ECBC

EUROPEAN COVERED BOND **FACT BOOK**

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2016 ECBC EUROPEAN COVERED BOND **FACT BOOK**

This 11th edition of the ECBC European Covered Bond Fact Book builds on the success of previous editions, as the benchmark and the most comprehensive source of information on the asset class. Chapter I presents an analysis of eleven key themes of the year, offering an overview of the Industry's views on these.

Chapter II provides a detailed explanation of covered bond fundamentals, including reviews of some of the current European regulatory changes that have had/are bound to have a direct, significant impact on covered bonds, mainly the Capital Requirements Directive and Regulation (CRD IV and CRR), Liquidity Coverage Ratio, Solvency II. This chapter also includes articles outlining the repo treatment of covered bonds by central banks, investigating the relationship between covered bonds and other asset classes such as senior unsecured and government bonds, and describing the USD and GBP denominated covered bond market.

Chapter III presents an overview of the legislation and markets in 37 countries. Chapter IV sets out the rating agencies' covered bond methodologies and, finally, Chapter V provides a description of trends in the covered bond market as well as a complete set of covered bond statistics.

We welcome the broad range of views expressed in this latest edition of the Fact Book and would like extend our appreciation to the Chairmen of the ECBC "Fact Book" and "Statistics & Data" Working Groups, Mr Wolfgang Kälberer and Mr Florian Eichert respectively, as well as to all Fact Book contributors, whose efforts have once again produced an outstanding edition of the ECBC Fact Book.

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FOREWORD

On the 23rd of June 2016, a new and significant page in the history of Europe was written. The political and market dynamics triggered by the decision of the United Kingdom to leave the European Union (EU) are giving rise to completely new and unpredictable perspectives on the Old Continent. The pillars of the Capital Markets Union (CMU) designed by Commissioner Jonathan Hill are becoming more unstable with increasing market uncertainty on the horizon.

Once again, mortgage lenders and covered bond issuers are exposed to an unprecedented macroeconomic landscape with an extremely fragile and vulnerable political, institutional and social framework. In our view, however, one thing is sure: covered bonds will continue to serve as an effective crisis management tool providing an essential long-term financing instrument.

During the financial crisis of 2008 and subsequent years, the covered bond community made immense efforts to bring about convergence in market best practices and to offer a common set of market initiatives to the EU institutions, presenting a robust and consistent asset class amongst what were very fragmented national legal and macroeconomic landscapes.

Looking back over the last year, it is clear that the covered bond space has been fundamentally impacted upon by major waves of monetary policy, supervisory review and regulatory change. These developments and the new perspectives that they bring with them are reshaping market dynamics as well as the environment in which the asset class operates.

In September 2014, the European Central Bank (ECB) announced the launch of the third covered bond purchase programme (CBPP3) alongside a first asset backed security purchase programme (ABSPP). This was closely followed in Q1 2015 by the public sector purchase programme (PSPP), complementing the existing private sector assets operation with one focused on government debt. The expansion, in both size and scope, of the ECB's monetary stimuli aims at propelling the Eurozone out of its current deflationary path. Moreover, for the first time, lenders and investors in some parts of the EU were faced with the unprecedented challenge of a negative interest rate environment.

At the beginning of November 2014, the new European Commission started its five-year term and the EU began a new chapter in the process of European integration. The Juncker Commission set itself the ambitious political task of fostering growth whilst maintaining financial stability in (the then) 28 EU Member States, and has focused its attention and actions on galvanising Europe against the risk of further recession and deflation by coordinating structural reforms, investment, and budgetary, fiscal and monetary policies. These initiatives will affect the lives of more than 500 million citizens. European Commission President, Jean-Claude Juncker, announced a EUR 315 billion Investment Plan at the end of 2014, which is intended to change how public money is used for investment in Europe. The Commission's subsequent call for the creation of a Capital Markets Union in 2015 has put the spotlight on the role of the banking sector in supporting the growth agenda and on the contents of the long-term financing toolkit at the disposal of stakeholders.

Looking at the process of European integration in more detail, an additional fundamental building-block was put in place in November 2014 when the ECB fully assumed the supervisory tasks and responsibilities given to it in the framework of the Single Supervisory Mechanism (SSM), thereby taking charge of the euro area's 129 biggest credit institutions. This represents the biggest expansion of the ECB's powers since the introduction of the euro. The SSM, which is based in Frankfurt, represents the first established pillar of the Banking Union and is harmonising 19 sets of national supervisory practices aiming at a single pan-European framework, and oblige banks to take more precautions against crises.

The second pillar of the Banking Union, the Single Resolution Mechanism (SRM), was agreed upon in 2014 and implemented through the end of 2015. The main objective of the SRM is to ensure that potential future bank

failures in the Banking Union are managed efficiently, with minimal costs to taxpayers and the real economy. The SRM is managed by the Single Resolution Board in charge of the decision to initiate the resolution of a bank, and in some cases can it step up funding the resolution procedure using the Single Resolution Fund (SRF) war chest. Now the debate has shifted to the completion of the Banking Union by the introduction of its third pillar, the European Deposit Insurance Scheme (EDIS). EDIS introduction will be accompanied by risk reduction measures.

The changes of recent months to the regulatory and policy environment in Europe are having a significant impact on the long-term financing and housing finance sectors. When considering how best to shape the future European banking landscape and build the Capital Markets Union that will ensure the capability of the Industry to support the growth agenda and provide long-term financing to the real economy, several areas of reflection can be identified:

> Striking the right balance, in terms of a level playing field, between international banks operating in the European Union and European actors operating both internationally and domestically.

> Carefully examining the market impact of several key regulatory developments and trying to secure the European banking pillars in the Basel Committee debates: i.e. Net Stable Funding Ratio (NSFR), risk weighting, capital floors framework, leverage ratio.

> The role of European lenders in the framework of housing and small and medium sized enterprise (SME) financing, and lending to the real economy is becoming increasingly multi-faceted with the introduction of the Capital Markets Union.

> The role of covered bonds and the Industry's firm commitment to achieve a higher level of harmonisation, in line with EU objectives and market preferences.

Political perspective & the role of the ECBC

The path to the achievement of a common market offering free movement of goods, services, people and capital has been a long and gradual one. Starting in the 1950s with the signing of the Treaties of Paris and Rome, the process really started to take shape in 1985 with the initiative of the Delors Commission to design the Single European Act (SEA), and was developed further in the 1990s and 2000s with the signing of the Treaties of Maastricht, Amsterdam and Lisbon. Very much in line with the spirit of Delors, the Juncker Commission is revamping and extending what has gone before through its growth agenda and its plans to create deeper and more integrated capital markets in the EU Member States by way of the CMU.

At present, after several years of financial crisis, the three dimensions of the European project – financial, political and economic – are converging in a "unicum", which is rapidly accelerating the process of European integration. However, this acceleration is also dramatically highlighting the frictions, lack of convergence and institutional gaps of the current European mechanisms. The outcome of the UK referendum can arguably be listed as an unintended consequence of this process.

This is where the financial services industry, which is a fundamental element of the European political and social landscape, can potentially play a crucial role in facilitating convergence and integration by enhancing transparency and market best practices. Furthermore, understanding the transmission channels that exist between the financial and other sectors of the economy is critical when assessing growth and financial stability. The latter is crucial as robust financial systems are viewed as those that do not adversely affect the system itself, and those that are capable of withstanding shocks and limiting disruption in the allocation of savings to profitable investment opportunities.

Thus far, politically, the financial services sector has acted as a scapegoat for the financial crisis, for market fragmentation and for political uncertainty. In this challenging political atmosphere, the EU institutions have initiated an overarching reform of the financial sector. In doing so, regulators have walked – and continue to walk – a difficult and dangerous path, in their quest to find a balance between harmonisation on the one hand

and respect for national market traditions on the other, whilst at the same time limiting adverse collateral effects and ensuring social cohesion.

This new transition period is giving rise to challenges, expectations and emotions which have a much broader and deeper impact generally in EU society than ever before. The Industry is faced with the challenge of harnessing these new dynamics and contributing to the integration process by playing a proactive role in building the CMU so as to ensure financial stability and lending capacity, and to support economic growth, which remains at the heart of the European project.

