	1,833	6,515	2,371
Mortgage	3,805	6,093	7,111	5,457	7,181	3,165	11,007	11,228	20,587	15,553
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	10,687	9,466	12,257	8,634	9,536	6,280	13,047	13,061	27,102	17,924
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,250
Public Placement										
Benchmark (1bn and above)	1,000	-	-	-	-	-	1,000	-	-	-
Benchmark (500mio - below 1bn)	2,500	3,800	3,000	4,000	2,750	2,750	5,000	7,000	5,000	4,000
Others (below 500Mio)	318	-	-	327	390	550	605	315	280	1,386
Private Placement	6,869	5,666	9,256	4,308	6,396	2,980	6,441	5,746	21,822	12,538
Total	10,687	9,466	12,256	8,635	9,536	6,280	13,047	13,061	27,102	17,924
Denominated in EURO	10,447	9,466	12,256	8,635	9,536	6,280	12,935	13,061	27,102	17,924
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	240	-	-	-	-	-	112	-	-	-
Total	10,687	9,466	12,256	8,635	9,536	6,280	13,047	13,061	27,102	17,924
Hard Bullet	10,687	9,466	12,256	8,385	9,506	6,280	10,207	9,911	17,796	13,590
Soft Bullet	-	-	-	-	-	-	2,800	3,110	9,141	4,334
Conditional Pass Through	-	-	-	250	30	-	40	40	165	-
Total	10,687	9,466	12,256	8,635	9,536	6,280	13,047	13,061	27,102	17,924
Issuance fixed coupon	8,155	6,609	4,671	5,317	9,506	4,164	8,481	8,279	11,834	6,984
Issuance floating coupon	2,201	2,812	7,346	3,304	-	2,083	4,264	4,782	15,268	10,940
Issuance other	331	45	239	13	30	34	301	-	-	-
Total	10,687	9,466	12,256	8,634	9,536	6,280	13,047	13,061	27,102	17,924
Number of New Issuers	2	1	1	1	-	-	1	1	-	3
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	3

5.2.5 BELGIUM

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	1,750	1,800	2,300	2,300	2,461	2,461	2,461	1,211
Mortgage	2,590	8,188	10,575	15,105	16,700	15,250	20,092	23,637	41,062	41,462
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	2,590	8,188	12,325	16,905	19,000	17,550	22,553	26,098	43,523	42,673
Of which, total Sustainable CB	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a.
Public Placement										
Benchmark (1bn and above)	2,500	4,500	5,750	9,750	11,000	8,500	9,750	9,750	11,000	7,750
Benchmark (500mio - below 1bn)	-	2,500	5,175	5,175	5,925	6,925	10,175	8,825	8,500	9,500
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	90	1,188	1,400	1,980	2,075	2,125	2,628	7,523	24,023	25,423
Total	2,590	8,188	12,325	16,905	19,000	17,550	22,553	26,098	43,523	42,673
Denominated in EURO	2,590	8,188	12,325	16,905	19,000	17,550	22,553	26,098	43,523	42,673
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	2,590	8,188	12,325	16,905	19,000	17,550	22,553	26,098	43,523	42,673
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	2,590	8,188	12,325	16,905	19,000	17,550	22,553	26,098	43,523	42,673
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	2,590	8,188	12,325	16,905	19,000	17,550	22,553	26,098	43,523	42,673
Outstanding fixed coupon	2,590	8,188	12,185	16,765	18,860	17,410	22,413	25,998	43,423	42,673
Outstanding floating coupon	-	-	140	140	140	140	140	100	100	-
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	2,590	8,188	12,325	16,905	19,000	17,550	22,553	26,098	43,523	42,673
Number of Programmes	2	3	4	4	5	5	5	6	6	7
Number of Issuers	2	3	3	3	4	4	4	4	4	5
Of which, Sustainable Issuers	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	1,750	50	500	-	161	500	-	-
Mortgage	2,590	5,598	2,387	4,530	2,345	1,050	5,842	5,000	19,250	2,500
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	2,590	5,598	4,137	4,580	2,845	1,050	6,003	5,500	19,250	2,500
Of which, Sustainable CB Issuance	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a.
Public Placement										
Benchmark (1bn and above)	2,500	2,000	1,250	4,000	1,250	-	2,250	-	2,250	-
Benchmark (500mio - below 1bn)	-	2,500	2,675	-	1,500	1,000	3,250	500	500	1,000
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	90	1,098	212	580	95	50	503	5,000	16,500	1,500
Total	2,590	5,598	4,137	4,580	2,845	1,050	6,003	5,500	19,250	2,500
Denominated in EURO	2,590	5,598	4,137	4,580	2,845	1,050	6,003	5,500	19,250	2,500
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	2,590	5,598	4,137	4,580	2,845	1,050	6,003	5,500	19,250	2,500
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	2,590	5,598	3,997	4,580	2,845	1,050	6,003	5,500	19,250	2,500
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	2,590	5,598	3,997	4,580	2,845	1,050	6,003	5,500	19,250	2,500
Issuance fixed coupon	2,590	5,598	3,997	4,580	2,845	1,050	6,003	5,500	19,250	2,500
Issuance floating coupon	-	-	140	-	-	-	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	2,590	5,598	4,137	4,580	2,845	1,050	6,003	5,500	19,250	2,500
Number of New Issuers	2	1	-	-	1	-	-	-	-	1
Number of New Sustainable Issuers	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a.

5.2.6 BRAZIL

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Mortgage	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,487	3,199	7,609
Ships	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total Outstanding	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,487	3,199	7,609
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Benchmark (500mio - below 1bn)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,487	3,199	7,609
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,487	3,199	7,609
Denominated in EURO	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Denominated in domestic currency	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,487	3,199	7,609
Denominated in other currencies	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-		-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,487	3,199	7,609
Hard Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,487	3,199	7,609
Soft Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,487	3,199	7,609
Outstanding fixed coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Outstanding floating coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,487	3,199	7,609
Outstanding other	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,487	3,199	7,609
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4	7	7	7
Number of Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4	3	3	3
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Mortgage	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,040	2,473	4,366
Ships	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,040	2,473	4,366
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Benchmark (500mio - below 1bn)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,040	2,473	4,366
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,040	2,473	4,366
Denominated in EURO	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Denominated in domestic currency	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,040	2,473	4,366
Denominated in other currencies	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,040	2,473	4,366
Hard Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,040	2,473	4,366
Soft Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,040	2,473	4,366
Issuance fixed coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Issuance floating coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,040	2,473	4,366
Issuance other	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-		-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	454	2,040	2,473	4,366
Number of New Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.7 CANADA

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	49,121	50,459	64,836	85,759	100,830	93,095	107,496	113,016	168,195	138,436
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	49,121	50,459	64,836	85,759	100,830	93,095	107,496	113,016	168,195	138,436
Of which, total Sustainable CB	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Public Placement										
Benchmark (1bn and above)	43,495	45,372	59,481	76,749	84,273	77,075	88,943	93,697	86,559	93,899
Benchmark (500mio - below 1bn)	4,130	1,205	4,877	7,538	6,328	6,478	6,307	7,182	8,179	10,595
Others (below 500Mio)	1,496	3,882	478	571	1,728	1,183	1,899	553	625	931
Private Placement	-	-	-	901	8,500	8,360	10,347	11,584	72,832	33,011
Total	49,121	50,459	64,836	85,759	100,830	93,095	107,496	113,016	168,195	138,436
Denominated in EURO	2,576	6,750	19,250	34,401	47,262	50,012	56,662	57,662	57,282	62,518
Denominated in domestic currency	2,055	1,840	1,387	2,183	5,498	5,187	6,376	6,302	63,487	25,881
Denominated in other currencies	44,490	41,869	44,200	49,175	48,070	37,897	44,458	49,051	47,425	50,038
Total	49,121	50,459	64,836	85,759	100,830	93,095	107,496	113,016	168,195	138,436
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	49,121	50,459	64,836	85,759	100,830	93,095	107,496	113,016	168,195	138,436
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	49,121	50,459	64,836	85,759	100,830	93,095	107,496	113,016	168,195	138,436
Outstanding fixed coupon	48,743	48,962	60,588	76,427	89,939	82,362	93,478	96,936	96,125	89,064
Outstanding floating coupon	378	1,497	4,249	9,332	10,891	10,734	14,019	16,080	72,069	49,372
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	49,121	50,459	64,836	85,759	100,830	93,095	107,497	113,016	168,195	138,436
Number of Programmes	7	9	13	13	12	8	8	8	8	10
Number of Issuers	7	7	7	7	7	7	8	8	8	10
Of which, Sustainable Issuers	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	12,937	9,354	19,275	29,287	28,148	12,441	24,384	23,647	79,834	31,820
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	12,937	9,354	19,275	29,287	28,148	12,441	24,384	23,647	79,834	31,820
Of which, Sustainable CB Issuance	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Public Placement										
Benchmark (1bn and above)	11,937	9,030	15,851	18,246	20,569	11,167	18,390	19,560	14,389	26,739
Benchmark (500mio - below 1bn)	834	324	1,155	2,051	2,850	648	3,352	2,000	1,845	3,162
Others (below 500Mio)	166	-	321	2,515	701	-	222	-	-	350
Private Placement	-	-	-	6,475	4,028	625	2,420	2,088	63,600	1,569
Total	12,937	9,354	17,328	29,287	28,148	12,441	24,384	23,647	79,834	31,820
Denominated in EURO	-	5,500	12,500	15,151	12,861	4,000	12,750	11,750	10,370	12,785
Denominated in domestic currency	-	-	-	1,455	3,172	-	1,762	856	59,010	174
Denominated in other currencies	12,937	3,854	6,775	12,681	12,115	8,441	9,871	11,041	10,454	18,861
Total	12,937	9,354	19,275	29,287	28,148	12,441	24,383	23,647	79,834	31,820
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	12,937	9,354	19,275	29,287	28,148	12,441	24,384	23,647	79,834	31,820
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	12,937	9,354	19,275	29,287	28,148	12,441	24,384	23,647	79,834	31,820
Issuance fixed coupon	12,558	8,219	16,939	24,739	25,596	9,815	18,808	19,227	20,105	20,684
Issuance floating coupon	379	1,135	2,336	4,548	2,552	2,626	5,575	4,420	59,729	11,136
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	12,937	9,354	19,275	29,287	28,148	12,441	24,383	23,647	79,834	31,820
Number of New Issuers	-	-	-	-	-	-	1	-	-	2
Number of New Sustainable Issuers	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a.

Note: Outstanding and issuance amounts include registered (legislative) and non-registered covered bonds. For a breakdown, please refer to Figure [1] from the Canada chapter in 3.5 section of the Fact Book.

5.2.8 CYPRUS

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	4,550	1,000	1,000	650	650	650	650	650	650	650
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	4,550	1,000	1,000	650	650	650	650	650	650	650
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	4,550	1,000	1,000	650	650	650	650	650	650	650
Total	4,550	1,000	1,000	650	650	650	650	650	650	650
Denominated in EURO	4,550	1,000	1,000	650	650	650	650	650	650	650
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	4,550	1,000	1,000	650	650	650	650	650	650	650
Hard Bullet	n.a.	-	-	-	-	-	-	-	-	-
Soft Bullet	n.a.	1,000	1,000	-	-	-	-	-	-	-
Conditional Pass Through	n.a.	-	-	650	650	650	650	650	650	650
Total	n.a.	1,000	1,000	650	650	650	650	650	650	650
Outstanding fixed coupon	-	-	-	-	-	-	-	-	-	-
Outstanding floating coupon	4,550	1,000	1,000	650	650	650	650	650	650	650
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	4,550	1,000	1,000	650	650	650	650	650	650	650
Number of Programmes	n.a.	1	1	1	1	1	1	1	1	1
Number of Issuers	2	1	1	1	1	1	1	1	1	1
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	-	-	-	-	-	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	-	-	-	-	-	-	-	-	-	-
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Denominated in EURO	-	-	-	-	-	-	-	-	-	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	-	-	-	-	-	-	-	-	-	-
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Issuance fixed coupon	-	-	-	-	-	-	-	-	-	-
Issuance floating coupon	-	-	-	-	-	-	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Number of New Issuers	-	-	-	-	-	-	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.9 CZECHIA

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	9,056	10,355	11,106	11,656	13,060	15,522	13,757	14,168	18,185	22,548
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	9,056	10,355	11,106	11,656	13,060	15,522	13,757	14,168	18,185	22,548
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	700	-	-	-	-	-
Others (below 500Mio)	5,522	6,731	4,316	6,156	5,856	3,107	4,861	2,912	-	-
Private Placement	3,534	3,624	6,790	5,500	6,504	12,415	8,896	11,255	18,185	22,548
Total	9,056	10,355	11,106	11,656	13,060	15,522	13,757	14,168	18,185	22,548
Denominated in EURO	571	914	735	1,187	1,702	3,688	1,346	1,299	5,497	814
Denominated in domestic currency	8,485	9,441	10,371	10,469	11,358	11,834	12,411	12,868	12,688	21,734
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	9,056	10,355	11,106	11,656	13,060	15,522	13,757	14,168	18,185	22,548
Hard Bullet	9,056	10,355	11,106	11,656	13,060	15,522	13,757	14,168	18,185	22,548
Soft Bullet	-	-	-	-	-	-	-	-	-	-
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	9,056	10,355	11,106	11,656	13,060	15,522	13,757	14,168	18,185	22,548
Outstanding fixed coupon	3,280	6,110	5,279	6,101	7,386	10,591	9,334	9,938	10,413	10,763
Outstanding floating coupon	5,096	4,105	5,654	5,462	5,571	4,838	4,407	4,230	7,772	11,785
Outstanding other	680	140	173	93	103	93	16	-	-	-
Total	9,056	10,355	11,106	11,656	13,060	15,522	13,758	14,168	18,185	22,548
Number of Programmes	n.a.	8	8	8	7	8	8	8	7	7
Number of Issuers	8	8	8	8	7	8	8	8	7	7
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	1,309	1,791	2,188	2,729	1,693	4,074	2,573	1,516	6,412	10,415
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	1,309	1,791	2,188	2,729	1,693	4,074	2,573	1,516	6,412	10,415
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	-	-	-	-	500
Others (below 500Mio)	742	622	369	1,138	387	376	187	-	-	-
Private Placement	567	1,169	1,819	1,591	1,306	3,698	2,386	1,516	6,412	9,915
Total	1,309	1,791	2,188	2,729	1,693	4,074	2,573	1,516	6,412	10,415
Denominated in EURO	500	886	286	623	200	2,318	500	7	4,501	500
Denominated in domestic currency	809	905	1,902	2,106	1,493	1,756	2,073	1,509	1,911	9,915
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	1,309	1,791	2,188	2,729	1,693	4,074	2,573	1,516	6,412	10,415
Hard Bullet	1,309	1,791	2,188	2,729	1,693	4,074	2,573	1,516	6,412	10,415
Soft Bullet	-	-	-	-	-	-	-	-	-	-
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	1,309	1,791	2,188	2,729	1,693	4,074	2,573	1,516	6,412	10,415
Issuance fixed coupon	484	1,717	2,013	2,090	1,551	4,035	2,442	1,478	2,354	8,546
Issuance floating coupon	745	74	136	639	142	39	131	38	4,058	1,869
Issuance other	80	-	39	-	-	-	-	-	-	-
Total	1,309	1,791	2,188	2,729	1,693	4,074	2,573	1,516	6,412	10,415
Number of New Issuers	-	-	-	-	-	1	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.10 DENMARK