Taking stock, it is clear that the European financial world has entered a completely new market and regulatory environment. In this context, the ECBC is now playing, more than ever, the role of market catalyst and think-tank, which is, in turn, allowing the market to converge and coordinate by speaking with one voice. Moreover, the role played by the ECBC in this new context ensures the smooth functioning of the market itself by identifying and implementing common qualitative standards and quantitative parameters. Looking ahead, the ECBC is determined to continue to act as the Industry discussion forum and market "lighthouse", developing a clear vision of the challenges and opportunities on the horizon amongst market participants and, subsequently, guiding the Industry through these uncharted waters.

Regulatory recognition

In light of the current debate on Basel IV, more than ever the covered bond community is determined to ensure that the qualitative characteristics of the covered bond asset class will be appropriately captured in the future regulatory landscape. Since the beginning of the financial crisis, a diverse set of financial regulations has been approved by the European institutions, all aimed at strengthening the financial sector and rendering it more resilient to shocks. Amongst the most notable legislative proposals are: the Basel III framework for capital requirements; the Banking Union, which encompasses the Single Supervisory Mechanism (SSM), the Single Resolution Mechanism (SRM) including the framework for resolving banks (Bank Recovery and Resolution Directive – BRRD) and the newly proposed rules for a European Deposit Insurance Scheme (EDIS); together with the revamping of the European capital market structure. In particular, the implementation of the Capital Requirements Regulation (CRR) / Capital Requirements Directive (CRD) IV package in the EU is the backbone of the EU's Single Rulebook for banks, which aims at providing a single set of harmonised prudential rules that all financial institutions throughout the EU (approximately 8300 banks) must comply with, thus helping complete the single market in financial services. SME and mortgage lending, key drivers of recovery in the real economy, are predominately based on bank lending principles that are rooted in the banking supervisory tradition, which thereby facilitates due diligence for investors and proper risk assessment. Looking at the numbers, roughly 85% of financing in the EU is provided by banks. The overall financial strength of the European economy is strongly correlated to banks' ability to lend to both the private and public sectors. This capacity has been impinged as a result of new global rules that require banks to increase their capital ratios.

The implementation of the Basel rules, together with the proper treatment of covered bonds and High Quality Securitisation, raises questions about how a level playing field can be ensured at the global level, especially for economies strongly reliant upon these funding instruments, such as in Europe. More importantly, as has been clearly indicated by their recognition in the ECB's CBPP3 and ABSPP, these instruments play a pivotal role in the creation and development of a Capital Markets Union as key long-term financing tools and as a means for a common monetary policy to be effectively transmitted to the real economy.

This strong macro-prudential recognition was further confirmed by the publication of the Liquidity Coverage Ratio (LCR) delegated act by the European Commission the 10th of October 2014, in which covered bonds have been categorised as Extremely High Liquid Assets (Level 1). The ECBC welcomes the Commission's recognition of the macro prudential value of covered bonds. Indeed, the inclusion of covered bonds in Level 1 will facilitate the aim of delinking the sovereign from the banking sector.

A real economy long-term funding tool

Covered bonds represent a key funding tool for the future European banking industry. They are an effective way of channelling long-term financing for high quality assets at a reasonable cost. They improve banks' ability to borrow and lend over long-term horizons and, therefore, represent a stable source of funding for key banking functions such as housing loans and public infrastructure.

For instance, long-term financing is crucial for housing finance. Building or purchasing a home is the most significant investment for the majority of European citizens, representing typically four to five times their annual income. In the absence of pre-existing wealth, they would have to wait for 40 or 50 years if they had to rely solely on their individual savings. Borrowing resources are therefore necessary to acquire a home and more generally to support the European economy. Given the size of the investment, their repayment must be spread out over a long period to be compatible with their annual savings capacity. Long-term funding tools for banks are therefore required to avoid asset and liabilities mismatches. Covered bonds are typically designed for mortgage lending, and it is important to recall that a mortgage-focused bank tends to have more asset encumbrance than a bank with a non-mortgage focus. Cutting back lending capacities of those more specialised mortgage-focused banks would limit the credit supply to housing finance.

The efficient availability of mortgage finance is also based on the ready availability of financing at the longest tenors possible and the lowest price feasible. Without this, the mortgage market would be a function of market sentiment and the refinancing rates available to borrowers would be subject to much more price volatility, making planning for private households more challenging. In this context and in particular in times of low risk appetite from investors, covered bonds play an essential role in ensuring the flow of capital in financing long-term growth and the real economy. They offer key safety features such as a strict legal and supervisory framework, asset segregation, and a cover pool actively managed in order to maintain the quality of the collateral. During the recent financial turmoil, the existence of a well-functioning covered bond market has allowed governments in Europe to constantly channel private sector funds to housing markets and maintain a relatively efficient lending activity without increasing the burden for taxpayers and public debt.

The growth agenda debate has also dominated economic and political discussions beyond the EU, raising the key questions of how to finance economic growth and how to create an efficient and robust long-term financing toolkit. This debate has a very high political profile as it engages key stakeholders at both an international and a national level. Furthermore this raises fundamental questions regarding the fine-tuning of the Basel III parameters and the right calibration between enhanced risk assessments, reduction of systemic risks and continued lending capabilities of the banking sector. Such discussions belong, traditionally, to an emerging market landscape, where the World Bank has always played a pivotal role in assisting the development of capital market infrastructures which aim at ensuring economic growth and social development.

Looking at the numbers produced by the World Bank, 8.3 billion people are expected to be alive by 2030, with 60% of them living in cities. Consequently, the global demand for new dwellings is foreseen to rise by 565 million over the same period. Furthermore, the World Bank considers that in emerging markets, five permanent jobs are created for every new housing unit built, with the figure being even higher in the developed world, thus making housing a key driver for economic growth and social stability.

Market developments

Covered bonds are at the heart of the European financial tradition, having played a central role in funding strategies for the last two centuries. The strategic importance of covered bonds as a long-term funding tool is now recognised at a global level. Outside Europe, Australia, Canada, New Zealand and South Korea have already implemented covered bond legislation in recent years. Major jurisdictions including Brazil, Chile, India, Japan, Mexico, Morocco, Panama, Peru, South Africa and the United States, are either in the process of adopting covered bond legislation or are investigating the introduction of covered bonds. In recognition of

the global spread of covered bonds and with a view to ensuring that the key quality characteristics of the asset class remain its foundation around the world, in late 2015 the ECBC established a Global Issues Working Group (GIWG), which held its first meeting in Singapore in March 2016. This year's ECBC Fact Book provides comprehensive coverage of related new legislative frameworks and developments, and shows how the ECBC, through the GIWG amongst other channels, is further strengthening its role as the principal voice of covered bonds, not just in Europe but globally.

During the recent years of market turmoil, covered bonds demonstrated a strong degree of resilience. Throughout the crisis, they played a pivotal role in bank wholesale funding, providing lenders with a cost-effective and reliable long-term funding instrument for mortgage and public-sector loans. The Industry continues to build on the lessons learnt from the financial crisis while maintaining a focus on the essential features and qualities that have made the asset class such a success story. The ECBC firmly believes that the quality of the asset class will continue to be the basis of our strength in the future.

The success of covered bonds also lies in the Industry's capacity to respond to the challenges of the current crisis and its ability to share market best practices. This allows a continuous fine-tuning of European covered bond legislation and facilitates a strong level of transparency for the asset class. As indicated above, the instrument has enabled Member States in Europe to continue to channel private sector funds to housing markets and maintain efficient lending activity without an additional increase of burden for taxpayers or public debt. Furthermore, the on-balance sheet nature of covered bonds is an efficient and simple alternative to complex originate-to-distribute products ensuring financial stability.

The commitment to contribute to European efforts to enhance financial stability and transparency has led the covered bond industry to launch a quality Label. The Covered Bond Label was developed by the European issuer community working in close cooperation with investors and regulators, and in consultation with all major stakeholders such as the European Commission and the European Central Bank. The Label is based on the Covered Bond Label Convention, which defines the core characteristics required for a covered bond programme to qualify for the Label.

The Covered Bond Label and its transparency platform (www.coveredbondlabel.com) have been operational since January 2013, providing detailed covered bond market data, comparable cover pool information and legislative details on the various national legal frameworks designed to protect bondholders. As of August 2016, 91 labels have been granted to 77 issuers from 14 countries, covering over EUR 1.4 trillion of covered bonds outstanding.

In this context, covered bond issuers from these 14 different jurisdictions have come together to develop a Harmonised Transparency Template. From 2016 onwards (with a one year phase-in period), this provides cover pool information in a harmonised format, which allows for both the recognition of national specificities, with the National Transparency Tabs, and the comparability of information required to facilitate investors' due diligence.

The critical mass achieved by this initiative (c. 60% of covered bonds outstanding globally hold the Label) is a clear sign that the Industry sees the need to respond to the requirements of new classes of investors by providing higher levels of transparency to aid investment decisions. Equally, it is important to highlight the progress that has been made in recent years in terms of collating and distributing relevant macro-level information on the covered bond sector:

- The ECBC website continues to be the primary site for aggregate covered bond market data and comparative framework analysis; and
- The ECBC Fact Book, now in its eleventh edition, remains the most widely read source of covered bond market intelligence.

Looking ahead

In conclusion, the ECBC believes that the quality of the covered bond asset class will be the basis of our strength in the future. Over the last two centuries the asset class has made a significant contribution in Europe to supporting the real economy and ensuring financial stability. The Industry has demonstrated that through market initiatives such as the Covered Bond Label and the recently proposed European Secured Note (ESN), it is possible to build, from the bottom up, proposals based on market consensus in order to initiate pan-European solutions which enhance transparency, comparability, convergence of markets and best practices. Furthermore, it has been possible to do this without over-regulating and, thereby, potentially jeopardising the capabilities of lenders to support the growth agenda. More work needs to be done, but we believe that the initiatives underway will strengthen the asset class and facilitate the convergence of market and supervisory best practices. The increased recognition by policymakers and regulators of the central role that the asset class plays for the banking system and also for wider financial stability reinforces the need for an appropriate regulatory framework for covered bonds at both European and international levels. This will be our objective for the coming years.

On a final, additional positive note, the EMF-ECBC has for some time now been investigating the ways in which the mortgage and covered bond industries can contribute to the increasingly important EU policy objective of increasing the energy efficiency of the EU's building stock in order to help meet the EU's ambitious energy savings targets for 2020 and 2030. Specifically, the EMF-ECBC is working on a private financing initiative to incentivise homeowners to move their properties out of the brown zone and into the green zone by way of preferential interest rates and/or additional funds at the time of origination for retrofitting. After a formal green light from the EMF board in June 2016, the EMF-ECBC will launch a yearlong pilot phase of the initiative in September 2016 to define and substantiate with data the key parameters of the initiative and the underlying business case. See Key Theme Article 1.8 for more details on this initiative, in particular regarding the link with covered bonds.

Waleed El-Amir
ECBC Chairman

Luca Bertalot
EMF-ECBC Secretary General

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 August 2016, the Council has over 100 members across 26 covered bonds jurisdictions and many different market segments. ECBC members represent over 95% of covered bonds outstanding. The ECBC and the EMF re-integrated in 2014 under a common umbrella entity, i.e. the Covered Bond & Mortgage Council (CBMC). The intention is to further develop synergies, share market best practices, achieve convergence across the whole value chain of this Industry, and, at the same time, to act as a market catalyst in origination and funding techniques.

Against this background, the purpose of the ECBC is 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 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 Plenary Meeting is a bi-annual discussion forum where all ECBC members gather around the table to discuss issues and to establish strong network links.

The ECBC Steering Committee, headed by the ECBC Chairman, and composed of representatives from the major covered bond issuing jurisdictions and industry experts, is responsible for the day-to-day activities of the ECBC. It comes together once every quarter and addresses strategy related questions. Furthermore, it coordinates the agenda of the various 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 special treatment for covered bonds. As well as monitoring and lobbying on the CRD IV/CRR, the European Legislation Working Group is actively working on issues such as Solvency II, the path towards Basel IV, Net Stable Funding Ratio (NSFR) and crisis management.

> **The Technical Issues Working Group**, chaired by Mr Morten Bækmand Nielsen, represents the technical think thank of the covered bond community, drawing on experts from across the industry to tackle key issues for the industry. 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. This Working Group is currently leading discussions on improving liquidity in secondary markets and, in the context of the MiFID review, on the issues of pre- and post-trade price transparency.

> **The Statistics and Data Working Group**, chaired by Mr Florian Eichert, 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 Wolfgang Kälberer, is responsible for the 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 Mr Boudewijn Dierick, 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 at a global level.

Membership of the ECBC continues to grow and its agenda for the coming year is already filled with numerous activities. The ECBC's objective now is to press ahead in its work with a view to further strengthening its role in facilitating the communication amongst the different covered bonds stakeholders, in 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 http://ecbc.hypo.org/

Luca Bertalot,
EMF-ECBC Secretary General

ECBC MEMBERS

ABECIP

ABN Amro

Aktia Bank plc

Allen & Overy

AIB Mortgage Bank – Allied Irish Banks Plc.

Asociación de Intermediarios de Activos – AIAF

Asociación Hipotecaria Española – AHE

Association of Danish Mortgage Banks – Realkreditrådet

Association of Hungarian Mortgage Banks – Magyar Jelzálogbank Egyesület

Association of Swedish Covered Bond Issuers – ASCB

AXA Bank Europe SCF

Banca Popolare di Milano – BPM

Bank of Ireland Mortgages Bank

Bankia

Banking & Payments Federation Ireland – BPFI / ACS Ireland

Banque Fédérale des Banques Populaires – BPCE

Barclays

Bayerische Landesbank – Bayern LB

Belfius Bank

Bloomberg LP

BNP Paribas

BNP Paribas Fortis

BRFKredit A/S

Caisse centrale Desjardins et Capital Desjardins inc.

Canada Mortgage and Housing Corporation (CMHC)

Canadian Imperial Bank of Commerce (CIBC)

Caisse de Refinancement de l'Habitat – CRH

Caixa Geral de Depósitos S.A.

Citigroup Global Markets Germany

Clifford Chance LLP

Commerzbank Securities

Crédit Agricole Corporate and Investment Bank

Crédit Agricole Home Loan SFH – CM-CIC Home Loan SFH

Crédit Foncier de France

Crédit Mutuel – CIC Home Loan SFH

Crédit Mutuel Arkéa

Credit Suisse

CRIF

Danish Ship Finance

Danske Bank

DBRS Ratings Limited

Depfa ACS Bank

Deutsche Bank AG

DLR Kredit A/S

DNB Boligkreditt

Dutch Association of Covered Bond Issuers – DACB

DZ Bank

EAA Covered Bond Bank Plc.

Eika Boligkreditt AS

Eurex Bonds

Euromoney Conferences

European AVM Alliance – EAA

European DataWarehouse GmbH

Finance Norway – FNO

Fitch Ratings Ltd.

GOH Portugal

Goldman Sachs

Grupo BBVA

Gruppo Banca Carige

HSBC SFH France

Hypoport / Intertrust

ING Belgium

ING Group

Intesa Sanpaolo

Italian Banking Association – Associazione Bancaria Italiana – ABI

JP Morgan

KBC Bank

Korea Housing Finance Corporation – KHFC

La Banque Postale Home Loan SFH

Landesbank Baden-Württemberg – LBBW

Linklaters Business Services

Lloyds Banking Group

Luxembourg Bankers' Association – ABBL

Merrill Lynch International

Moody's

Morgan Stanley Bank AG

Münchener Hypothekenbank eG

National Bank of Greece SA – NBG

Nationwide Building Society

Natixis

NIBC Bank N.V.

Nomura International Plc.

Norddeutsche Landesbank Girozentrale

Nordea Hypotek

Novo Banco S.A.

Nykredit A/S

OP Mortgage Bank

pbb Deutsche Pfandbriefbank AG

Pfandbrief & Covered Bond Forum Austria

Pfandbriefbank schweizerischer Hypothekarinstitute

Realkredit Danmark A/S

Realkreditforeningen

Royal Bank of Canada – RBC

Royal Bank of Scotland – RBS

Santander UK Plc.

Scope Ratings AG

SEB AG

SNS Reaal Bank N.V.

Société de Financement Local

Société Générale Corporate & Investment Banking

Société Générale Société de Crédit Foncier – SG SCF

Standard & Poor's

Svenska Handelsbanken – Stadshypotek

TD Bank Group

The Association of Banks in Singapore – ABS

The Mortgage Society of Finland

TXS GmbH

UBI Banca

UBS

UK Regulated Covered Bond Council – UKRCBC

UniCredit Group

Verband Deutscher Pfandbriefbanken e.V. – vdp

White & Case

August 2016

COVERED BOND
· LABEL ·

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 and regulators, and in consultation with all major stakeholders. It became fully operational on the 1st of January 2013, with the first Labels being effective since then.