Outstanding (in EUR million)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	4,375	10,864	12,872	14,778
Mortgage	359,560	359,646	369,978	377,903	389,200	393,447	396,246	402,432	419,031	433,812
Ships	6,325	5,514	5,013	5,221	4,744	4,947	5,370	6,090	5,680	6,110
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	365,885	365,160	374,991	383,124	393,944	398,394	405,991	419,386	437,583	454,700
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,117	3,062	7,157
Public Placement										
Benchmark (1bn and above)	231,421	234,504	228,111	216,822	241,463	270,245	282,575	307,847	311,130	326,368
Benchmark (500mio - below 1bn)	52,156	54,170	64,229	76,880	78,434	57,504	54,836	45,686	50,142	61,211
Others (below 500Mio)	80,692	74,355	78,721	77,125	69,261	66,636	64,449	63,109	69,029	65,479
Private Placement	1,616	2,131	3,931	12,297	4,786	4,009	4,131	2,743	7,282	1,642
Total	365,885	365,160	374,992	383,124	393,944	398,394	405,991	419,386	437,583	454,700
Denominated in EURO	46,451	40,856	38,682	36,934	38,481	30,805	27,290	24,439	29,009	26,589
Denominated in domestic currency	312,065	316,603	327,442	337,631	346,368	357,977	369,111	384,498	397,571	414,787
Denominated in other currencies	7,368	7,701	8,867	8,559	9,095	9,612	9,590	10,449	11,004	13,324
Total	365,885	365,160	374,991	383,124	393,944	398,394	405,991	419,386	437,583	454,700
Hard Bullet	n.a.	n.a.	n.a.	n.a.	211,224	183,166	176,393	195,024	231,069	232,266
Soft Bullet	n.a.	n.a.	n.a.	n.a.	182,720	215,228	229,598	224,362	206,515	222,434
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Total	365,885	365,160	374,991	383,124	393,944	398,394	405,991	419,386	437,583	454,700
Outstanding fixed coupon	285,754	284,483	285,721	285,004	287,779	293,255	298,456	314,483	333,477	349,488
Outstanding floating coupon	80,131	80,677	89,271	98,120	105,165	105,139	107,535	104,903	104,107	105,211
Outstanding other	-	-	-	-	1,000	-	-	-	-	-
Total	365,885	365,160	374,992	383,124	393,944	398,394	405,991	419,386	437,583	454,700
Number of Programmes	n.a.	24	23	23	23	23	27	28	28	29
Number of Issuers	10	10	9	9	9	9	9	9	7	7
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2	3	4

Issuance (in EUR million)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	4,382	6,377	2,469	2,428
Mortgage	185,845	149,989	154,310	163,050	130,329	123,205	113,441	165,208	124,013	121,724
Ships	1,474	458	399	955	883	2,524	1,183	1,713	1,042	1,194
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	187,319	150,447	154,709	164,005	131,212	125,729	119,006	173,298	127,524	125,346
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,334	4,116
Public Placement										
Benchmark (1bn and above)	140,705	112,880	78,323	74,213	48,361	48,179	42,693	86,317	46,280	44,237
Benchmark (500mio - below 1bn)	18,339	17,573	31,779	33,205	34,322	28,429	30,205	39,856	31,946	32,466
Others (below 500Mio)	27,843	19,657	44,592	54,531	48,110	49,121	45,497	46,125	43,798	48,643
Private Placement	432	337	15	2,056	419	-	611	1,000	5,500	-
Total	187,319	150,447	154,709	164,005	131,212	125,729	119,006	173,298	127,524	125,346
Denominated in EURO	25,074	23,553	15,412	11,390	8,865	8,594	7,821	5,466	7,803	3,406
Denominated in domestic currency	158,335	124,331	134,368	147,944	118,030	114,873	109,434	164,053	116,635	116,404
Denominated in other currencies	3,910	2,563	4,929	4,671	4,317	2,262	1,751	3,779	3,086	5,536
Total	187,319	150,447	154,709	164,005	131,212	125,729	119,006	173,298	127,524	125,346
Hard Bullet	n.a	n.a	n.a	n.a	29,630	28,786	36,362	98,706	62,104	56,213
Soft Bullet	n.a	n.a	n.a	n.a	101,582	96,943	82,644	74,592	65,419	69,133
Conditional Pass Through	n.a	n.a	n.a	n.a	-	-	-	-	-	-
Total	187,319	150,447	154,709	164,005	131,212	125,729	119,006	173,298	127,524	125,346
Issuance fixed coupon	-	130,290	131,949	129,815	90,328	89,319	89,194	140,692	100,598	92,943
Issuance floating coupon	163,680	20,157	22,760	34,190	40,884	36,410	29,812	32,606	26,926	32,403
Issuance other	23,638	-	-	-	-	-	-	-	-	-
Total	187,319	150,447	154,709	164,005	131,212	125,729	119,006	173,298	127,524	125,346
Number of New Issuers	-	-	-	-	-	-	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	1

Note: Since a large share of Danish mortgage covered bonds are tap-issued over a period of typically 3 years, Benchmark (1bn and above) issues and outstanding are defined as covered bond with more than EUR 1 bn in the year, the bond reach EUR 1 bn. The same way, Benchmark (500Mio - below 1bn) issues and outstanding are defined as covered bond with 500Mio - below 1bn euro in the year, the bond reach EUR 500 Mio, and at the same time does not exceed EUR 1 bn. The definition includes both covered bonds denominated in DKK and in EUR. Danish covered bonds denominated in euro and issued in a jurisdiction outside Denmark are included in the Danish data.

5.2.11 ESTONIA

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Mortgage	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	850
Ships	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Total Outstanding	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	850
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Benchmark (500mio - below 1bn)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	500	500
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	250	250
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	100	100
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	850
Denominated in EURO	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	850
Denominated in domestic currency	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Denominated in other currencies	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	850
Hard Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Soft Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	850
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	850
Outstanding fixed coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	850
Outstanding floating coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Outstanding other	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	850
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2	2
Number of Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2	2
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Mortgage	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	-
Ships	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Total Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	-
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Benchmark (500mio - below 1bn)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	500	-
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	250	-
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	100	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	-
Denominated in EURO	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	-
Denominated in domestic currency	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Denominated in other currencies	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	-
Hard Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Soft Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	-
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	-
Issuance fixed coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	-
Issuance floating coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Issuance other	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	850	-
Number of New Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.12 FINLAND

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	26,684	29,783	32,031	33,974	33,822	34,625	37,257	37,774	43,855	47,119
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	26,684	29,783	32,031	33,974	33,822	34,625	37,257	37,774	43,855	47,119
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	20,750	22,500	25,750	27,250	26,000	28,000	27,750	27,500	26,250	26,250
Benchmark (500mio - below 1bn)	2,200	2,200	2,100	2,070	2,000	2,500	4,000	4,500	4,500	7,087
Others (below 500Mio)	2,874	4,115	3,116	500	1,207	2,777	2,067	2,650	3,149	4,066
Private Placement	861	969	1,065	4,154	4,615	1,348	3,440	3,124	9,956	9,717
Total	26,684	29,783	32,031	33,974	33,822	34,625	37,257	37,774	43,855	47,119
Denominated in EURO	26,114	29,230	31,738	33,663	33,665	34,458	36,842	37,398	43,269	46,388
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	571	553	293	311	157	167	414	376	587	732
Total	26,684	29,783	32,031	33,974	33,822	34,625	37,257	37,774	43,855	47,119
Hard Bullet	n.a.	n.a.	n.a.	n.a.	17,202	16,305	17,643	16,166	19,657	12,388
Soft Bullet	n.a.	n.a.	n.a.	n.a.	16,620	18,320	19,614	21,608	24,198	34,732
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Total	26,684	29,783	32,031	33,974	33,822	34,625	37,257	37,774	43,855	47,119
Outstanding fixed coupon	23,247	26,425	28,665	30,476	30,996	32,995	35,584	36,342	35,428	33,789
Outstanding floating coupon	3,437	3,358	3,366	3,498	2,826	1,630	1,673	1,432	8,427	13,331
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	26,684	29,783	32,031	33,974	33,822	34,625	37,257	37,774	43,855	47,119
Number of Programmes	n.a.	8	9	9	8	9	9	9	9	11
Number of Issuers	5	6	6	6	8	9	8	8	8	9
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2	2

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	9,368	3,771	6,469	7,425	4,679	5,550	5,650	6,650	11,199	8,587
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	9,368	3,771	6,469	7,425	4,679	5,550	5,650	6,650	11,199	8,587
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement							-			
Benchmark (1bn and above)	7,000	2,750	5,500	6,500	2,250	4,500	3,250	4,750	3,250	3,000
Benchmark (500mio - below 1bn)	-	500	500	500	500	500	2,000	1,000	-	2,287
Others (below 500Mio)	1,790	370	469	250	550	550	400	900	500	450
Private Placement	578	151	-	175	1,379	-	-	-	7,449	2,850
Total	9,368	3,771	6,469	7,425	4,679	5,550	5,650	6,650	11,199	8,587
Denominated in EURO	9,186	3,771	6,283	7,425	4,679	5,550	5,650	6,650	11,000	8,050
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	182	-	186	-	-	-	-	-	199	537
Total	9,368	3,771	6,469	7,425	4,679	5,550	5,650	6,650	11,199	8,587
Hard Bullet	n.a.	n.a.	n.a.	n.a.	1,279	1,500	3,000	2,500	6,000	-
Soft Bullet	n.a.	n.a.	n.a.	n.a.	3,400	4,050	2,650	4,150	5,199	8,587
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Total	9,368	3,771	6,469	7,425	4,679	5,550	5,650	6,650	11,199	8,587
Issuance fixed coupon	6,783	3,621	6,170	7,410	3,679	5,550	5,650	6,650	4,200	2,350
Issuance floating coupon	2,585	150	299	15	1,000	-	-	-	6,999	6,237
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	9,368	3,771	6,469	7,425	4,679	5,550	5,650	6,650	11,199	8,587
Number of New Issuers	1	1	-	-	2	1	-	-	-	1
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	1

5.2.13 FRANCE

Outstanding (in EUR million)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Total Covered Bonds Outstanding										
Public Sector	72,033	68,349	67,696	66,717	64,228	64,115	64,482	65,079	68,123	70,103
Mortgage	208,297	202,822	188,925	188,669	177,813	185,820	194,227	209,294	221,821	226,893
Ships	81,560	73,015	68,896	67,685	66,587	62,289	62,602	59,870	55,824	53,144
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	361,890	344,185	325,517	323,072	308,627	312,224	321,311	334,243	345,767	350,141
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4,000	7,250	12,000
Public Placement										
Benchmark (1bn and above)	241,775	209,885	208,784	201,947	188,508	181,069	180,484	173,151	169,393	169,904
Benchmark (500mio - below 1bn)	4,949	23,992	14,788	17,128	18,858	25,765	32,431	42,756	46,626	48,350
Others (below 500Mio)	36,595	32,253	7,865	10,121	5,427	4,806	4,804	13,257	10,190	2,135
Private Placement	78,570	78,055	94,081	93,876	95,836	100,584	103,593	105,079	119,558	129,751
Total	361,890	344,186	325,518	323,072	308,627	312,224	321,311	334,243	345,767	350,141
Denominated in EURO	331,212	316,562	303,435	303,710	292,233	302,504	314,880	327,567	339,805	345,213
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	30,678	27,624	22,083	19,362	16,395	9,720	6,431	6,676	5,962	4,928
Total	361,890	344,186	325,517	323,072	308,627	312,224	321,311	334,243	345,767	350,141
Hard Bullet	n.a.	n.a.	n.a.	n.a.	246,233	225,423	216,228	199,215	177,940	163,599
Soft Bullet	n.a.	n.a.	n.a.	n.a.	62,394	86,801	105,083	135,028	167,827	186,542
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Total	361,890	344,186	325,517	323,072	308,627	312,224	321,311	334,243	345,767	350,141
Outstanding fixed coupon	297,009	287,504	279,149	295,639	284,807	289,169	275,856	315,135	327,217	327,548
Outstanding floating coupon	47,805	43,002	32,725	16,640	12,690	14,493	8,536	10,699	12,593	16,787
Outstanding other	17,076	13,680	13,643	10,792	11,131	8,562	36,920	8,410	5,958	5,805
Total	361,890	344,186	325,517	323,072	308,627	312,224	321,311	334,243	345,767	350,141
Number of Programmes	n.a.	23	21	19	19	19	18	19	17	18
Number of Issuers	20	21	21	19	16	19	18	19	17	18
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3	4	3

Issuance (in EUR million)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Total Covered Bonds Issuance										
Public Sector	1,150	4,179	5,318	6,785	6,441	8,681	5,483	8,800	9,047	14,150
Mortgage	49,260	19,637	14,483	29,705	19,482	28,347	27,108	37,050	39,770	29,865
Ships	8,101	3,498	6,149	8,395	5,366	6,455	5,218	3,000	3,025	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	58,511	27,314	25,950	44,885	31,289	43,483	37,809	48,850	51,842	44,015
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4,000	3,250	4,750
Public Placement										
Benchmark (1bn and above)	25,672	12,250	15,250	14,500	17,050	18,745	15,800	19,710	21,250	15,000
Benchmark (500mio - below 1bn)	1,185	5,550	4,250	5,650	4,250	7,800	9,950	7,460	7,100	8,800
Others (below 500Mio)	4,830	1,755	496	2,431	-	421	-	230	150	-
Private Placement	26,824	7,759	5,955	22,304	9,989	16,517	12,059	21,450	23,342	20,215
Total	58,511	27,314	25,951	44,885	31,289	43,483	37,809	48,850	51,842	44,015
Denominated in EURO	55,851	26,596	25,455	44,562	31,102	43,312	37,809	48,620	51,842	44,015
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	2,660	718	495	323	187	171	-	230	-	-
Total	58,511	27,314	25,950	44,885	31,289	43,483	37,809	48,850	51,842	44,015
Hard Bullet	n.a.	n.a.	n.a.	n.a.	11,272	12,966	10,791	10,035	11,982	13,160
Soft Bullet	n.a.	n.a.	n.a.	n.a.	20,017	30,517	27,018	38,815	39,860	30,855
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Total	58,511	27,314	25,950	44,885	31,289	43,483	37,809	48,850	51,842	44,015
Issuance fixed coupon	36,003	23,556	24,027	43,642	30,395	40,208	35,821	47,280	46,745	40,477
Issuance floating coupon	22,368	3,558	1,549	1,243	840	3,275	1,000	1,570	5,000	3,500
Issuance other	140	200	374	-	54	-	988	-	97	38
Total	58,511	27,314	25,950	44,885	31,289	43,483	37,809	48,850	51,842	44,015
Number of New Issuers	1	1	-	-	-	-	-	1	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3	1	2