As of August 2016, visitors can find the Harmonised Transparency Template and 14 National Transparency Templates, 77 issuer profiles and information on 91 labelled cover pools with issuance data on over 4,200 covered bonds amounting to a total face value of over 1.4 trillion EUR. The Harmonised Transparency Template will be implemented by all covered bond labelled issuers with a phase-in period of one year, starting from the 1st of January 2016.

The Label is based on the Covered Bond Label Convention (please see below), which defines the core characteristics required for a covered bond programme to qualify for the Label. This definition of the required characteristics, which is updated on a yearly basis, is complemented by a transparency tool developed at national level based on the "Guidelines for National Transparency Templates".

The Covered Bond Label Foundation (CBLF) granted that the first Non-European Economic Area (non-EEA) Label in 2015. This was made possible following on from the decision taken in September 2014 to open up the Covered Bond Label Initiative, from the 1st of January 2015 onwards, to covered bond programmes beyond the frontiers of the EEA, provided that they comply with all the requirements of the Covered Bond Label Convention (please see below). In February 2016, the first non-EEA global issuer published the Harmonised Transparency Template followed by the first European issuers.

The Harmonised Transparency Template 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 common Harmonised Transparency Template 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.

2016 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.

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 129(7) of the CRR.

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

LABELLED COVER POOLS

AUSTRIA

UniCredit Bank Austria AG Credit Public Sector

UniCredit Bank Austria AG Credit Mortgage

DENMARK

BRFKredit a/s Capital Center E

Danish Ship Finance General Capital Center

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

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 H

Realkredit Danmark A/S Capital Centre S

Realkredit Danmark A/S Capital Centre T

FINLAND

Danske Bank Plc Pool 1

Nordea Bank Finland cover pool

OP Mortgage Bank, Pool B

FRANCE

AXA Bank Europe SCF

BNP Paribas Home Loan SFH

BNP Paribas Public Sector SCF

BPCE Home Loan SFH

Caisse de Refinancement de l’Habitat, CRH

Caisse Française de Financement Local

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 Article 52(4) of the UCITS Directive and Article 129 of the CRR, 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 Harmonised Transparency Template will enter into force for the first quarter of 2016 and will be a binding requirement for the granting and renewal of the Covered Bond Label with a phase-in period of one year in order to allow issuers to align their IT systems and disclosure policies to the new format.

Compagnie de Financement Foncier
Credit Agricole Home Loan SFH
Credit Agricole Public Sector SCF
Crédit Mutuel – CIC Home Loan SFH
Crédit Mutuel Arkéa Home Loans SFH
Crédit Mutuel Arkéa Public Sector SCF
HSBC SFH (France)
La Banque Postale Home Loan SFH
SG Credit Public Sector SCF
SG Credit Home Loan SFH

GERMANY
NORD/LB
UniCredit Bank AG HVB Mortgage
UniCredit Bank AG HVB Public

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

ITALY
Banca Carige S.p.A. Credit Home/Commercial Loan
Banco Popolare de Milano, Bpm OBG2
Cassa di Risparmio di Parma e Piacenza S.p.A –
Cariparma OBG S.r.l.
Intesa Sanpaolo S.p.A. ISP CB Ipotecario S.r.l.
Intesa Sanpaolo S.p.A. ISP CB Pubblico S.r.l.
UniCredit S.p.A. BpC Mortgage s.r.l.
UniCredit S.p.A. OBG srl

NETHERLANDS
ABN AMRO Bank N.V. Cover Pool
Aegon Bank N.V. Cover Pool
F. van Lanschot Bankiers N.V. Conditional
Pass-Through Covered Bond Programme
ING Bank N.V. ING Bank
ING Bank N.V. ING Bank Soft Bullet
SNS Bank N.V. Cover pool
NIBC Bank N.V. Conditional Pass-Through
Covered Bond Programme

NORWAY
DNB Boligkreditt AS mortgage cover pool
Eika Boligkreditt AS (EIKBOL)
Nordea Eiendomskreditt AS cover pool
SpareBank 1 Boligkreditt (Spabol)

PORTUGAL
Banco BPI S.A. Mortgage Cover Pool
Banco Comercial Português A.S. Residential Mortgages
Banco Santander Totta, S.A.
Caixa Económica Montepio Geral (CEMG)
Caixa Geral de Depósitos, S.A. Mortgage Cover Pool

SINGAPORE
DBS Bank Limited USD10 billion Global
Covered Bond Programme
United Overseas Bank Limited USD8 billion
Global Covered Bond Programme

SPAIN
Banco de Sabadell, S.A.
Banco Mare Nostrum, S.A.
Banco Popular Español S.A.
Banco Santander S.A. Mortgage Covered Bonds
Bankia Mortgage
Bankinter, S.A.
BBVA Covered Bond Programme
BBVA Public Sector Covered Bond Programme
CaixaBank S.A. Mortgages Loans
CaixaBank S.A. Public Loans
Caja Rural de Castilla La Mancha
Ibercaja Banco S.A.
Kutxabank S.A.
Unicaja Banco S.A. Mortgage Covered Bonds

SWEDEN
Länsförsäkringar Hypotek AB
Nordea Hypotek cover pool
SEB Cover Pool
Stadshypotek AB (publ) Swedish Pool
Stadshypotek AB (publ) Norwegian Pool
Swedbank Mortgage AB cover pool
The Swedish Covered Bond Corporation

UK
Santander UK plc
Clydesdale Bank PLC €10 billion Global Covered
Bond Programme
Coventry Building Society 1006
Lloyds Bank plc EUR60bn Global Covered Bond
Programme
Nationwide Building Society Covered Bond LLP
Royal Bank of Scotland Covered Bond programme
Yorkshire Building Society Covered Bonds

CHAPTER 1 - KEY THEMES OF THE YEAR

1.1 COVERED BOND HARMONISATION: WHERE DO WE STAND?

We address in this article recent developments about the two legs dominating the discussion on harmonisation in the covered bond market: (1) data disclosure and transparency and (2) legal frameworks.

1.1.1 HARMONISING TRANSPARENCY

By Alexander Batchvarov and Anne Caris, Bank of America Merrill Lynch

In the covered bond community, disclosure and transparency have been key topics in the spotlight in recent years. On the 16th of June 2015, following on from intense discussions and debates initiated in 2010 under the umbrella of the ECBC Technical Issues Working Group, the Covered Bond Label Foundation (CBLF) and the European Covered Bond Council (ECBC) announced the decision to implement the Harmonised Transparency Template (HTT) across jurisdictions for all covered bond issuers that hold the Covered Bond Label.

The HTT has come into force since 1st January 2016 and is a binding requirement for the granting and renewal of the Covered Bond Label with a phase-in period of one year. Once fully implemented, it will have a direct impact on more than 70% of eligible covered bonds[1] – in Europe but also globally. Singapore was the first to launch the HTT, an initiative seen as a positive and important step by market participants and regulators.

WHY THE HARMONISED TRANSPARENCY TEMPLATE (HTT)

The HTT is replacing the 14 National Transparency Templates (NTT) established for the Covered Bond Label. While they contributed to enhanced reporting practices, the NTTs have been heterogeneous and have not fully met market expectations. The HTT was put together by a Transparency Task Force (TTF) organised by the ECBC in November 2014 which consisted of 20 individuals from different countries and backgrounds (issuers, analysts, covered bond associations, data providers, etc.).

The TTF's approach was pragmatic, keeping in mind the costs and benefits for the industry as a whole. The TTF debated at length national differences, an obstacle to full harmonisation, and ultimately reached a consensus in order to harmonise data disclosure and further enhance transparency in the covered bond market. Market participants were consulted extensively during the process – among which investors.

The HTT is notably addressing the following investors' needs and wish list regarding disclosure:

- Harmonised data in a more user-friendly downloadable format (i.e., available in Excel).
- Harmonised definitions by issuers – ideally across jurisdictions and, if not possible, at least within a jurisdiction (definitions should be disclosed).
- Harmonised timing as issuers should disclose relatively recent data.
- Disclosure of key details – e.g. regulatory treatment, maturity structures, involved counterparties, levels of committed over-collateralisation and covered bond structures.
- No loan by loan data was required however, being used only by a small minority of investors. The availability of historical series was seen as more important.

WORK DONE SO FAR

After a few months, the HTT is already global. While Singapore was the first country to adopt the HTT in February 2016, the HTT initiative was followed by several issuers across Europe shortly after – e.g. France, Italy, Spain, the UK. More countries, both European and non-European, are in the pipeline. Implementation has been smooth and has entailed:

1 That is Capital Requirements Regulation (CRR) compliant covered bonds.

> An in-depth review of each new HTT to ensure consistency across countries.

> An active dialogue with the issuers e.g., on how to improve reporting or answer any uncertainty.

> A new logo for the HTT to flag to investors when an issuer has switched to the HTT from the NTT.

Positively, the HTT format allows issuers to further reflect their national specificities – thus enabling a flexible and exhaustive reporting as need be, in an efficient way with all the data being typically disclosed in one single file. A dual format has been highly encouraged and typically made available, or at least the Excel version, even though the later should not be a barrier to the HTT implementation.

WHAT'S NEXT

The HTT will remain a dynamic process in order to meet investor and issuer requirements and ensure its appropriateness as the covered bond industry further develops. For example, during the first few months of 2016, some Labelled Issuers as well as investors presented requests for minor modification of the HTT. For example, some market participants would like to have additional information on interest rate risks (i.e., before and after hedging like for currency risks), counterparty risk for swaps or conditional pass through triggers.

Any modification of the HTT will be presented to the Covered Bond Label Committee, which will consider and analyse their merits and any potential modifications agreed will be implemented in 2017. As such, with a view to collecting feedback and/or concerns raised by Labelled Issuers during the implementation phase in 2016, the ECBC has launched a Review Process which will allow market participants to comment while minimise the sudden shifts of the HTT by only introducing changes in 2017. Such review process will guarantee that all feedback is taken into account and help preserve harmonisation efforts.

1.1.2 HARMONISATION OF LEGAL FRAMEWORKS

By Joost Beaumont, ABN AMRO BANK N.V.

Another key issue that is currently topping the agenda of the covered bond community is the drive for harmonisation and/or convergence of national covered bond frameworks in the EU. Back in 2014, the European Banking Authority (EBA) noted that more convergence was needed among covered bond frameworks in the EU in order to increase the safety and robustness of the covered bond instrument. It would also strengthen the EU covered bond market more generally, in the end supporting financial stability as well. Overall, the EBA identified some areas where convergence of frameworks was needed in the medium to longer term, also to continue to warrant the preferential risk weight treatment of covered bonds. The key areas were:

> Dual recourse mechanism;

> Segregation of cover assets and bankruptcy remoteness of covered bonds;

> Cover pool features;

> Valuation of cover assets and LTV limits as well as other requirements on mortgage cover assets;

> Coverage principle and legal over-collateralisation;

> Asset and liability risk management;

> Covered bond monitoring;

> Role of supervisor;

> Investor reporting.

EUROPEAN COMMISSION CONSULTATION ON COVERED BONDS

The discussion on covered bond harmonisation was taken to another level last year, when the European Commission (EC) published a consultation paper on covered bonds in the European Union (EU). This was part of the EC's Action Plan to build a Capital Markets Union.

The consultation paper was published at the end of September 2015 and responses could be submitted until the 6th of January 2016. It was the EC's aim to 'evaluate signs of weaknesses and vulnerabilities in national covered bond markets as a result of the crisis, with a view to assessing the convenience of a possible future integrated European covered bond framework that could help improve funding conditions throughout the Union and facilitate cross-border investment and issuance in Member States currently facing practical or legal challenges in the development of their covered bond markets'.

The consultation was driven by the fact that covered bonds are regulated by national laws, which has resulted in fragmentation as well as inefficiencies according to the EC (and especially fragmentation between the core and peripheral countries). In order to reduce fragmentation/inefficiencies, the EC proposed several options for convergence of covered bond frameworks. These were:

1. Voluntary convergence of Member States' covered bond laws in accordance with non-legislative coordination measures such as targeted recommendations from the Commission.
2. An EU covered bond legislative framework seeking to harmonise existing national laws.
3. A new EU law framework for covered bonds (29th Regime), as an alternative to national laws.

Having said that, the EC also mentioned in the consultation paper that it would take a cautious approach. Indeed, it did not want to disrupt existing covered bond markets, which have actually functioned well.

THE INDUSTRY'S RESPONSE TO THE CONSULTATION

By the 6th of January 2016, the EC had received 72 responses. In this article, we would like to highlight the response of the ECBC, as it is the main representative of the covered bond industry, including issuers, analysts, bankers, investors, rating agencies and other stakeholders.

The ECBC welcomed the EC's cautious approach, noting that the subjects addressed in the consultation paper are of 'crucial importance to the very different legislative frameworks that exist in Europe'. It further stressed that the reason of national differences are a 'consequence of historical national differences in terms of mortgage markets, housing policies, consumer behaviour, insolvency law, credit and valuation regulation etc.', and that full harmonisation of EU covered bonds laws was an 'utopia'.

Nevertheless, the ECBC noted further that it saw room for improvement and further convergence in specific areas, as this would continue to justify the preferential regulatory treatment of covered bonds, while also enhancing transparency, which would be beneficial for investors.

Overall, the ECBC was of the view that the EC should find a balance between maintaining national covered bond legislative frameworks and establishing a common European framework. It could do so 'by means of (i) a recommendation to encourage Member States to increase convergence and (ii) a high quality principle-based directive ensuring harmonisation of certain minimum standards'.

According to the ECBC, 'a combination of a recommendation and a principle-based directive will ensure that national markets continue to function, whilst safeguarding the prominent role of covered bonds as a crisis management tool able to promote: (i) investors' confidence; (ii) financial stability; and (iii) long-term financing'. Such a solution would also maintain competition among EU covered bond markets, which can be beneficial for investors that will then still have some different flavours to choose from.

THE PUBLIC HEARING ON 1 FEBRUARY

On the 1st of February 2016, a one-day public hearing on the EC's consultation process was held in Brussels. The EC reiterated that it had no intentions to overhaul the covered bond market. Indeed, EC Commissioner Lord Hill said in his opening speech that the aim is not to have a harmonised framework, but that the goal is to see whether best practices can be used to create a more integrated market and to assess what legal barriers stand in the way. He added that the EC does not want to hurt a well-functioning market, which was in line with general feedback from most participants. The general message from participants at the conference was that an integrated EU framework for covered bonds would not result in a material change in pricing or increase in the investor base. Therefore, a pan-EU framework should be flexible and principle-based, if any.

It seems that the EC has taken aboard these considerations, although it said in its first CMU Status Report that harmonisation would result in better comparability of national covered bond frameworks, which could result in deeper, more liquid and more robust national markets. Meanwhile, it also mentioned that participants had 'encouraged the Commission Services to explore further the potential for greater market integration based on high-level principles, respecting national specificities and building on frameworks that are currently working well'. At the time of writing, the EC considers the next steps, which are expected later in 2016.

CONVERGENCE: WHERE DO WE NEED TO GO?

We, the authors, agree the view that if established, a harmonised covered bond framework should be high-level and principle based. Overall, however, we wonder whether it is really necessary to move to an integrated EU covered bond framework. In our view, the EBA best practices already provide a sufficient incentive for convergence of covered bond frameworks, while also harmonising reporting standards. The EBA has been clear that jurisdictions need to implement the best practices in some key areas in order to keep warranted the preferential risk-weight treatment of covered bonds. If implemented, we expect that this will be a sufficient incentive for countries to properly implement these, lessening the need for additional EU wide regulation. The update of the Dutch covered bond law as of the 1st of January 2015 was for instance according to the lines of the EBA best practices, and could be an example for other countries.

What is more, we see a risk that the setup of a pan-EU covered bond framework could create some uncertainty, harming an already well-functioning market. More important is that covered bond frameworks will continue to show differences, which we do not see as a bad thing. It often reflects national specifics (e.g. legal, housing) and it also offers room for diversification. In the end, harmonisation/strengthening covered bond frameworks is a good thing, but it is no panacea.