Note: The "Mixed assets" category refers to covered bonds that are backed by a mix of public sector assets, mortgage loans. The bonds (outstanding and issuance) have been allocated equally between mortgage and public sector categories in the total (5.2.1 section of the Fact Book)

5.2.14 GERMANY

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	301,125	245,961	206,535	180,524	161,871	148,081	134,717	121,849	123,425	125,263
Mortgage	215,999	199,900	189,936	197,726	207,338	215,199	233,372	239,570	246,311	264,016
Ships	7,246	5,792	4,811	5,158	3,551	2,420	1,154	2,724	2,212	2,088
Others	506	506	1,006	1,006	1,006	505	505	-	-	-
Total Outstanding	524,876	452,159	402,288	384,414	373,766	366,205	369,747	364,143	371,947	391,366
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5,675	6,618	9,471
Public Placement										
Benchmark (1bn and above)	112,869	81,030	55,608	48,462	34,635	32,235	37,110	40,625	46,625	52,366
Benchmark (500mio - below 1bn)	36,862	46,798	56,987	69,883	85,807	90,494	102,175	116,688	112,963	116,226
Others (below 500Mio)	75,244	63,864	60,229	43,828	41,913	40,133	51,073	29,655	24,586	31,341
Private Placement	299,901	260,467	229,464	222,241	211,411	203,343	179,390	177,175	187,773	191,433
Total	524,876	452,159	402,288	384,414	373,766	366,205	369,747	364,143	371,947	391,366
Denominated in EURO	506,639	437,737	387,772	370,419	357,884	350,976	357,184	349,229	361,460	379,016
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	18,237	14,422	14,516	13,995	15,882	15,229	12,563	14,914	10,487	12,350
Total	524,876	452,159	402,288	384,414	373,766	366,205	369,747	364,143	371,947	391,366
Hard Bullet	524,876	452,159	402,288	384,414	373,766	366,205	369,747	364,143	371,947	-
Soft Bullet	-	-	-	-	-	-	-	-	-	391,366
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	524,876	452,159	402,288	384,414	373,766	366,205	369,747	364,143	371,947	391,366
Outstanding fixed coupon	433,787	375,537	339,705	334,264	328,143	326,595	342,427	336,220	330,063	325,523
Outstanding floating coupon	76,840	59,170	51,956	44,359	34,657	33,844	24,557	20,721	38,753	62,081
Outstanding other	14,249	17,452	10,627	5,791	10,966	5,766	2,764	7,201	3,131	3,761
Total	524,876	452,159	402,288	384,414	373,766	366,205	369,747	364,143	371,947	391,366
Number of Programmes	n.a.	116	121	121	120	117	120	120	120	118
Number of Issuers	71	72	78	79	78	78	78	78	80	81
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5	5	8

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	14,341	15,611	15,334	15,544	10,364	11,935	7,230	11,236	19,080	18,314
Mortgage	38,540	33,583	29,145	40,369	35,070	36,841	43,142	41,973	40,248	45,812
Ships	3,169	303	920	2,208	-	-	10	1,760	450	600
Others	506	-	500	-	-	-	-	-	-	-
Total Issuance	56,556	49,497	45,899	58,121	45,434	48,776	50,382	54,969	59,778	64,726
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,675	1,000	2,800
Public Placement										
Benchmark (1bn and above)	4,008	2,125	5,500	5,500	5,250	4,250	9,000	10,000	11,250	6,690
Benchmark (500mio - below 1bn)	11,879	15,725	14,100	22,201	20,469	15,882	22,441	20,422	11,546	15,154
Others (below 500Mio)	11,816	11,816	9,045	11,263	6,492	11,758	6,850	8,575	6,474	9,429
Private Placement	28,853	19,831	17,254	19,157	13,223	16,886	12,091	15,972	30,508	33,452
Total	56,556	49,497	45,899	58,121	45,434	48,776	50,382	54,969	59,778	64,726
Denominated in EURO	52,608	45,757	42,811	55,470	40,754	42,750	45,610	48,970	58,704	59,371
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	3,948	3,740	3,088	2,651	4,680	6,026	4,772	5,998	1,074	5,355
Total	56,556	49,497	45,899	58,121	45,434	48,776	50,382	54,969	59,778	64,726
Hard Bullet	56,556	49,497	45,899	58,121	45,434	48,776	50,382	54,969	59,778	-
Soft Bullet	-	-	-	-	-	-	-	-	-	64,726
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	56,556	49,497	45,899	58,121	45,434	48,776	50,382	54,969	59,778	64,726
Issuance fixed coupon	32,274	37,878	36,917	50,618	43,888	41,490	45,116	49,340	33,489	37,516
Issuance floating coupon	23,702	11,302	8,755	6,743	1,303	7,100	5,241	5,617	26,259	27,110
Issuance other	580	317	227	760	243	186	25	12	30	99
Total	56,556	49,497	45,899	58,121	45,434	48,776	50,382	54,969	59,778	64,726
Number of New Issuers	5	1	6	2	-	2	2	3	4	1
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	3

5.2.15 GREECE

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	18,046	16,546	14,546	4,961	4,485	10,100	13,840	13,190	10,890	10,840
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	18,046	16,546	14,546	4,961	4,485	10,100	13,840	13,190	10,890	10,840
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	846	846	846	846	-	1,250	1,750	1,750	500	500
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	17,200	15,700	13,700	4,115	4,485	8,850	12,090	11,440	10,390	10,340
Total	18,046	16,546	14,546	4,961	4,485	10,100	13,840	13,190	10,890	10,840
Denominated in EURO	18,046	16,546	14,546	4,961	4,485	10,100	13,840	13,190	10,890	10,840
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	18,046	16,546	14,546	4,961	4,485	10,100	13,840	13,190	10,890	10,840
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	18,046	16,546	5,546	896	3,725	6,350	3,990	1,840	1,840	2,440
Conditional Pass Through	-	-	9,000	4,065	760	3,750	9,850	11,350	9,050	8,400
Total	18,046	16,546	14,546	4,961	4,485	10,100	13,840	13,190	10,890	10,840
Outstanding fixed coupon	846	846	846	846	-	1,250	2,550	2,350	700	700
Outstanding floating coupon	17,200	15,700	13,700	4,115	4,485	8,850	11,290	10,840	10,190	10,140
Outstanding other	-	-	-	-	-	-	-	-		-
Total	18,046	16,546	14,546	4,961	4,485	10,100	13,840	13,190	10,890	10,840
Number of Programmes	n.a.	6	6	6	6	7	8	8	7	7
Number of Issuers	4	4	4	4	4	4	4	4	4	4
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	750	-	3,675	7,375	6,650	200	-	600
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	-	-	750	-	3,675	7,375	6,650	200	-	600
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	1,250	500	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	750	-	3,675	6,125	6,150	200	-	600
Total	-	-	750	-	3,675	7,375	6,650	200	-	600
Denominated in EURO	-	-	750	-	3,675	7,375	6,650	200	-	600
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	-	-	750	-	3,675	7,375	6,650	200	-	600
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	-	-	-	-	3,675	2,625	2,050	-	-	600
Conditional Pass Through	-	-	750	-	-	4,750	4,600	200	-	-
Total	-	-	750	-	3,675	7,375	6,650	200	-	600
Issuance fixed coupon	-	-	-	-	-	1,250	1,300	-	-	-
Issuance floating coupon	-	-	750	-	3,675	6,125	5,350	200	-	600
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	-	-	750	-	3,675	7,375	6,650	200	-	600
Number of New Issuers	-	-	-	-	-	-	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.16 HUNGARY

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	4,958	4,016	3,272	3,022	2,189	2,641	3,762	3,868	4,526	4,483
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	4,958	4,016	3,272	3,022	2,189	2,641	3,762	3,868	4,526	4,483
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	103
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	2,290	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	865	20		19	612	71	543	3,363	3,549	3,865
Private Placement	1,803	3,996	3,272	3,003	1,577	2,569	3,219	504	977	619
Total	4,958	4,016	3,272	3,022	2,189	2,641	3,762	3,868	4,526	4,483
Denominated in EURO	1,863	1,616	1,116	1,036	537	35	25	17	16	16
Denominated in domestic currency	3,059	2,354	2,154	1,986	1,652	2,605	3,737	3,850	4,510	4,468
Denominated in other currencies	36	46	2		-	-	-	-	-	-
Total	4,958	4,016	3,272	3,022	2,189	2,641	3,762	3,868	4,526	4,483
Hard Bullet	4,958	4,016	3,272	3,022	2,189	2,641	3,762	3,868	4,526	4,483
Soft Bullet	-	-	-	-	-	-	-	-	-	-
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	4,958	4,016	3,272	3,022	2,189	2,641	3,762	3,868	4,526	4,483
Outstanding fixed coupon	3,318	2,650	2,205	1,699	1,387	1,814	3,275	3,210	3,972	3,759
Outstanding floating coupon	1,640	1,366	1,067	1,323	802	827	449	658	555	724
Outstanding other	-	-	-	-	-	-	38	-	-	-
Total	4,958	4,016	3,272	3,022	2,189	2,641	3,762	3,868	4,526	4,483
Number of Programmes	n.a	3	3	4	4	5	5	5	5	5
Number of Issuers	3	3	3	3	4	5	5	5	5	5
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	1,140	559	91	888	625	1,166	2,004	487	1,555	541
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	1,140	559	91	888	625	1,166	2,004	487	1,555	541
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	103
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	510	500	-	-	-	-	-	-	-	-
Others (below 500Mio)	630	57		-	293	16	505	453	1,203	478
Private Placement	-	2	91	888	333	1,150	1,499	33	353	63
Total	1,140	559	91	888	626	1,166	2,004	487	1,555	541
Denominated in EURO	510	515	-	500	5	-	-	-	-	-
Denominated in domestic currency	630	42	91	388	620	1,166	2,004	487	1,555	541
Denominated in other currencies	-	2	-	-	-	-	-	-	-	-
Total	1,140	559	91	888	625	1,166	2,004	487	1,555	541
Hard Bullet	1,140	559	91	888	625	1,166	2,004	487	1,555	541
Soft Bullet	-	-	-	-	-	-	-	-	-	-
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	1,140	559	91	888	625	1,166	2,004	487	1,555	541
Issuance fixed coupon	630	57	44	121	402	552	1,599	265	1,242	468
Issuance floating coupon	510	502	48	767	224	614	405	222	314	73
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	1,140	559	92	888	626	1,166	2,004	487	1,555	541
Number of New Issuers	-	-	-	-	1	1	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3

5.2.17 ICELAND

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	893	803	927	1,205	1,902	2,506	3,123	3,071	3,330	4,270
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	893	803	927	1,205	1,902	2,506	3,123	3,071	3,330	4,270
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	893	803	927	1,205	1,902	2,506	3,123	3,071	3,330	4,270
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	893	803	927	1,205	1,902	2,506	3,123	3,071	3,330	4,270
Denominated in EURO	-	-	-	-	-	-	-	-		300
Denominated in domestic currency	893	803	927	1,205	1,902	2,506	3,123	3,071	3,330	3,970
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	893	803	927	1,205	1,902	2,506	3,123	3,071	3,330	4,270
Hard Bullet	497	520	489	421	489	354	338	78	69	78
Soft Bullet	396	283	438	784	1,413	2,152	2,786	2,993	3,261	4,192
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	893	803	927	1,205	1,902	2,506	3,123	3,071	3,330	4,270
Outstanding fixed coupon	15	66	199	254	490	541	612	866	904	1,615
Outstanding floating coupon	-	-	-	-	-	-	-	-	-	-
Outstanding other	878	737	728	951	1,412	1,965	2,512	2,205	2,426	2,655
Total	893	803	927	1,205	1,902	2,506	3,123	3,071	3,330	4,270
Number of Programmes	3	4	4	4	4	4	4	3	3	3
Number of Issuers	2	3	3	3	3	3	3	3	3	3
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	113	51	91	414	560	850	755	788	646	988
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	113	51	91	414	560	850	755	788	646	988
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	113	51	91	414	560	850	755	788	646	988
Private Placement	-		-	-	-	-	-	-	-	-
Total	113	51	91	414	560	850	755	788	646	988
Denominated in EURO	-	-	-	-	-	-	-	-	-	300
Denominated in domestic currency	113	51	91	414	560	850	755	788	646	688
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	113	51	91	414	560	850	755	788	646	988
Hard Bullet	-	-	-	-	-	-	83	-	-	-
Soft Bullet	113	51	91	414	560	850	672	788	646	988
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	113	51	91	414	560	850	755	788	646	988
Issuance fixed coupon	15	23	35	158	255	99	89	378	462	931
Issuance floating coupon	-	-	-	-	-	-	-	-	-	-
Issuance other	98	28	56	256	305	751	667	410	184	57
Total	113	51	91	414	560	850	755	788	646	988
Number of New Issuers	1	1	-	-	-	-	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.18 IRELAND