1.2 COVERED BOND PURCHASE PROGRAMME 3: IMPLICATIONS FOR PRIMARY AND SECONDARY MARKETS

By Matthias Melms, NordLB, Franz Rudolf, UniCredit and Maureen Schuller, ING Bank

COVERED BOND PURCHASE PROGRAMME 3 – THE FACTS

On Thursday, 4 September 2014, the European Central Bank (ECB) announced its plan to buy covered bonds. This Covered Bond Purchase Programme (CBPP) came as a surprise to markets and was the third covered bond purchase programme besides the CBPP1 (from July 2009 to June 2010) and the CBPP2 (from November 2011 to October 2012). Purchases of the CBPP3 started at the end of October 2014. The CBPP3 programme was originally scheduled until October 2016. In January 2015, however, it was embedded in a broader asset purchase programme, including sovereign debt as well as international and supranational institutions and agencies with a monthly target volume of EUR 60bn. In December 2015, the ECB asset purchase programme was extended to March 2017 and the monthly volume was increased to EUR 80bn. In March 2016, the asset purchase programme was extended to also include corporate bonds from June 2016 onwards. The ECB's rational is that alongside the public sector programme (PSPP), the asset-backed securities purchase programme (ABSPP), the corporate sector purchase programme (CSPP) and the targeted longer-term refinancing operations (TLTROs), the CBPP3 will further enhance the transmission of monetary policy, facilitate credit provision to the euro area economy, generate positive spill-overs to other markets and, as a result, ease the ECB's monetary policy stance, and contribute to a return of inflation rates to levels closer to 2%.

The purchases are conducted in both primary and secondary markets in a uniform and decentralised manner, meaning that the Eurosystem central banks purchase eligible covered bonds from eligible counterparties.

In order to qualify for purchase under the programme, covered bonds must fulfil the following eligibility criteria:

- Be eligible for monetary policy operations in line with section 6.2.1 of Annex I to Guideline ECB/2011/14 (eligibility criteria for marketable assets) and, in addition, fulfil the conditions for their acceptance as own-used collateral as laid out in section 6.2.3.2. (fifth paragraph) of Annex I to Guideline ECB/2011/14.
- Be issued by euro area credit institutions; or, in the case of multi-cédulas, by special purpose vehicles incorporated in the euro area.
- Be denominated in euro and held and settled in the euro area.
- Have underlying assets that include exposure to private and/or public entities.
- Have a minimum first-best credit assessment of credit quality step 3 (CQS3; BBB- or equivalent) by at least one rating agency.
- For covered bond programmes which currently do not achieve the CQS3 rating in Cyprus and Greece, a minimum asset rating at the level of the maximum achievable covered bond rating defined for the jurisdiction will be required for as long as the Eurosystem's minimum credit quality threshold is not applied in the collateral eligibility requirements for marketable debt instruments issued or guaranteed by the Greek or Cypriot governments, with the following additional risk mitigants: (i) monthly reporting of the pool and asset characteristics; (ii) minimum committed overcollateralisation of 25%; (iii) currency hedges with at least BBB- rated counterparties for non-euro-denominated claims included in the cover pool of the programme or, alternatively, that at least 95% of the assets are denominated in euro; and (iv) claims must be against debtors domiciled in the euro area.
- Covered bonds issued by entities suspended from Eurosystem credit operations are excluded for the duration of the suspension.

> Counterparties eligible to participate in CBPP3 are those counterparties that are eligible for the Eurosystem's monetary policy operations, together with any of the counterparties that are used by the Eurosystem for the investment of its euro-denominated portfolios.

> The Eurosystem will apply an issue share limit of 70% per ISIN (joint holdings under CBPP1, CBPP2 and CBPP3), except in the case of covered bonds issued by issuers in Greece and Cyprus and not fulfilling the CQS3 rating requirement. For such covered bonds, an issue share limit of 30% per ISIN will be applied.

> Covered bonds retained by their issuer shall be eligible for purchases under the CBPP3, provided that they fulfil the eligibility criteria as specified.

Furthermore, the Governing Council has decided to make its CBPP3 portfolio available for lending. Lending will be voluntary and conducted through security lending facilities offered by central securities depositories, or via matched repo transactions with the same set of eligible counterparties as for CBPP3 purchases.

Compared to the CBPP1 and CBPP2, the current purchase programme (CBPP3) did not apply any minimum size or any specific maturity of the covered bonds purchased.

PREVIOUS COVERED BOND PURCHASE PROGRAMMES

In June 2009, the ECB had announced its first Covered Bond Purchase Programme (CBPP1) with a volume of EUR 60 bn – with purchases between July 2009 and June 2010. The programme was fully used with a nominal value of EUR 60 bn, and, in total, 422 different bonds were purchased, 27% in the primary market and 73% in the secondary market. The Eurosystem mainly purchased covered bonds with maturities of three to seven years, which resulted in an average modified duration of 4.12 for the portfolio as of June 2010. In November 2011, the ECB launched its second Covered Bond Purchase Programme (CBPP2) with a programme size of EUR 40 bn and eligible covered bonds to be purchased up until October 2012. However, cumulative purchases reached only a volume of EUR 16.4 bn, of which 36.7% related to the primary market and 63.3% to secondary markets.

> FIGURE 1: KEY CBPP CRITERIA IN COMPARISON

	CBPP1	CBPP2	CBPP3
Programme size	EUR 60 bn	EUR 40 bn	Not specified
Purchase period	7/2009 to 6/2010	11/2011 to 10/2012	10/2014 to 3/2017
Amount purchased	EUR 60 bn	EUR 16.4 bn	Still ongoing
Bond size	EUR 500mn or above as a rule and in any case not lower than EUR 100mn	EUR 300mn or above	Not specified
Minimum rating	AA as a rule and in any case not lower than BBB-	BBB-	BBB- (special criteria for Cyprus and Greece)
Residual maturity	Not specified but focus on 3Y-7Y	Maximum 10.5Y	Not specified
Underlying assets	Exposure to private and/or public entities	Exposure to private and/or public entities	Exposure to private and/or public entities
Retained issues	Not eligible	Not eligible	Eligible
Limit per ISIN	Not specified	Not specified	70% joint limit of CBPP 1, 2 and 3

Source: ECB, UniCredit Research

As of the 10th of June 2016, the ECB reported covered bond holdings of EUR 179.85 bn under the CBPP3 at amortised cost, deriving from primary market (29.3%) and secondary market sources (70.7%). In addition, the remaining holdings from terminated covered bond purchase programmes were reported as EUR 18.10 bn under the CBPP1 and EUR 7.95 bn under the CBPP2.

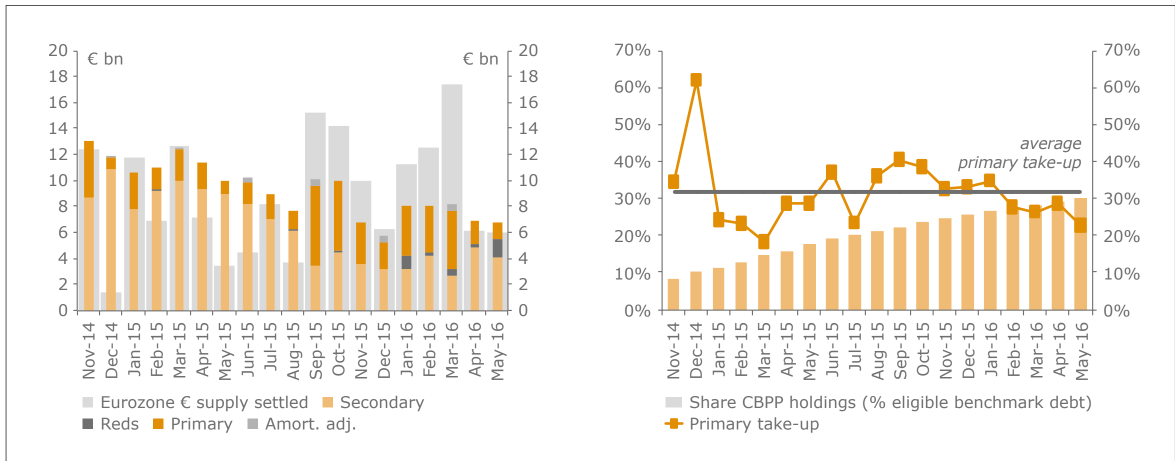
PRIMARY AND SECONDARY PURCHASES

After the Eurosystem started to buy public sector securities under the public sector purchase programme (PSPP) in March 2015, the purchases under the CBPP3 have gradually softened. The ECB's decision in March 2016 to expand the monthly purchases under its asset purchase programme (APP) from EUR 60 bn to EUR 80 bn per month, to facilitate later inclusion of the corporate sector purchase programme (CSPP), did little to alter this trend. A case in point is the declining share of the CBPP3 in the asset purchase aggregate. This share was 15% on average in 2015 and 12% in the first quarter of this year, but dropped to 7% after the EUR 20 bn increase in monthly purchases per April 2016.

The more moderate buying activity has been most notable in the secondary market. Since September 2015 the gross secondary purchases (unadjusted for redemptions of CBPP3 holdings) have been just above EUR 4 bn on average, half the average secondary purchases recorded during the first eight months of 2015. For most of this period, primary purchases largely compensated for the slower secondary buying pace (please see Figure 2). Primary buying was not only enhanced by the increased covered bond supply activity since September 2015, but also coincided with a higher take-up by the Eurosystem in new covered bond debt in the second half of last year. However, the second quarter of 2016 saw lower fresh covered bond settlements overlap with an abating buying footprint by the CBPP3 in primary. The buying consequences thereof have not been neutralised in full by a stronger presence by the Eurosystem in the secondary market.

> FIGURE 2: CBPP3 PRIMARY AND SECONDARY PURCHASES

> FIGURE 3: PRIMARY TAKE-UP TRENDING LOWER



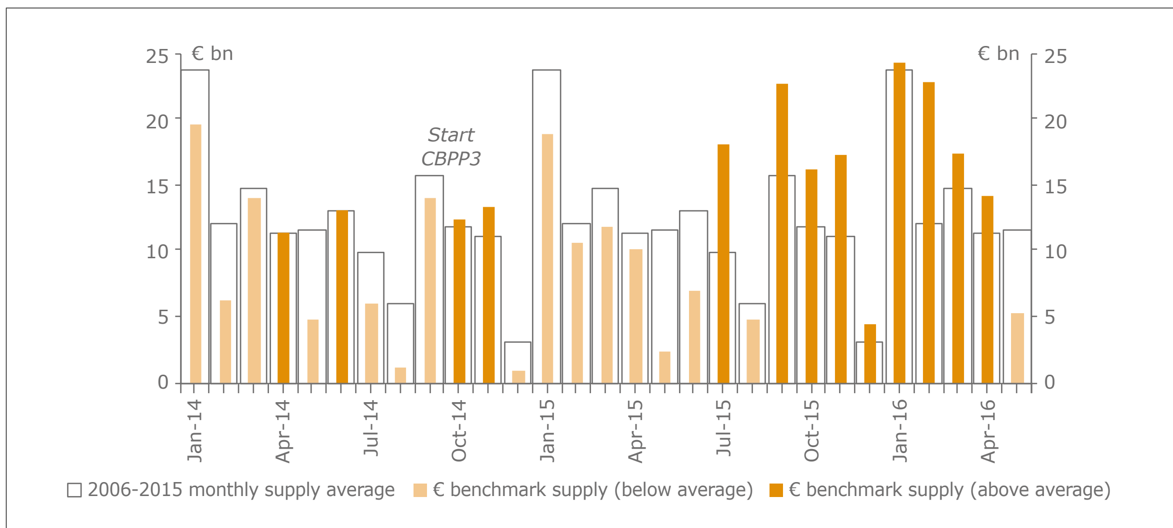
Source: ECB, ING Bank

The scaling down of central bank purchases has taken place against the backdrop of ECB covered bond holdings hitting 30% of the eurozone EUR benchmark market, i.e. approaching the average primary take-up of 32% during the term of the purchase programme (please see Figure 3). Even though the Eurosystem is allowed to buy a maximum of 70% per ISIN, this seems to herald a more measured purchase pace. That said, monthly purchases are still well above the EUR 5 bn monthly average recorded during the first covered bond purchase programme. Furthermore the ECB announced in December 2015 that it will reinvest repayments on securities bought under the APP for as long as necessary.

CBPP RELATED SUPPLY DYNAMICS

Figure 4 assesses the impact of the CBPP3 on covered bond supply. We measure the monthly supply during 2014, 2015 and 2016 YTD against the average monthly supply numbers during the period 2006-2015. To make the number of months in which supply exceeded the monthly average reference level more obvious, we darkened the bars with above average supply. The figure illustrates that the strongest increase in covered bond primary activity has been experienced since September 2015, i.e. almost a year after the start of the purchase programme. This contributed to a hoped for modest expansion of the EUR benchmark covered bond market in 2015, after two consecutive years of significant shrinking. The covered bond market may grow further this year if the second series of quarterly targeted longer-term refinancing operations (TLTRO-II) conducted as of June does not throw a spanner in the works.

> FIGURE 4: ASSESSING THE SUPPLY EFFECT OF THE CBPP3



Source: ING Bank

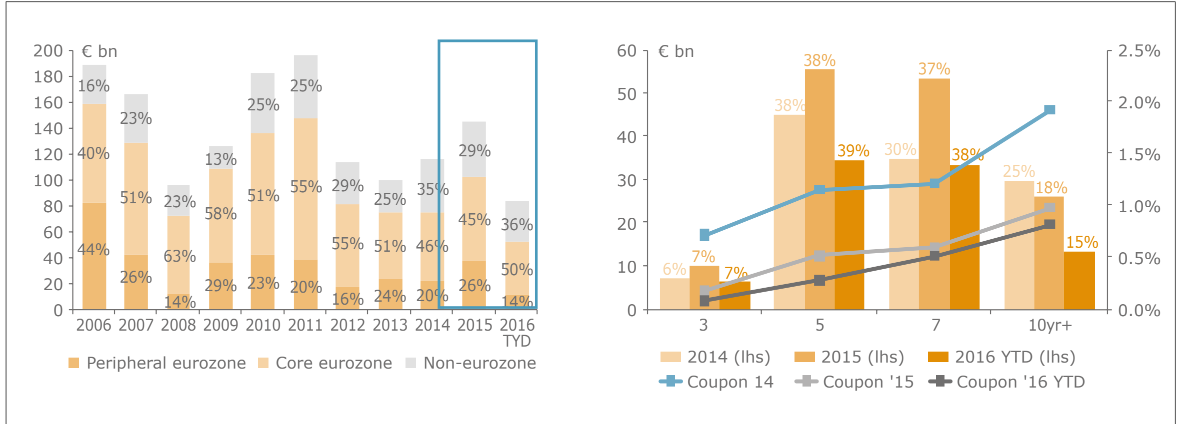
The supportive demand from the CBBP3 in combination with the expirations of the first two 3yr LTROs in the first quarter of 2015, have been a strong stimulant to the return of peripheral eurozone issuers to the covered bond market last year (please see Figure 5). Peripheral eurozone banks printed EUR 15 bn more benchmark debt compared to the previous year and were responsible for 26% of the total covered bond supply in 2015. However, the option to attract funding under the TLTRO-II seems to curb their share in this year's print.

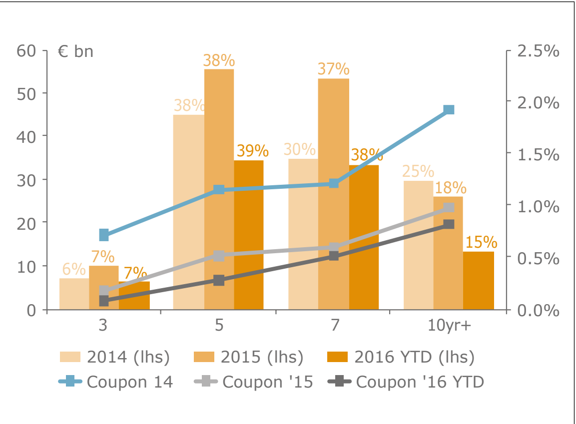
Additional important supply insights are offered by Figure 6. This graphic illustrates the maturity focus in 2014, 2015 and 2016 YTD versus the average coupon per maturity bucket. The figure shows the decline in the average coupon sizes of the bonds printed across the different maturity buckets as a result of the lower underlying yield levels. Yet the figure does not confirm a shift in supply away from the front end of the curve towards the 10yr area or beyond on the back of demand for yield. The EUR benchmark supply in the 3yr maturity bucket has remained relatively stable, while the share of 10yr issuance in the total supply has declined from 25% in 2014 to 18% in 2015 and 15% YTD.

Demand for longer duration deals has been lukewarm at the prevailing low yield levels. On the other hand, so far only one issuer has printed a shorter duration covered bond at a negative yield to maturity. This demonstrates that issuers strive to offer investors a positive yield, which explains the stronger concentration on the 7yr area that can typically rely on a broader investor base compared to the longer tenors.