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	27,546	22,154	20,258	15,389	6,757	3,114	2,531	708	178	-
Mortgage	25,099	20,827	18,473	16,916	17,062	16,416	20,788	19,337	16,816	14,433
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	52,645	42,981	38,731	32,305	23,819	19,530	23,319	20,044	16,995	14,433
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	23,079	17,169	13,254	8,010	1,675	2,000	1,000	1,000	1,000	1,000
Benchmark (500mio - below 1bn)	500	2,500	4,611	7,134	8,668	5,750	7,355	5,679	3,679	10,205
Others (below 500Mio)	868	239	-	232	476	472	-	25	-	25
Private Placement	28,198	23,073	20,866	16,930	13,000	11,308	14,964	13,341	12,316	3,203
Total	52,645	42,981	38,731	32,305	23,819	19,530	23,319	20,044	16,995	14,433
Denominated in EURO	44,725	36,360	31,987	27,108	22,263	18,974	23,103	19,973	16,964	14,433
Denominated in domestic currency	-	-	-	-	-	-	216	72	-	-
Denominated in other currencies	7,920	6,621	6,743	5,198	1,556	556	-	-	31	-
Total	52,645	42,981	38,731	32,305	23,819	19,530	23,319	20,044	16,995	14,433
Hard Bullet	n.a.	n.a.	n.a.	n.a.	6,853	3,210	2,541	718	178	-
Soft Bullet	n.a.	n.a.	n.a.	n.a.	16,966	16,320	20,778	19,327	16,816	14,433
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Total	52,645	42,981	38,731	32,305	23,819	19,530	23,319	20,044	16,995	14,433
Outstanding fixed coupon	32,658	27,652	26,187	23,003	15,622	11,244	10,190	7,840	5,347	3,983
Outstanding floating coupon	17,008	12,730	10,240	7,045	6,267	8,230	13,058	12,204	11,634	10,450
Outstanding other	2,979	2,598	2,303	2,258	1,930	56	70	-	14	-
Total	52,645	42,981	38,731	32,305	23,819	19,530	23,319	20,044	16,995	14,433
Number of Programmes	5	5	5	5	5	5	5	5	3	2
Number of Issuers	5	5	5	5	5	5	5	5	3	2
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	25	-	-	-	-	-	-	-	-
Mortgage	5,500	3,235	2,535	5,225	3,542	3,250	5,575	-	2,000	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	5,500	3,260	2,535	5,225	3,542	3,250	5,575	-	2,000	-
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	1,000	1,000	-	1,000	1,000	-	-	-	-	-
Benchmark (500mio - below 1bn)	500	2,000	1,250	3,000	-	-	750	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	4,000	260	1,285	1,225	2,542	3,250	4,825	-	2,000	-
Total	5,500	3,260	2,535	5,225	3,542	3,250	5,575	-	2,000	-
Denominated in EURO	5,500	3,260	2,535	5,225	3,542	3,250	5,575	-	2,000	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	5,500	3,260	2,535	5,225	3,542	3,250	5,575	-	2,000	-
Hard Bullet	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Soft Bullet	n.a.	n.a.	n.a.	n.a.	3,542	3,250	5,575	-	2,000	-
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Total	5,500	3,260	2,535	5,225	3,542	3,250	5,575	-	2,000	-
Issuance fixed coupon	1,500	3,035	1,385	4,225	1,042	-	875	-	-	-
Issuance floating coupon	4,000	225	1,150	1,000	2,500	3,250	4,700	-	2,000	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	5,500	3,260	2,535	5,225	3,542	3,250	5,575	-	2,000	-
Number of New Issuers	-	-	-	-	-	-	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.19 ITALY

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	10,300	6,945	8,700	8,400	7,575	6,725	5,625	4,925	4,075	3,575
Mortgage	116,405	122,099	122,464	122,135	138,977	139,937	163,311	172,728	171,102	168,099
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	126,705	129,044	131,164	130,535	146,552	146,662	168,936	177,653	175,177	171,674
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	500
Public Placement										
Benchmark (1bn and above)	37,927	39,602	44,453	46,503	42,423	42,073	38,103	38,603	35,103	28,886
Benchmark (500mio - below 1bn)	4,450	8,450	8,400	12,628	12,500	16,575	18,750	20,100	19,600	21,300
Others (below 500Mio)	1,783	1,170	140	500	375	-	-	200	542	995
Private Placement	82,544	79,822	78,171	70,904	91,254	88,014	112,083	118,750	119,932	120,494
Total	126,705	129,044	131,164	130,535	146,552	146,662	168,936	177,653	175,177	171,674
Denominated in EURO	126,705	129,044	131,164	130,535	146,552	146,662	168,936	177,653	175,177	171,374
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	300
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	126,705	129,044	131,164	130,535	146,552	146,662	168,936	177,653	175,177	171,674
Hard Bullet	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Soft Bullet	n.a.	n.a.	n.a.	n.a.	112,212	110,857	124,951	134,213	131,407	129,639
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	34,340	35,805	43,985	43,440	43,770	42,035
Total	126,705	129,044	131,164	130,535	146,552	146,662	168,936	177,653	175,177	171,674
Outstanding fixed coupon	50,059	57,724	63,924	68,111	63,603	64,115	64,070	66,420	63,861	60,508
Outstanding floating coupon	76,646	71,320	67,240	62,424	82,950	82,497	104,816	111,183	111,266	111,116
Outstanding other	-	-	-	-	-	50	50	50	50	50
Total	126,705	129,044	131,164	130,535	146,552	146,662	168,936	177,653	175,177	171,674
Number of Programmes	n.a.	19	21	24	24	25	23	21	23	22
Number of Issuers	13	13	14	14	14	14	13	12	14	13
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	4,200	1,000	1,700	2,375	1,650	-	-	-	1,000
Mortgage	70,768	24,520	39,475	27,650	41,780	19,180	45,200	27,000	26,100	22,500
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	70,768	28,720	40,475	29,350	44,155	20,830	45,200	27,000	26,100	23,500
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	500
Public Placement										
Benchmark (1bn and above)	6,304	5,250	7,750	7,250	3,250	2,250	1,000	3,000	-	-
Benchmark (500mio - below 1bn)	1,700	3,500	2,750	5,500	2,750	3,575	4,250	3,350	1,250	2,750
Others (below 500Mio)	-	250	-	-	-	-	-	-	300	500
Private Placement	62,764	19,720	29,975	16,600	38,155	15,005	39,950	20,650	24,550	20,250
Total	70,768	28,720	40,475	29,350	44,155	20,830	45,200	27,000	26,100	23,500
Denominated in EURO	70,768	28,720	40,475	29,350	44,155	20,830	45,200	27,000	25,800	23,500
Denominated in domestic currency	-	-	-	-	-	-	-	-	300	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	70,768	28,720	40,475	29,350	44,155	20,830	45,200	27,000	26,100	23,500
Hard Bullet	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Soft Bullet	n.a.	n.a.	n.a.	n.a.	25,105	14,015	31,475	23,500	19,550	17,250
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	19,050	6,815	13,725	3,500	6,550	6,250
Total	70,768	28,720	40,475	29,350	44,155	20,830	45,200	27,000	26,100	23,500
Issuance fixed coupon	11,013	12,170	10,585	12,250	8,000	7,825	6,000	7,350	3,250	4,750
Issuance floating coupon	59,755	16,550	29,890	17,100	36,155	13,005	39,200	19,650	22,850	18,750
Issuance other	-	-	-		-	-	-	-	-	-
Total	70,768	28,720	40,475	29,350	44,155	20,830	45,200	27,000	26,100	23,500
Number of New Issuers	1	-	1	1	-	1	-	-	2	3
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1

5.2.20 JAPAN

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Mortgage	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	3,585	5,322	6,174
Ships	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total Outstanding	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	3,585	5,322	6,174
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	1,890	2,815	2,883
Benchmark (500mio - below 1bn)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	1,695	2,507	3,291
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	3,585	5,322	6,174
Denominated in EURO	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	2,250	4,100	4,850
Denominated in domestic currency	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Denominated in other currencies	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	1,335	1,222	1,324
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	3,585	5,322	6,174
Hard Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Soft Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	3,585	5,322	6,174
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	3,585	5,322	6,174
Outstanding fixed coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	3,585	5,322	6,174
Outstanding floating coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Outstanding other	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	3,585	5,322	6,174
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	1	2	2
Number of Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	1	2	2
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Mortgage	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	2,585	1,850	750
Ships	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	2,585	1,850	750
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	890	1,000	-
Benchmark (500mio - below 1bn)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	1,695	850	750
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	2,585	1,850	750
Denominated in EURO	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	1,250	1,850	750
Denominated in domestic currency	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Denominated in other currencies	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	1,335	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	2,585	1,850	750
Hard Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Soft Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	2,585	1,850	750
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	2,585	1,850	750
Issuance fixed coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	2,585	1,850	750
Issuance floating coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Issuance other	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	2,585	1,850	750
Number of New Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	-	1	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.21 LATVIA

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	-	-	-	-	-	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	-	-	-	-	-	-	-	-	-	-
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Denominated in EURO	-	-	-	-	-	-	-	-	-	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	-	-	-	-	-	-	-	-	-	-
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Outstanding fixed coupon	-	-	-	-	-	-	-	-	-	-
Outstanding floating coupon	-	-	-	-	-	-	-	-	-	-
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Number of Programmes	-	-	-	-	-	-	-	-	-	-
Number of Issuers	-	-	-	-	-	-	-	-	-	-
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	-	-	-	-	-	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	-	-	-	-	-	-	-	-	-	-
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Denominated in EURO	-	-	-	-	-	-	-	-	-	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	-	-	-	-	-	-	-	-	-	-
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Issuance fixed coupon	-	-	-	-	-	-	-	-	-	-
Issuance floating coupon	-	-	-	-	-	-	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Number of New Issuers	-	-	-	-	-	-	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.22 LUXEMBOURG

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	24,859	21,708	16,002	10,166	7,864	6,905	6,103	6,290	5,767	5,022
Mortgage	-	-	-	-	-	-	-	-	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	300	300
Total Outstanding	24,859	21,708	16,002	10,166	7,864	6,905	6,103	6,290	6,067	5,322
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	300	300
Public Placement										
Benchmark (1bn and above)	1,768	1,000	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	973	2,781	2,310	2,810	2,068	2,579	2,530	1,500
Others (below 500Mio)	9,696	10,052	8,041	1,150	810	440	375	438	583	525
Private Placement	13,395	10,656	6,987	6,235	4,744	3,655	3,660	3,273	2,954	3,297
Total	24,859	21,708	16,002	10,166	7,864	6,905	6,103	6,290	6,067	5,322
Denominated in EURO	14,994	12,925	8,226	5,578	5,360	4,267	4,057	4,350	4,533	3,988
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	9,864	8,783	7,775	4,589	2,504	2,638	2,046	1,940	1,534	1,334
Total	24,859	21,708	16,002	10,166	7,864	6,905	6,103	6,290	6,066	5,322
Hard Bullet	24,859	21,708	16,002	10,166	7,864	6,905	6,103	6,290	5,767	5,022
Soft Bullet	-	-	-	-	-	-	-	-	300	300
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	24,859	21,708	16,002	10,166	7,864	6,905	6,103	6,290	6,067	5,322
Outstanding fixed coupon	14,766	13,182	11,417	8,250	6,589	6,509	5,973	6,044	5,831	4,598
Outstanding floating coupon	8,507	7,080	3,802	1,710	816	142	116	118	222	131
Outstanding other	1,585	1,445	783	206	460	254	14	128	14	593
Total	24,859	21,708	16,002	10,166	7,864	6,905	6,103	6,290	6,067	5,322
Number of Programmes	n.a.	6	5	3	3	3	3	2	3	3
Number of Issuers	6	6	5	3	3	3	3	2	2	2
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	1

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	2,660	825	398	1,220	655	744	726	525	512	375
Mortgage	-	-	-	-	-	-	-	-	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	300	-
Total Issuance	2,660	825	398	1,220	655	744	726	525	812	375
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	300	-
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	1,000	500	500	568	500	500	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	300	-
Private Placement	2,660	825	398	220	155	244	158	25	12	375
Total	2,660	825	398	1,220	655	744	726	525	812	375
Denominated in EURO	2,587	825	233	1,220	655	640	158	525	812	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	73	-	165	-	-	104	568	-	-	375
Total	2,660	825	398	1,220	655	744	726	525	812	375
Hard Bullet	2,660	825	398	1,220	655	744	726	525	512	375
Soft Bullet	-	-	-	-	-	-	-	-	300	-
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	2,660	825	398	1,220	655	744	726	525	812	375
Issuance fixed coupon	187	-	398	1,205	655	744	726	525	812	375
Issuance floating coupon	2,473	825	-	15	-	-	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	2,660	825	398	1,220	655	744	726	525	812	375
Number of New Issuers	1	-	-	-	-	-	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	-

5.2.23 THE NETHERLANDS

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	59,822	61,015	58,822	61,101	67,604	72,880	94,797	118,969	154,505	172,181
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	59,822	61,015	58,822	61,101	67,604	72,880	94,797	118,969	154,505	172,181
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	44,487	44,188	40,335	37,228	38,773	40,001	42,330	46,730	44,617	45,944
Benchmark (500mio - below 1bn)	500	1,000	1,000	2,750	4,750	7,750	10,500	13,875	15,625	18,825
Others (below 500Mio)	2,319	2,281	2,329	1,523	1,211	812	399	415	417	339
Private Placement	12,516	13,547	15,158	19,600	22,870	24,317	41,568	57,949	93,846	107,073
Total	59,822	61,015	58,822	61,101	67,604	72,880	94,797	118,969	154,505	172,181
Denominated in EURO	53,884	55,362	53,030	55,897	63,694	69,722	91,990	116,103	152,002	169,913
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	5,938	5,653	5,792	5,204	3,910	3,158	2,807	2,866	2,503	2,268
Total	59,822	61,015	58,822	61,101	67,604	72,880	94,797	118,969	154,505	172,181
Hard Bullet	53,242	53,938	53,303	17,557	16,151	15,038	12,762	12,400	11,170	9,892
Soft Bullet	6,580	6,576	4,519	40,793	47,203	51,092	73,786	95,924	132,439	150,394
Conditional Pass Through	-	501	1,000	2,751	4,250	6,750	8,250	10,645	10,895	11,895
Total	59,822	61,015	58,822	61,101	67,604	72,880	94,797	118,969	154,505	172,181
Outstanding fixed coupon	58,902	60,016	57,874	59,152	62,191	67,868	87,285	112,032	147,677	165,546
Outstanding floating coupon	880	959	928	1,928	5,392	4,992	7,492	6,917	6,807	6,615
Outstanding other	40	40	20	20	20	20	20	20	20	20
Total	59,822	61,015	58,822	61,101	67,604	72,880	94,797	118,969	154,504	172,181
Number of Programmes	5	6	5	8	8	10	11	13	14	17
Number of Issuers	5	5	5	7	7	9	9	9	9	9
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	10,738	4,478	3,910	7,908	9,908	11,925	28,714	28,388	44,013	36,705
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	10,738	4,478	3,910	7,908	9,908	11,925	28,714	28,388	44,013	36,705
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	8,387	2,750	1,500	1,750	3,500	6,750	7,770	6,375	4,250	4,975
Benchmark (500mio - below 1bn)	-	500	500	1,750	2,000	3,000	3,250	4,625	2,500	3,200
Others (below 500Mio)	290	-	-	-	-	-	-	-	-	-
Private Placement	2,062	1,228	1,910	4,408	4,408	2,175	17,694	17,388	37,263	28,530
Total	10,738	4,478	3,910	7,908	9,908	11,925	28,714	28,388	44,013	36,705
Denominated in EURO	8,859	4,478	3,910	7,908	9,908	11,925	28,714	28,388	44,013	36,705
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	1,879	-	-	-	-	-	-	-	-	-
Total	10,738	4,478	3,910	7,908	9,908	11,925	28,714	28,388	44,013	36,705
Hard Bullet	9,738	3,977	3,235	-	-	-	-	30	-	-
Soft Bullet	1,000	-	-	6,157	8,408	9,425	26,714	25,463	43,013	35,705
Conditional Pass Through	-	501	675	1,751	1,500	2,500	2,000	2,895	1,000	1,000
Total	10,738	4,478	3,910	7,908	9,908	11,925	28,714	28,388	44,013	36,705
Issuance fixed coupon	10,558	4,398	3,895	6,908	6,333	11,925	28,714	28,388	44,013	36,705
Issuance floating coupon	180	80	15	1,000	3,575	-	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	10,738	4,478	3,910	7,908	9,908	11,925	28,714	28,388	44,013	36,705
Number of New Issuers	-	-	-	2	-	2	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.24 NEW ZEALAND

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	6,881	7,851	9,464	9,149	10,677	10,188	9,803	10,018	9,692	10,151
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	6,881	7,851	9,464	9,149	10,677	10,188	9,803	10,018	9,692	10,151
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Benchmark (500mio - below 1bn)	3,051	3,954	5,472	5,470	6,750	6,750	7,000	7,500	7,000	7,450
Others (below 500Mio)	1,353	1,436	1,347	788	605	555	134	138	315	320
Private Placement	477	461	645	891	1,322	883	669	380	377	381
Total	6,881	7,851	9,464	9,149	10,677	10,188	9,803	10,018	9,692	10,151
Denominated in EURO	4,500	5,500	7,000	7,200	8,950	8,950	9,200	9,700	9,200	9,650
Denominated in domestic currency	982	940	1,014	879	1,122	683	469	180	177	181
Denominated in other currencies	1,399	1,411	1,449	1,070	605	555	134	138	315	320
Total	6,881	7,851	9,464	9,149	10,677	10,188	9,803	10,018	9,692	10,151
Hard Bullet	6,131	5,979	6,839	5,061	2,889	932	293	-	-	-
Soft Bullet	750	1,872	2,625	4,088	7,788	9,256	9,510	10,018	9,692	10,151
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	6,881	7,851	9,464	9,149	10,677	10,188	9,803	10,018	9,692	10,151
Outstanding fixed coupon	6,259	7,244	8,834	8,961	10,479	10,010	9,627	10,018	9,377	9,831
Outstanding floating coupon	622	607	630	188	198	178	176	-	315	320
Outstanding other	-	-	-	-	-		-	-	-	-
Total	6,881	7,851	9,464	9,149	10,677	10,188	9,803	10,018	9,692	10,151
Number of Programmes	4	5	5	5	5	5	5	5	5	5
Number of Issuers	4	5	5	5	5	5	5	5	5	5
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5	5

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	3,192	1,122	750	1,450	3,698	2,250	1,250	1,250	315	2,450
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	3,192	1,122	750	1,450	3,698	2,250	1,250	1,250	315	2,450
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	1,000	1,000	-	-	-	-
Benchmark (500mio - below 1bn)	2,000	1,000	750	1,250	2,500	1,250	1,250	1,250	-	2,450
Others (below 500Mio)	902	122	-	-	-	-	-	-	315	-
Private Placement	290	-	-	200	198	-	-	-	-	-
Total	3,192	1,122	750	1,450	3,698	2,250	1,250	1,250	315	2,450
Denominated in EURO	2,000	1,000	750	1,450	3,500	2,250	1,250	1,250	-	2,450
Denominated in domestic currency	343	-	-	-	198	-	-	-	-	-
Denominated in other currencies	849	122	-	-	-	-	-	-	315	-
Total	3,192	1,122	750	1,450	3,698	2,250	1,250	1,250	315	2,450
Hard Bullet	2,442	-	-	-	-	-	-	-	-	-
Soft Bullet	750	1,122	750	1,450	3,698	2,250	1,250	1,250	315	2,450
Conditional Pass Through	-	-	-	-	-		-	-	-	-
Total	3,192	1,122	750	1,450	3,698	2,250	1,250	1,250	315	2,450
Issuance fixed coupon	2,757	1,122	750	1,450	3,698	2,250	1,250	1,250	-	2,450
Issuance floating coupon	435	-	-	-	-	-	-	-	315	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	3,192	1,122	750	1,450	3,698	2,250	1,250	1,250	315	2,450
Number of New Issuers	-	1	-	-	-	-	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.25 NORWAY

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	2,742	2,035	1,820	1,672	2,199	1,824	1,784	1,886	2,580	1,953
Mortgage	107,242	105,202	102,704	107,694	113,051	113,359	119,398	123,023	131,713	130,030
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	109,984	107,237	104,524	109,366	115,251	115,183	121,182	124,909	134,294	131,983
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4,009	7,302	11,545
Public Placement										
Benchmark (1bn and above)	51,179	47,342	51,185	46,834	52,192	49,390	53,375	53,088	56,930	54,201
Benchmark (500mio - below 1bn)	20,125	18,471	14,523	18,953	21,430	30,183	29,086	34,650	38,590	42,000
Others (below 500Mio)	32,354	31,763	26,434	32,463	32,681	26,212	29,305	25,651	27,318	26,444
Private Placement	6,327	9,661	12,382	11,116	8,947	9,397	9,416	11,520	11,456	9,338
Total	109,985	107,237	104,524	109,366	115,251	115,183	121,182	124,909	134,294	131,983
Denominated in EURO	38,597	44,510	49,928	51,537	55,256	56,257	60,396	63,004	62,929	62,172
Denominated in domestic currency	59,533	49,965	41,502	44,081	50,159	49,490	52,640	54,385	64,171	62,447
Denominated in other currencies	11,854	12,762	13,094	13,748	9,837	9,435	8,145	7,520	7,195	7,363
Total	109,984	107,237	104,524	109,366	115,251	115,183	121,182	124,909	134,294	131,983
Hard Bullet	n.a.	n.a.	n.a.	n.a.	8,232	8,484	7,646	7,286	8,724	6,713
Soft Bullet	n.a.	n.a.	n.a.	n.a.	107,019	106,699	113,535	117,623	125,570	125,270
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Total	109,984	107,237	104,524	109,366	115,251	115,183	121,182	124,909	134,294	131,983
Outstanding fixed coupon	56,918	63,088	66,831	70,368	68,106	68,908	71,896	75,935	74,174	73,405
Outstanding floating coupon	53,066	44,148	37,694	38,998	47,146	45,246	49,285	48,974	60,120	58,578
Outstanding other	-	-	-	-	-	1,029	-	-	-	-
Total	109,984	107,236	104,524	109,366	115,251	115,183	121,182	124,909	134,294	131,983
Number of Programmes	n.a.	23	23	27	28	29	28	27	26	26
Number of Issuers	22	22	22	24	25	25	24	24	24	24
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5	8	13

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	943	239	664	312	781	457	332	608	382	551
Mortgage	22,946	18,339	14,474	17,750	23,058	21,256	24,331	20,766	29,686	20,466
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	23,888	18,578	15,138	18,063	23,839	21,713	24,663	21,374	30,068	21,017
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,509	2,795	2,528
Public Placement										
Benchmark (1bn and above)	10,916	7,441	6,823	4,937	9,143	7,699	10,595	7,584	9,847	7,730
Benchmark (500mio - below 1bn)	4,748	1,458	2,157	4,346	6,400	6,767	6,049	8,548	11,368	8,395
Others (below 500Mio)	7,664	8,267	5,082	8,574	7,115	6,295	7,304	4,633	4,596	4,338
Private Placement	560	1,412	1,076	206	1,181	951	716	608	4,257	554
Total	23,888	18,578	15,138	18,063	23,839	21,713	24,663	21,374	30,068	21,017
Denominated in EURO	12,431	8,382	4,590	6,773	10,342	9,688	11,618	8,150	5,918	8,498
Denominated in domestic currency	9,463	7,546	9,854	9,206	12,807	9,675	11,465	12,295	23,115	11,625
Denominated in other currencies	1,994	2,651	694	2,084	690	2,350	1,580	929	1,036	894
Total	23,888	18,578	15,138	18,063	23,839	21,713	24,663	21,374	30,068	21,017
Hard Bullet	n.a.	n.a.	n.a.	n.a.	196	633	1,167	30	747	-
Soft Bullet	n.a.	n.a.	n.a.	n.a.	23,643	21,080	23,496	21,344	29,321	21,017
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Total	23,888	18,578	15,138	18,063	23,839	21,713	24,663	21,374	30,068	21,017
Issuance fixed coupon	15,462	11,423	3,475	9,173	10,719	11,896	13,992	10,375	5,898	9,068
Issuance floating coupon	8,427	7,155	11,519	8,748	12,525	9,817	10,671	10,999	24,170	11,949
Issuance other	-	-	144	142	594	-	-		-	-
Total	23,888	18,578	15,138	18,063	23,839	21,713	24,663	21,374	30,068	21,017
Number of New Issuers	-	-	1	2	1	-	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3	2	5

Note: The breakdown for public/private issuance may be based on different definitions with the ECBC guidelines.

5.2.26 PANAMA

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	152	218	247	276	80	-	10	46	42	46
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	152	218	247	276	80	-	10	46	42	46
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	-		-	-	-
Others (below 500Mio)	152	218	247	276	80	-	-	-	-	-
Private Placement	-	-	-	-	-	-	10	46	42	46
Total	152	218	247	276	80	-	10	46	42	46
Denominated in EURO	-	-	-	-	-	-	-	-	-	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	152	218	247	276	80	-	10	46	42	46
Total	152	218	247	276	80	-	10	46	42	46
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	152	218	247	276	80	-	10	46	42	46
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	152	218	247	276	80	-	10	46	42	46
Outstanding fixed coupon	152	218	247	276	80	-	10	46	42	46
Outstanding floating coupon	-	-	-	-	-	-	-	-	-	-
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	152	218	247	276	80	-	10	46	42	46
Number of Programmes	1	1	1	1	1	-	1	1	1	1
Number of Issuers	1	1	1	1	1	-	1	1	1	1
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	152	73				-	10	36	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	152	73	-	-	-	-	10	36	-	-
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	152	73	-	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	-	10	36	-	-
Total	152	73	-	-	-	-	10	36	-	-
Denominated in EURO	-	-	-	-	-	-	-	-	-	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	152	73	-	-	-	-	10	36	-	-
Total	152	73	-	-	-	-	10	36	-	-
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	152	73	-	-	-	-	10	36	-	-
Conditional Pass Through			-	-	-	-	-	-	-	-
Total	152	73	-	-	-	-	10	36	-	-
Issuance fixed coupon	152	73	-	-	-	-	10	36	-	-
Issuance floating coupon	-	-	-	-	-	-	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	152	73	-	-	-	-	10	36	-	-
Number of New Issuers	1	-	-	-	-	-	1	1	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.27 POLAND

Outstanding (in EUR million)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Total Covered Bonds Outstanding										
Public Sector	110	84	82	35	-	-	79	71	58	49
Mortgage	657	707	882	1,230	2,216	3,959	4,925	6,111	5,776	5,000
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	768	791	964	1,266	2,216	3,959	5,004	6,181	5,834	5,049
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	211	197	196
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	500	1,500	2,000	2,700	2,700	2,100
Others (below 500Mio)	768	791	964	1,266	1,556	2,284	2,846	3,332	2,997	2,691
Private Placement	-	-	-		160	175	158	150	137	258
Total	768	791	964	1,266	2,216	3,959	5,004	6,181	5,834	5,049
Denominated in EURO	20	117	250	378	1,046	2,170	2,882	3,841	3,806	3,076
Denominated in domestic currency	748	674	714	888	1,170	1,789	2,122	2,340	2,028	1,973
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	768	791	964	1,266	2,216	3,959	5,004	6,181	5,834	5,049
Hard Bullet	768	791	964	1,266	-	-	-	-	-	-
Soft Bullet	-	-	-	-	-	-	-	-	-	-
Conditional Pass Through	-	-	-	-	2,216	3,959	5,004	6,181	5,834	5,049
Total	768	791	964	1,266	2,216	3,959	5,004	6,181	5,834	5,049
Outstanding fixed coupon	-	30	107	139	721	1,990	2,781	3,782	3,756	3,039
Outstanding floating coupon	768	761	857	1,127	1,495	1,969	2,223	2,399	2,077	2,010
Outstanding other	-	-	-			-	-	-	-	-
Total	768	791	964	1,266	2,216	3,959	5,004	6,181	5,834	5,049
Number of Programmes	3	3	3	4	3	3	3	5	5	5
Number of Issuers	2	2	2	3	3	3	3	4	4	4
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2	2	2

Issuance (in EUR million)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Total Covered Bonds Issuance										
Public Sector	61	-	-		-	-	79	-	-	-
Mortgage	228	116	269	416	1,099	2,048	1,244	1,284	22	454
Ships	-	-	-			-	-	-	-	-
Others	-	-	-			-	-	-	-	-
Total Issuance	289	116	269	416	1,099	2,048	1,323	1,284	22	454
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	211	-	-
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	500	1,000	500	700	-	-
Others (below 500Mio)	289	116	269	416	439	801	744	534	22	323
Private Placement	-	-	-	-	160	247	79	50	-	131
Total	289	116	269	416	1,099	2,048	1,323	1,284	22	454
Denominated in EURO	20	96	135	127	668	1,204	800	1,050	-	-
Denominated in domestic currency	269	20	135	290	431	844	523	234	22	454
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	289	116	269	416	1,099	2,048	1,323	1,284	22	454
Hard Bullet	289	116	269	416	-	-	-	-	-	-
Soft Bullet	-	-	-	-	-	-	-	-	-	-
Conditional Pass Through	-	-	-	-	1,099	2,048	1,323	1,284	22	454
Total	289	116	269	416	1,099	2,048	1,323	1,284	22	454
Issuance fixed coupon	-	30	78	31	582	1,267	814	1,000	-	-
Issuance floating coupon	289	86	192	385	517	781	509	284	22	454
Issuance other	-	-	-			-	-	-	-	-
Total	289	116	269	416	1,099	2,048	1,323	1,284	22	454
Number of New Issuers	-	-	-	1	-	-	-	1	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2	-	-

For the Polish issuer community a placement is considered public when there is one external lead involved and not at least two as per the underlying definition of the Fact Book. This is the reason why there is a discrepancy between the Fact Book and Covered Bond Label statistics for Poland.

5.2.28 PORTUGAL

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	1,300	1,200	400	500	500	600	600	600	600	600
Mortgage	34,321	36,016	33,711	34,461	32,970	35,530	35,795	36,600	38,350	38,150
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	35,621	37,216	34,111	34,961	33,470	36,130	36,395	37,200	38,950	38,750
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	11,550	9,706	8,656	6,906	4,500	5,000	5,000	5,000	4,000	4,000
Benchmark (500mio - below 1bn)	-	750	1,500	3,000	3,000	3,750	3,000	2,500	1,750	1,750
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	24,071	26,760	23,955	25,055	25,970	27,380	28,395	29,700	33,200	33,000
Total	35,621	37,216	34,111	34,961	33,470	36,130	36,395	37,200	38,950	38,750
Denominated in EURO	35,621	37,216	34,111	34,961	33,470	36,130	36,395	37,200	38,950	38,750
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	35,621	37,216	34,111	34,961	33,470	36,130	36,395	37,200	38,950	38,750
Hard Bullet	300	300	300	300	-	-	-	-	-	-
Soft Bullet	35,321	36,916	33,811	30,961	27,020	29,630	29,895	29,400	31,150	30,950
Conditional Pass Through				3,700	6,450	6,500	6,500	7,800	7,800	7,800
Total	35,621	37,216	34,111	34,961	33,470	36,130	36,395	37,200	38,950	38,750
Outstanding fixed coupon	11,610	10,516	10,966	11,466	10,260	12,970	12,200	12,800	12,550	12,350
Outstanding floating coupon	24,011	26,700	23,145	23,495	23,210	23,160	24,195	24,400	26,400	26,400
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	35,621	37,216	34,111	34,961	33,470	36,130	36,395	37,200	38,950	38,750
Number of Programmes	11	11	10	11	10	9	7	7	7	7
Number of Issuers	9	9	9	9	8	8	7	6	6	6
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	100	150	350	-	-	-	-
Mortgage	4,850	4,500	3,825	8,675	5,950	8,200	2,350	4,800	1,500	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	4,850	4,500	3,825	8,775	6,100	8,550	2,350	4,800	1,500	-
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	1,000	1,000	-	3,000	-	-	-	-
Benchmark (500mio - below 1bn)	-	750	1,500	750	-	750	-	1,000	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	4,850	3,750	1,325	7,025	6,100	4,800	2,350	3,800	1,500	-
Total	4,850	4,500	3,825	8,775	6,100	8,550	2,350	4,800	1,500	-
Denominated in EURO	4,850	4,500	3,825	8,775	6,100	8,550	2,350	4,800	1,500	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	4,850	4,500	3,825	8,775	6,100	8,550	2,350	4,800	1,500	-
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	4,850	4,000	3,825	4,575	4,350	7,550	2,350	3,000	1,500	-
Conditional Pass Through	-	500	-	4,200	1,750	1,000	-	1,800	-	-
Total	4,850	4,500	3,825	8,775	6,100	8,550	2,350	4,800	1,500	-
Issuance fixed coupon	-	750	3,250	2,500	3,700	5,500	-	2,100	1,500	-
Issuance floating coupon	4,850	3,750	575	6,275	2,400	3,050	2,350	2,700	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	4,850	4,500	3,825	8,775	6,100	8,550	2,350	4,800	1,500	-
Number of New Issuers	-	-	-	-	-	-	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.29 ROMANIA

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Mortgage	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	200	200
Ships	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Total Outstanding	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	200	200
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Benchmark (500mio - below 1bn)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	200	200
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	200	200
Denominated in EURO	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	200	200
Denominated in domestic currency	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Denominated in other currencies	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	200	200
Hard Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	200	200
Soft Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	200	200
Outstanding fixed coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Outstanding floating coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	200	200
Outstanding other	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	200	200
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	1	1
Number of Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	1	1
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Mortgage	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	-	-
Ships	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Total Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	-	-
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	-	-
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Benchmark (500mio - below 1bn)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	-	-
Denominated in EURO	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	-	-
Denominated in domestic currency	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Denominated in other currencies	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	-	-
Hard Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	-	-
Soft Bullet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	-	-
Issuance fixed coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Issuance floating coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	-	-
Issuance other	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	-	-
Number of New Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.30 SINGAPORE

Outstanding (in EUR million)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Total Covered Bonds Outstanding										
Public Sector	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Mortgage	n.a.	n.a.	n.a.	919	1,963	5,576	8,466	8,990	8,815	11,087
Ships	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Others	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total Outstanding	n.a.	n.a.	n.a.	919	1,963	5,576	8,466	8,990	8,815	11,087
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	919	949	834	1,092	1,113	2,019	3,202
Benchmark (500mio - below 1bn)	n.a.	n.a.	n.a.	-	1,014	4,644	7,282	7,783	6,797	7,886
Others (below 500Mio)	n.a.	n.a.	n.a.	-	-	98	92	94	-	-
Private Placement	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total	n.a.	n.a.	n.a.	919	1,963	5,576	8,466	8,990	8,815	11,087
Denominated in EURO	n.a.	n.a.	n.a.	-	500	3,250	5,250	5,250	6,250	7,250
Denominated in domestic currency	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Denominated in other currencies	n.a.	n.a.	n.a.	919	1,463	2,326	3,216	3,740	2,565	3,837
Total	n.a.	n.a.	n.a.	919	1,963	5,576	8,466	8,990	8,815	11,087
Hard Bullet	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Soft Bullet	n.a.	n.a.	n.a.	919	1,963	5,576	8,466	8,990	8,816	11,087
Conditional Pass Through	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total	n.a.	n.a.	n.a.	919	1,963	5,576	8,466	8,990	8,816	11,087
Outstanding fixed coupon	n.a.	n.a.	n.a.	919	1,449	4,598	6,871	7,347	7,676	7,691
Outstanding floating coupon	n.a.	n.a.	n.a.	-	514	977	1,596	1,643	1,139	3,396
Outstanding other	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total	n.a.	n.a.	n.a.	919	1,963	5,576	8,466	8,990	8,815	11,087
Number of Programmes	n.a.	n.a.	n.a.	1	2	3	3	3	3	3
Number of Issuers	n.a.	n.a.	n.a.	1	2	3	3	3	3	3
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Total Covered Bonds Issuance										
Public Sector	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Mortgage	n.a.	n.a.	n.a.	919	1,014	3,753	3,762	914	1,000	3,702
Ships	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Others	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total Issuance	n.a.	n.a.	n.a.	919	1,014	3,753	3,762	914	1,000	3,702
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	919	-	-	1,092	-	1,000	2,202
Benchmark (500mio - below 1bn)	n.a.	n.a.	n.a.	-	1,014	3,656	2,671	914	-	1,500
Others (below 500Mio)	n.a.	n.a.	n.a.	-	-	98	-	-	-	-
Private Placement	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total	n.a.	n.a.	n.a.	919	1,014	3,753	3,762	914	1,000	3,702
Denominated in EURO	n.a.	n.a.	n.a.	-	500	2,750	2,000	-	1,000	1,500
Denominated in domestic currency	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Denominated in other currencies	n.a.	n.a.	n.a.	919	514	1,003	1,762	914	-	2,202
Total	n.a.	n.a.	n.a.	919	1,014	3,753	3,762	914	1,000	3,702
Hard Bullet	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Soft Bullet	n.a.	n.a.	n.a.	919	1,014	3,753	3,762	914	1,000	3,702
Conditional Pass Through	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total	n.a.	n.a.	n.a.	919	1,014	3,753	3,762	914	1,000	3,702
Issuance fixed coupon	n.a.	n.a.	n.a.	919	500	3,265	3,092	445	1,000	1,500
Issuance floating coupon	n.a.	n.a.	n.a.	-	514	489	671	469	-	2,202
Issuance other	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total	n.a.	n.a.	n.a.	919	1,014	3,753	3,762	914	1,000	3,702
Number of New Issuers	-	-	-	1	1	1	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.31 SLOVAKIA

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	3,835	4,067	3,939	4,198	4,197	5,118	4,858	6,658	7,337	8,851
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	3,835	4,067	3,939	4,198	4,197	5,118	4,858	6,658	7,337	8,851
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	-	-	2,000	2,500	3,500
Others (below 500Mio)	1,606	1,477	1,197	927	-	-	-	1,050	1,050	1,050
Private Placement	2,229	2,590	2,742	3,271	4,197	5,118	4,858	3,608	3,787	4,301
Total	3,835	4,067	3,939	4,198	4,197	5,118	4,858	6,658	7,337	8,851
Denominated in EURO	3,680	3,925	3,814	4,094	4,076	5,036	4,810	6,658	7,337	8,851
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	155	142	124	104	121	82	48	-	-	-
Total	3,835	4,067	3,939	4,198	4,197	5,118	4,858	6,658	7,337	8,851
Hard Bullet	3,835	4,067	3,939	4,198	4,197	5,118	4,058	3,608	2,787	2,301
Soft Bullet	-	-	-	-	-	-	800	3,050	4,550	6,550
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	3,835	4,067	3,939	4,198	4,197	5,118	4,858	6,658	7,337	8,851
Outstanding fixed coupon	2,224	2,611	2,754	3,262	3,197	4,235	4,372	6,358	7,337	8,851
Outstanding floating coupon	1,606	1,451	1,185	936	995	883	486	300	-	-
Outstanding other	5	5	-	-	5	-	-	-	-	-
Total	3,835	4,067	3,939	4,198	4,197	5,118	4,858	6,658	7,337	8,851
Number of Programmes	n.a.	8	8	8	8	6	6	6	6	6
Number of Issuers	8	8	8	8	8	6	6	6	6	6
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	785	841	654	1,159	751	1,316	800	2,250	1,500	2,000
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	785	841	654	1,159	751	1,316	800	2,250	1,500	2,000
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	-	-	2,000	500	1,000
Others (below 500Mio)	248	167	154	-	-	-	-	250	-	-
Private Placement	537	674	500	1,159	751	1,316	800	-	1,000	1,000
Total	785	841	654	1,159	751	1,316	800	2,250	1,500	2,000
Denominated in EURO	735	815	654	1,159	685	1,316	800	2,250	1,500	2,000
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	50	26	-	-	66	-	-	-	-	-
Total	785	841	654	1,159	751	1,316	800	2,250	1,500	2,000
Hard Bullet	785	841	654	1,159	751	1,316	-	-	-	-
Soft Bullet	-	-	-	-	-	-	800	2,250	1,500	2,000
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	785	841	654	1,159	751	1,316	800	2,250	1,500	2,000
Issuance fixed coupon	703	757	585	940	690	1,316	800	2,250	1,500	2,000
Issuance floating coupon	77	84	69	219	56	-	-	-	-	-
Issuance other	5	-	-		5	-	-	-	-	-
Total	785	841	654	1,159	751	1,316	800	2,250	1,500	2,000
Number of New Issuers	-	-	-	-	-	-	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.32 SOUTH KOREA

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	2,407	2,536	1,349	1,954	2,490	2,619	2,771	6,241	7,928	9,966
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	2,407	2,536	1,349	1,954	2,490	2,619	2,771	6,241	7,928	9,966
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	500	1,000	3,000	5,550
Public Placement										
Benchmark (1bn and above)	758	725	-	-	-	-	-	-	1,000	2,000
Benchmark (500mio - below 1bn)	758	1,088	1,235	1,837	2,372	2,501	2,684	3,284	3,222	3,992
Others (below 500Mio)	-	-	-	-	118	117	-	-	-	-
Private Placement	891	723	113	117	-	-	87	2,957	3,706	3,974
Total	2,407	2,536	1,349	1,954	2,490	2,619	2,771	6,241	7,928	9,966
Denominated in EURO	-	-	-	-	-	-	500	1,000	3,000	5,550
Denominated in domestic currency	740	723	113	117	118	117	-	2,869	3,706	3,974
Denominated in other currencies	1,667	1,813	1,235	1,837	2,372	2,501	2,271	2,372	1,222	442
Total	2,407	2,536	1,349	1,954	2,490	2,618	2,771	6,241	7,928	9,966
Hard Bullet	2,407	2,536	1,349	1,495	1,541	1,785	1,810	5,220	7,021	8,466
Soft Bullet	-	-	-	459	949	833	961	1,021	907	1,500
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	2,407	2,536	1,349	1,954	2,490	2,618	2,771	6,241	7,928	9,966
Outstanding fixed coupon	2,255	2,536	1,349	1,954	2,490	2,619	2,771	6,241	7,928	9,966
Outstanding floating coupon	152	-	-	-	-	-	-	-	-	-
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	2,407	2,536	1,349	1,954	2,490	2,619	2,771	6,241	7,928	9,966
Number of Programmes	2	2	1	2	2	2	2	5	6	7
Number of Issuers	2	2	1	2	2	2	2	5	6	7
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	1	2	3

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	178	466	-	919	949	417	587	3,369	2,921	2,847
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	178	466	-	919	949	417	587	3,369	2,921	2,847
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	500	500	2,000	2,550
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	1,000	1,000
Benchmark (500mio - below 1bn)	-	363	-	919	949	417	500	500	1,000	1,550
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	178	103	-	-	-	-	87	2,869	921	297
Total	178	466	-	919	949	417	587	3,369	2,921	2,847
Denominated in EURO	-	-	-	-	-	-	500	500	2,000	2,550
Denominated in domestic currency	178	466	-	-	-	-	-	2,869	921	297
Denominated in other currencies	-	-	-	919	949	417	87	-	-	-
Total	178	466	-	919	949	417	587	3,369	2,921	2,847
Hard Bullet	178	466	-	459	474	417	500	3,369	2,421	1,847
Soft Bullet	-	-	-	459	474	-	87	-	500	1,000
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	178	466	-	919	949	417	587	3,369	2,921	2,847
Issuance fixed coupon	178	466	-	919	949	417	587	3,369	2,921	2,847
Issuance floating coupon	-	-	-	-	-	-	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	178	466	-	919	949	417	587	3,369	2,921	2,847
Number of New Issuers	-	-	-	1	-	-	-	3	1	1
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	-	1	1

5.2.33 SPAIN

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	33,609	30,352	25,495	28,505	26,887	25,362	18,362	20,763	18,262	17,544
Mortgage	406,736	334,572	282,568	252,383	232,456	216,498	213,253	220,689	231,143	216,808
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	1,500	7,397	8,522
Total Outstanding	440,345	364,924	308,063	280,888	259,344	241,860	231,615	242,952	256,802	242,874
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,000	2,100	2,800
Public Placement										
Benchmark (1bn and above)	243,207	211,343	172,344	156,845	129,777	107,096	96,706	89,506	83,910	72,246
Benchmark (500mio - below 1bn)	11,850	14,098	10,714	11,690	12,190	10,190	9,850	4,410	3,510	3,460
Others (below 500Mio)	200	-	-	-	-	-	-	5,000	6,282	4,000
Private Placement	185,088	139,483	125,006	112,352	117,376	124,574	125,059	144,036	163,100	163,169
Total	440,345	364,924	308,063	280,888	259,344	241,860	231,615	242,952	256,802	242,874
Denominated in EURO	438,641	363,731	306,522	279,969	258,395	241,860	231,615	242,319	252,946	237,833
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	1,703	1,193	1,541	919	949	-	-	633	3,856	5,041
Total	440,345	364,924	308,063	280,888	259,344	241,860	231,615	242,952	256,802	242,874
Hard Bullet	440,345	364,924	308,063	280,888	259,344	241,860	231,615	242,952	256,802	242,874
Soft Bullet	-	-	-	-	-	-	-	-	-	-
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	440,345	364,924	308,063	280,888	259,344	241,860	231,615	242,952	256,802	242,874
Outstanding fixed coupon	311,719	260,831	200,975	181,033	160,646	138,141	126,806	127,707	135,264	116,481
Outstanding floating coupon	128,625	103,631	107,088	99,855	98,698	103,299	104,450	115,245	121,538	126,394
Outstanding other	-	462	-	-	-	421	359			-
Total	440,345	364,924	308,063	280,888	259,344	241,860	231,615	242,952	256,802	242,874
Number of Programmes	n.a.	40	39	40	35	33	31	29	26	26
Number of Issuers	38	32	31	31	28	26	24	23	21	19
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2	2	2

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	6,407	5,895	1,853	10,400	7,250	350	800	800	2,900	1,000
Mortgage	98,846	22,919	23,038	31,375	31,393	30,000	19,935	19,435	14,560	12,720
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	1,500	5,897	880
Total Issuance	105,253	28,814	24,891	41,775	38,643	30,350	20,735	21,735	23,357	14,600
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	100	700
Public Placement										
Benchmark (1bn and above)	7,200	7,000	8,250	15,000	11,536	2,600	3,625	5,750	3,500	-
Benchmark (500mio - below 1bn)	3,600	4,840	500	4,750	2,000	-	1,500	750	-	700
Others (below 500Mio)	-	-	-	-	-	-	-	500	-	-
Private Placement	94,453	16,974	16,141	22,025	25,107	27,750	15,610	14,735	19,857	13,900
Total	105,253	28,814	24,891	41,775	38,643	30,350	20,735	21,735	23,357	14,600
Denominated in EURO	105,253	28,814	24,891	41,775	38,643	30,350	20,735	21,735	20,260	13,720
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	3,097	880
Total	105,253	28,814	24,891	41,775	38,643	30,350	20,735	21,735	23,357	14,600
Hard Bullet	105,253	28,814	24,891	41,775	38,643	30,350	20,735	21,735	23,357	14,600
Soft Bullet	-	-	-	-	-	-	-	-	-	-
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	105,253	28,814	24,891	41,775	38,643	30,350	20,735	21,735	23,357	14,600
Issuance fixed coupon	27,559	16,169	8,800	23,837	25,043	10,198	5,821	7,760	9,060	12,970
Issuance floating coupon	77,694	12,445	16,091	17,938	13,600	20,152	14,914	13,975	14,297	1,630
Issuance other	-	200	-	-	-	-	-	-	-	-
Total	105,253	28,814	24,891	41,775	38,643	30,350	20,735	21,735	23,357	14,600
Number of New Issuers	3	-	-	2	-	-	-	-	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	1

Source: AIAF, Bloomberg, Reuters, Moody's, Fitch, S&P, ECBC

Note: Please note that the breakdown public vs private placements is an estimation made by the ECBC.

Please also note that the methodology used for counting the number of issuers has changed. Until 2011, the number of "new issuers" included the new financial institutions established as part of the restructuring of the Spanish banking sector whose inaugural issue occurred during the year of reporting. The number of issuers also included all the former financial institutions with outstanding covered bonds at the end of each year - even if, as a consequence of the aforementioned restructuring, they were integrated into a new one - along with the new institutions. From 2012 onwards, however, only the new entities are reported as active issuers.

5.2.34 SWEDEN

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	220,374	217,854	209,842	221,990	222,444	219,212	217,979	235,111	247,713	242,018
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	220,374	217,854	209,842	221,990	222,444	219,212	217,979	235,111	247,713	242,018
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,362	1,668	1,633
Public Placement										
Benchmark (1bn and above)	175,163	173,333	163,281	172,823	177,385	173,105	171,336	185,661	196,370	191,639
Benchmark (500mio - below 1bn)	8,234	10,775	12,149	14,836	13,623	16,212	18,046	20,876	17,916	19,504
Others (below 500Mio)	29,055	26,071	26,047	24,859	22,918	23,432	18,117	18,312	21,227	19,731
Private Placement	7,921	7,676	8,364	9,472	8,518	6,463	10,481	10,262	12,200	11,145
Total	220,374	217,854	209,842	221,990	222,444	219,212	217,979	235,111	247,713	242,018
Denominated in EURO	39,995	39,423	36,108	37,931	38,224	39,094	43,610	47,301	44,962	39,929
Denominated in domestic currency	164,501	161,651	156,791	165,682	167,831	165,874	164,307	178,854	195,770	195,817
Denominated in other currencies	15,878	16,780	16,942	18,377	16,389	14,244	10,062	8,956	6,982	6,272
Total	220,374	217,854	209,842	221,990	222,444	219,212	217,979	235,111	247,713	242,018
Hard Bullet	220,374	217,854	208,848	216,945	214,177	207,424	203,566	217,145	234,715	224,354
Soft Bullet	-	-	993	5,045	8,267	11,788	14,413	17,966	12,998	17,664
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	220,374	217,854	209,842	221,990	222,444	219,212	217,979	235,111	247,713	242,018
Outstanding fixed coupon	198,372	195,770	187,395	200,034	201,061	199,424	200,840	215,500	219,770	215,532
Outstanding floating coupon	21,778	22,055	22,432	21,956	21,383	19,788	17,139	19,611	27,943	26,487
Outstanding other	224	29	14	-	-	-	-	-	-	-
Total	220,374	217,854	209,842	221,990	222,444	219,212	217,979	235,111	247,713	242,018
Number of Programmes	n.a.	10	10	9	10	10	12	12	12	13
Number of Issuers	7	8	8	8	8	8	10	10	10	11
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2	2	2

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	48,936	51,633	48,424	60,729	52,187	48,525	54,199	53,258	53,222	57,240
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	48,936	51,633	48,424	60,729	52,187	48,525	54,199	53,258	53,222	57,240
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	859	249	-
Public Placement										
Benchmark (1bn and above)	37,148	35,519	34,881	47,756	37,508	30,206	34,876	34,618	38,196	44,844
Benchmark (500mio - below 1bn)	92	6,753	5,989	5,608	7,360	7,766	10,715	8,140	1,124	3,877
Others (below 500Mio)	10,078	8,276	5,883	6,410	6,895	10,315	6,027	9,241	10,936	4,586
Private Placement	1,620	1,086	1,672	955	424	237	2,582	1,258	2,966	3,934
Total	48,936	51,633	48,424	60,729	52,187	48,525	54,199	53,258	53,222	57,240
Denominated in EURO	2,485	5,745	6,531	10,066	7,065	11,689	5,620	7,814	3,855	9,104
Denominated in domestic currency	41,971	41,220	39,866	47,364	43,741	34,981	46,375	44,388	47,027	45,083
Denominated in other currencies	4,481	4,668	2,027	3,299	1,381	1,855	2,204	1,055	2,340	3,053
Total	48,936	51,633	48,424	60,729	52,187	48,525	54,199	53,258	53,222	57,240
Hard Bullet	48,936	51,633	47,464	56,642	50,005	44,881	50,571	49,125	51,646	54,462
Soft Bullet	-	-	960	4,087	2,182	3,643	3,628	4,134	1,576	2,779
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	48,936	51,633	48,424	60,729	52,187	48,525	54,199	53,258	53,222	57,240
Issuance fixed coupon	38,294	42,949	41,346	54,618	46,046	44,358	47,056	46,947	41,349	45,544
Issuance floating coupon	10,642	8,684	7,077	6,111	6,141	4,166	7,143	6,311	11,873	11,697
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	48,936	51,633	48,424	60,729	52,187	48,525	54,199	53,258	53,222	57,240
Number of New Issuers	-	1	-	-	-	-	2	-	-	1
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	-	-

Note: In the Swedish domestic market it is common practice to tap issue and to buy back issuances if the bond has a maturity of less than 12-18 months. In order to best represent the liquidity of the market, tapped issuance which per ECBC definition fall under private placement have been considered as public placement according to the benchmark of their yearly cumulative issuance and their size of outstanding volume. This explains the discrepancy between the figures of the Fact Book and the Covered Bond Label.

5.2.35 SWITZERLAND

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Outstanding CBs - Pfandbriefe	67,652	71,716	78,468	95,940	105,012	101,962	110,556	120,798	131,702	146,014
Outstanding CBs - Structured	18,055	17,348	21,967	15,602	12,553	9,670	8,867	7,450	8,914	6,811
Total Outstanding	85,707	89,064	100,436	111,542	117,564	111,632	119,422	128,248	140,617	152,825
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	145
Public Placement										
Benchmark (1bn and above)	17,926	17,120	21,133	14,898	11,500	8,750	7,500	4,750	4,750	2,252
Benchmark (500mio - below 1bn)	23,839	6,218	40,767	60,457	64,107	59,627	74,316	83,100	94,691	111,959
Others (below 500Mio)	35,986	61,351	37,701	35,483	41,247	42,549	37,505	39,727	40,403	35,597
Private Placement	7,956	4,376	834	704	710	706	101	671	773	3,017
Total	85,707	89,064	100,436	111,542	117,564	111,632	119,422	128,248	140,617	152,825
Denominated in EURO	13,000	11,500	15,350	13,100	12,100	9,350	8,101	5,350	5,350	1,850
Denominated in domestic currency	67,652	71,716	78,468	95,940	105,012	102,176	111,221	122,827	135,200	150,905
Denominated in other currencies	5,055	5,848	6,617	2,502	453	106	100	71	67	70
Total	85,707	89,064	100,436	111,542	117,564	111,632	119,422	128,248	140,617	152,825
Hard Bullet	n.a.	n.a.	n.a.	n.a.	105,464	102,068	111,256	121,398	132,302	146,614
Soft Bullet	n.a.	n.a.	n.a.	n.a.	12,100	9,564	8,167	6,850	8,315	6,211
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Total	85,707	89,064	100,436	111,542	117,564	111,632	119,422	128,248	140,617	152,825
Outstanding fixed coupon	85,707	89,064	100,312	111,542	117,564	111,632	119,422	128,248	140,617	152,825
Outstanding floating coupon	-	-	124	-	-	-	-	-	-	-
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	85,707	89,064	100,436	111,542	117,564	111,632	119,422	128,248	140,617	152,825
Number of Programmes	n.a.	4	4	4	4	5	5	6	8	8
Number of Issuers	4	4	4	4	4	5	5	6	7	7
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
New Issues of CBs - Pfandbriefe	12,804	12,568	13,343	15,840	16,106	12,708	13,282	14,022	19,050	17,952
New Issues of CBs - Structured	6,919	1,015	5,850	-	-	214	444	1,338	1,458	1,345
Total Issuance	19,723	13,583	19,193	15,840	16,106	12,922	13,725	15,360	20,508	19,297
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	145
Public Placement										
Benchmark (1bn and above)	6,919	906	5,250	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	2,394	2,171	4,562	8,822	3,850	2,437	2,983	2,036	5,453	6,202
Others (below 500Mio)	10,410	10,397	8,782	7,018	12,256	10,485	10,742	13,324	14,949	12,403
Private Placement	-	109	600	-	-	-	-	-	106	692
Total	19,723	13,583	19,193	15,840	16,106	12,922	13,725	15,360	20,508	19,297
Denominated in EURO	2,750	-	5,850	-	-	-	-	-	-	-
Denominated in domestic currency	12,804	12,568	13,343	15,840	16,106	12,922	13,725	15,360	20,508	19,297
Denominated in other currencies	4,169	1,015	-	-	-	-	-	-	-	-
Total	19,723	13,583	19,193	15,840	16,106	12,922	13,725	15,360	20,508	19,297
Hard Bullet	n.a.	n.a.	n.a.	n.a.	16,106	12,708	13,282	14,022	19,050	17,952
Soft Bullet	n.a.	n.a.	n.a.	n.a.	-	214	444	1,338	1,458	1,345
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Total	19,723	13,583	19,193	15,840	16,106	12,922	13,725	15,360	20,508	19,297
Issuance fixed coupon	19,723	13,474	19,193	15,840	16,106	12,922	13,725	15,360	20,508	19,297
Issuance floating coupon	-	109	-	-	-	-	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	19,723	13,583	19,193	15,840	16,106	12,922	13,725	15,360	20,508	19,297
Number of New Issuers	-	-	-	-	-	1	-	1	1	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1

Note: from 2008 only Limmat bonds are considered as “Private Placements”

5.2.36 TURKEY

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Mortgage	n.a.	n.a.	n.a.	128	628	1,923	2,334	2,560	1,755	895
Ships	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Others	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total Outstanding	n.a.	n.a.	n.a.	128	628	1,923	2,334	2,560	1,755	895
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	n.a.	n.a.	n.a.	-	500	500	500	500	500	-
Others (below 500Mio)	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Private Placement	n.a.	n.a.	n.a.	128	128	1,423	1,834	2,060	1,255	895
Total	n.a.	n.a.	n.a.	128	628	1,923	2,334	2,560	1,755	895
Denominated in EURO	n.a.	n.a.	n.a.	-	500	500	500	-	500	-
Denominated in domestic currency	n.a.	n.a.	n.a.	128	128	1,423	1,834	2,560	1,255	895
Denominated in other currencies	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total	n.a.	n.a.	n.a.	128	628	1,923	2,334	2,560	1,755	895
Hard Bullet	n.a.	n.a.	n.a.	-	-	-	68	-	-	895
Soft Bullet	n.a.	n.a.	n.a.	128	628	1,923	2,266	2,560	1,755	-
Conditional Pass Through	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total	n.a.	n.a.	n.a.	128	628	1,923	2,334	2,560	1,755	895
Outstanding fixed coupon	n.a.	n.a.	n.a.	128	628	1,923	2,334	2,560	1,755	-
Outstanding floating coupon	n.a.	n.a.	n.a.	-	-	-	-	-	-	895
Outstanding other	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total	n.a.	n.a.	n.a.	128	628	1,923	2,334	2,560	1,755	895
Number of Programmes	n.a.	n.a.	n.a.	1	1	4	6	7	7	8
Number of Issuers	n.a.	n.a.	n.a.	1	1	4	6	1	7	7
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Mortgage	n.a.	n.a.	n.a.	128	500	1,334	766	227	-	16
Ships	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Others	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total Issuance	n.a.	n.a.	n.a.	128	500	1,334	766	227	-	16
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	n.a.	n.a.	n.a.	-	500	-	-	-	-	-
Others (below 500Mio)	n.a.	n.a.	n.a.	-	-	-	-	227	-	-
Private Placement	n.a.	n.a.	n.a.	128	-	1,334	766	-	-	16
Total	n.a.	n.a.	n.a.	128	500	1,334	766	227	-	16
Denominated in EURO	n.a.	n.a.	n.a.	-	500	-	-	-	-	-
Denominated in domestic currency	n.a.	n.a.	n.a.	128	-	1,334	766	227	-	16
Denominated in other currencies	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total	n.a.	n.a.	n.a.	128	500	1,334	766	227	-	16
Hard Bullet	n.a.	n.a.	n.a.	-	-	-	68	-	-	16
Soft Bullet	n.a.	n.a.	n.a.	128	500	1,334	698	227	-	-
Conditional Pass Through	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total	n.a.	n.a.	n.a.	128	500	1,334	766	227	-	16
Issuance fixed coupon	n.a.	n.a.	n.a.	128	500	1,334	766	227	-	-
Issuance floating coupon	n.a.	n.a.	n.a.	-	-	-	-	-	-	16
Issuance other	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Total	n.a.	n.a.	n.a.	128	500	1,334	766	227	-	16
Number of New Issuers	n.a.	n.a.	n.a.	1	1	2	2	1	-	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

5.2.37 UNITED KINGDOM

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Regulated - Mortgages	147,425	114,395	114,654	106,674	97,127	89,509	93,530	108,857	96,012	88,710
Regulated - Public Sector	-	-	-	-	-	-	-	-	-	-
Non-regulated - Mortgages	37,818	18,077	16,143	8,236	-	-	-	-	1,112	2,380
Non-regulated - Public Sector	3,742	5,784	6,152	6,358	4,894	4,697	4,662	705	667	595
Total Outstanding	188,985	138,255	136,949	121,268	102,021	94,206	98,192	109,562	97,791	91,685
Of which, total Sustainable CB	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	500
Public Placement										
Benchmark (1bn and above)	148,608	112,064	107,687	93,997	75,733	70,229	72,312	87,503	72,679	59,728
Benchmark (500mio - below 1bn)	27,127	13,341	16,995	10,233	9,546	7,548	11,457	12,164	13,609	13,219
Others (below 500Mio)	9,137	8,637	7,948	971	280	248	-	-	50	484
Private Placement	4,113	4,213	4,319	16,068	16,462	16,181	14,423	9,895	11,454	18,254
Total	188,985	138,255	136,949	121,268	102,021	94,206	98,192	109,562	97,791	91,685
Denominated in EURO	118,667	84,633	77,968	67,651	57,703	55,876	56,426	58,096	48,159	37,325
Denominated in domestic currency	61,012	44,957	50,972	47,613	38,532	36,977	40,482	48,854	45,551	50,856
Denominated in other currencies	9,306	8,665	8,009	6,004	5,786	1,353	1,284	2,612	4,081	3,504
Total	188,985	138,255	136,949	121,268	102,021	94,206	98,192	109,562	97,791	91,685
Hard Bullet	n.a.	n.a.	n.a.	n.a.	7,508	5,331	2,581	2,581	2,581	2,481
Soft Bullet	n.a.	n.a.	n.a.	n.a.	91,028	85,531	92,291	106,981	95,210	89,204
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	3,485	3,344	3,320	-	-	-
Total	188,985	138,255	136,949	121,268	102,021	94,206	98,192	109,562	97,791	91,685
Outstanding fixed coupon	123,888	106,995	101,816	91,567	78,951	72,038	71,144	74,833	65,195	52,633
Outstanding floating coupon	65,097	31,260	35,133	29,701	23,070	22,168	27,048	34,729	32,596	39,052
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	188,985	138,255	136,949	121,268	102,021	94,206	98,192	109,562	97,791	91,685
Number of Programmes	n.a.	18	17	16	14	14	14	15	16	16
Number of Issuers	15	17	16	15	12	12	13	14	16	16
Of which, Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Regulated - Mortgages	37,109	1,480	12,529	15,015	9,599	11,563	14,916	22,959	9,089	9,783
Regulated - Public Sector	-	-	-	-	-	-	-	-	-	-
Non-regulated - Mortgages	-	-	-	-	-	-	-	-	1,112	1,190
Non-regulated - Public Sector	-	-	-	-	-	-	-	-	-	-
Total Issuance	37,109	1,480	12,529	15,015	9,599	11,563	14,916	22,959	10,201	10,973
Of which, Sustainable CB Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	500
Public Placement										
Benchmark (1bn and above)	22,921	1,000	9,135	11,540	6,701	10,013	12,224	19,629	7,643	1,785
Benchmark (500mio - below 1bn)	9,432	-	2,892	2,159	1,381	1,500	2,662	2,850	500	1,750
Others (below 500Mio)	3,222	380	396	409	-	-	-	-	-	-
Private Placement	1,534	100	106	907	1,517	50	30	480	2,057	7,438
Total	37,109	1,480	12,529	15,015	9,599	11,563	14,916	22,959	10,201	10,973
Denominated in EURO	20,024	1,480	6,406	8,135	6,833	4,800	4,030	7,620	1,750	1,750
Denominated in domestic currency	15,041	-	6,123	6,880	2,766	6,763	10,231	13,989	6,617	9,223
Denominated in other currencies	2,044	-	-	-	-	-	655	1,350	1,834	-
Total	37,109	1,480	12,529	15,015	9,599	11,563	14,916	22,959	10,201	10,973
Hard Bullet	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Soft Bullet	n.a.	n.a.	n.a.	n.a.	9,599	11,563	14,916	22,959	10,201	10,973
Conditional Pass Through	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-
Total	37,109	1,480	12,529	15,015	9,599	11,563	14,916	22,959	10,201	10,973
Issuance fixed coupon	17,991	1,200	6,406	8,816	6,808	4,800	4,685	8,970	3,584	1,750
Issuance floating coupon	19,118	280	6,123	6,199	2,791	6,763	10,231	13,989	6,617	9,223
Issuance other	-	-	-	-	-	-		-	-	-
Total	37,109	1,480	12,529	15,015	9,599	11,563	14,916	22,959	10,201	10,973
Number of New Issuers	-	-	-	-	-	1	1	1	1	-
Number of New Sustainable Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1

Note: There are 14 Regulated issuers each with one Regulated residential mortgage programme (two regulated issuers also have unregulated programmes).

Please refer to the FCA's website for more details of the Regulted issues (http://www.fca.org.uk/firms/systems-reporting/regulated-covered-bonds-register).

5.2.38 UNITED STATES

Outstanding (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	6,000	6,000	4,000	4,000	2,000	-	-	-	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	6,000	6,000	4,000	4,000	2,000	-	-	-	-	-
Of which, total Sustainable CB										
Public Placement										
Benchmark (1bn and above)	6,000	6,000	4,000	4,000	2,000	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	6,000	6,000	4,000	4,000	2,000	-	-	-	-	-
Denominated in EURO	6,000	6,000	4,000	4,000	2,000	-	-	-	-	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	6,000	6,000	4,000	4,000	2,000	-	-	-	-	-
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	6,000	6,000	4,000	4,000	2,000	-	-	-	-	-
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	6,000	6,000	4,000	4,000	2,000	-	-	-	-	-
Outstanding fixed coupon	6,000	6,000	4,000	4,000	2,000	-	-	-	-	-
Outstanding floating coupon	-	-	-	-	-	-	-	-	-	-
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	6,000	6,000	4,000	4,000	2,000	-	-	-	-	-
Number of Programmes	2	2	2	2	1	-	-	-	-	-
Number of Issuers	2	2	2	2	2	-	-	-	-	-
Of which, Sustainable Issuers										

Issuance (in EUR million)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	-	-	-	-	-	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	-	-	-	-	-	-	-	-	-	-
Of which, Sustainable CB Issuance										
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500mio - below 1bn)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Denominated in EURO	-	-	-	-	-	-	-	-	-	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Hard Bullet	-	-	-	-	-	-	-	-	-	-
Soft Bullet	-	-	-	-	-	-	-	-	-	-
Conditional Pass Through	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Issuance fixed coupon	-	-	-	-	-	-	-	-	-	-
Issuance floating coupon	-	-	-	-	-	-	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Number of New Issuers	-	-	-	-	-	-	-	-	-	-
Number of New Sustainable Issuers										

5.2.39 ANNEX: EUROPEAN CENTRAL BANK EXCHANGE RATES WITH THE EURO, YEAR END

	Australian dollar	Brazilian real	Canadian dollar	Swiss franc	Czech koruna	Danish krone	UK pound sterling
2006	1.6691	2.8141	1.5281	1.6069	27.485	7.456	0.6715
2007	1.6757	2.5914	1.4449	1.6547	26.628	7.4583	0.73335
2008	2.0274	3.2436	1.6998	1.485	26.875	7.4506	0.9525
2009	1.6008	2.5113	1.5128	1.4836	26.473	7.4418	0.8881
2010	1.3136	2.2177	1.3322	1.2504	25.061	7.4535	0.86075
2011	1.2723	2.4159	1.3215	1.2156	25.787	7.4342	0.8353
2012	1.2712	2.7036	1.3137	1.2072	25.151	7.461	0.8161
2013	1.5423	3.2576	1.4671	1.2276	27.427	7.4593	0.8337
2014	1.4829	3.2207	1.4063	1.2024	27.735	7.4453	0.7789
2015	1.4897	4.3117	1.5116	1.0835	27.023	7.4626	0.73395
2016	1.4596	3.4305	1.4188	1.0739	27.021	7.4344	0.85618
2017	1.5346	3.9729	1.5039	1.1702	25.535	7.4449	0.88723
2018	1.622	4.444	1.5605	1.1269	25.724	7.4673	0.89453
2019	1.5995	4.5157	1.4598	1.0854	25.408	7.4715	0.8508
2020	1.5896	6.3735	1.5633	1.0802	26.242	7.4409	0.89903
2021	**1.5615**	**6.3101**	**1.4393**	**1.0331**	**24.858**	**7.4364**	**0.84028**

	Hong Kong dollar	Hungarian forint	Iceland krona	Japanese yen	Korean won (Republic)	Lithuanian litas	Latvian lats
2006	10.2409	251.77	93.13	156.93	1224.81	3.4528	0.6972
2007	11.48	253.73	91.9	164.93	1377.96	3.4528	0.6964
2008	10.7858	266.7	250*	126.14	1839.13	3.4528	0.7083
2009	11.1709	270.42	179.48*	133.16	1666.97	3.4528	0.7093
2010	10.3856	277.95	153.78*	108.65	1499.06	3.4528	0.7094
2011	10.051	314.58	159*	100.2	1498.69	3.4528	0.6995
2012	10.226	292.3	168.91*	113.61	1406.23	3.4528	0.6977
2013	10.6933	297.04	158.29**	144.72	1450.93	3.4528	0.7028
2014	9.417	315.54	154.31**	145.23	1324.8	3.4528	1.000
2015	8.4376	315.98	141.38**	131.07	1280.8	1.000	1.000
2016	8.1751	309.83	119.15**	123.4	1269.36	1.000	1.000
2017	9.372	310.33	124.30**	135.01	1279.61	1.000	1.000
2018	8.9675	320.98	127.89	125.85	1277.93	1.000	1.000
2019	8.7473	330.53	137.28	121.94	1296.28	1.000	1.000
2020	9.5142	363.89	154.59	126.49	1336.00	1.000	1.000
2021	**8.8333**	**369.19**	**150.15**	**130.38**	**1346.38**	**1.000**	**1.000**

* Bloomberg "Compound New York" Rates, ** Bloomberg "Bloomberg Generic Pricing (BGN)" Rates (On December 10, 2008, the European Central Bank has stopped publishing foreign exchange reference rates of the Icelandic Króna, but it resumed on February 2018).

	Norwegian krone	New Zealand dollar	Polish zloty	Swedish krona	Singapore dollar	Turkish lira	US dollar
2006	8.238	1.8725	3.831	9.0404	2.0202	1.864	1.317
2007	7.958	1.9024	3.5935	9.4415	2.1163	1.717	1.4721
2008	9.75	2.4191	4.1535	10.87	2.004	2.1488	1.3917
2009	8.3	1.9803	4.1045	10.252	2.0194	2.1547	1.4406
2010	7.8	1.72	3.975	8.9655	1.7136	2.0694	1.3362
2011	7.754	1.6737	4.458	8.912	1.6819	2.4432	1.2939
2012	7.3483	1.6045	4.074	8.582	1.6111	2.3551	1.3194
2013	8.363	1.6762	4.1543	8.8591	1.7414	2.9605	1.3791
2014	9.042	1.5525	4.2732	9.393	1.6058	2.832	1.2141
2015	9.603	1.5923	4.2639	9.1895	1.5417	3.1765	1.0887
2016	9.0863	1.5158	4.4103	9.5525	1.5234	3.7072	1.0541
2017	9.8403	1.685	4.177	9.8438	1.6024	4.5464	1.1993
2018	9.9483	1.7056	4.3014	10.2548	1.5591	6.0588	1.145
2019	9.8638	1.6653	4.2568	10.4468	1.5111	6.6843	1.1234
2020	10.4703	1.6984	4.5597	10.0343	1.6218	9.1131	1.2271
2021	**9.9888**	**1.6579**	**4.5969**	**10.2503**	**1.5279**	**15.2335**	**1.1326**

Source: European Central Bank (ECB), Statistics Data Warehouse.

Note: The Euro is the denominator.

Note: The exchange rate protocol used for ECBC covered bond statistics is to take the ECB bilateral exchange rate on the last business day of the year.

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