> Figure 5: Primary activity distribution by region

> Figure 6: Coupon and EUR benchmark maturity focus





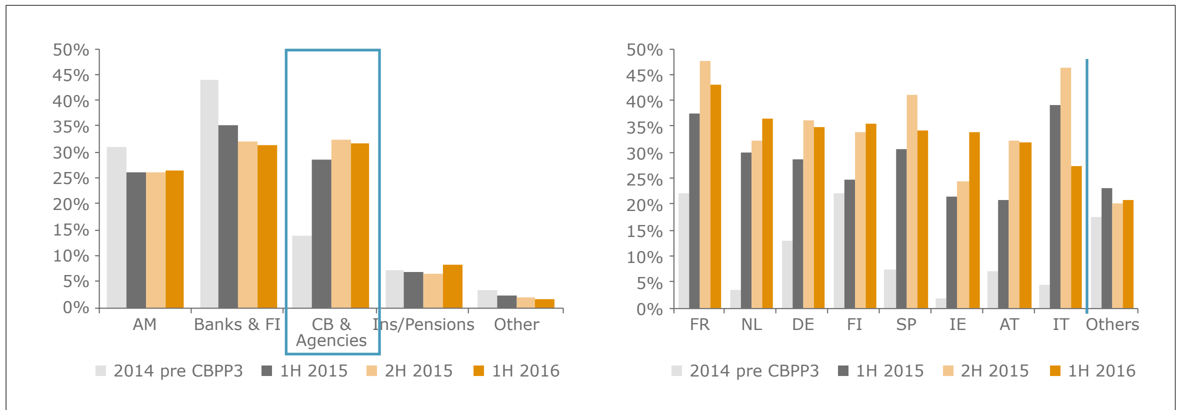
Source: ING Bank

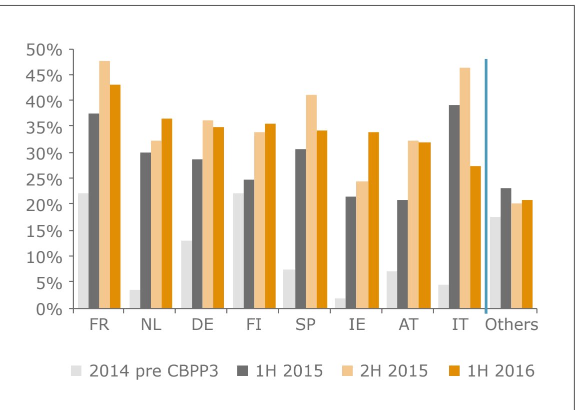
CBPP3 AND OTHER INVESTOR BEHAVIOUR IN PRIMARY MARKETS

The combination of low yield and tight spread levels have contributed to a certain reallocation away from covered bonds into better yielding alternatives. This may be one of the explanatory factors for the further rise in distributions to central banks in primary in the second half of 2015 (please see Figure 7). Allocations to banks and financial institutions continued to see the most prominent decline. However, covered bonds have attracted renewed investor interest after the spread re-widening until the beginning of March. This is demonstrated by the modest rise in primary distributions to asset managers and insurers and pension funds in the first half of 2016.

> Figure 7: Primary participation by investor type

> Figure 8: Central bank participation per jurisdiction





Source: IGM, ING Bank

Figure 8 offers an overview of primary allocations to central banks and SSAs per jurisdiction. The figure confirms the higher central bank participation in primary as of the second half of last year. The Southern European jurisdictions have seen the most prominent rise in allocations to central banks in this period. However, Southern European issuers place less fresh covered bond debt with central banks and SSAs this year, confirming the improved interest from other investors for these transactions.

An analysis of primary distribution statistics by maturity buckets (not plotted here) also suggests that the central banks' take-up has been the highest in the 10yr maturity bucket in the final six months of last year at 43% compared to 30% on average for the 3yr, 5yr and 7yr maturity buckets. This supports our findings in the previous paragraph, where we discussed the limited supply in longer tenors as a consequence of tepid investor interest. Allocations of 10yr deals to central banks and SSAs have declined to some degree this year, but remain elevated at 40%compared to 29% on average in the 3yr to 7yr maturities.

IMPACT OF THE CBPP3 ON SECONDARY MARKETS

Mario Draghi's announcement at the start of September 2014 that covered bonds would also be included in the quantitative easing programme of the ECB, under the CBPP3, had a significant impact on spread movements in secondary markets. We look at how different covered bond segments have responded to the purchase programme in secondary markets in the period from the 4th of September 2014 (the day of the CBPP3 announcement to the 15th of June 2016). Covered bond markets have not only be directly impacted by the ECB through the CBPP3, but were also affected by the environment created by the overall expanded asset purchase program, i.e. the overall low yield environment, leading to a significant share of covered bonds trading with negative yields.

As of end-May 2016, the iBoxx Euro Covered consisted of 728 bonds with an outstanding volume of EUR 749 bn. The aggregated volume of covered bonds from eurozone countries was EUR 555 bn or 74% and from non-eurozone countries, thus not eligible for the CBPP3, was EUR 194 bn or 26%. As of end-May 2016, the ECB had covered bond holdings under the CBPP3 of EUR 177 bn. In addition, the ECB still held EUR 18 bn under the CBPP1 and EUR 8 bn under the CBPP1. Thus, in total the ECB held EUR 203 bn, reflecting a share of around 36% of the eligible market (assumed that holdings are in benchmark bonds, leaving the also eligible retained issues and private placements aside). The reported breakdown of holdings under the CBPP3 regarding primary and secondary market purchases, was 29% primary and 71% secondary as of end-May 2016.

In order to determine whether the covered bond purchase programme triggered significant spread movements on the covered bond market, it is worthwhile to cluster covered bonds in the iBoxx Euro Covered into four groups:

> Core eurozone, including covered bonds from Austria, Belgium, Finland, France, Germany and the Netherlands;

> Periphery, including Ireland, Italy, Portugal and Spain;

> Core non-eurozone with covered bonds from Denmark, Norway, Sweden, Switzerland and the UK;

> Overseas, consisting of covered bonds from Australia, Canada and New Zealand.

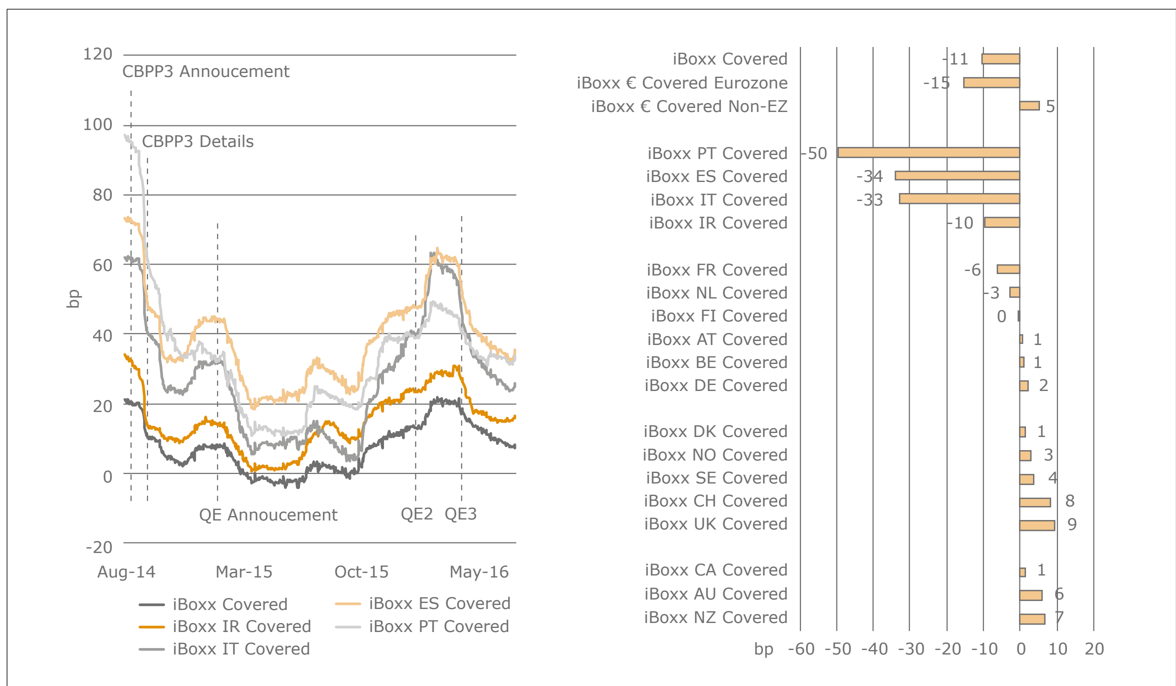
The picture deriving from spread changes (please see Figure 9) is relatively straight forward. Between September 2014 and June 2016, the iBoxx Covered tightened by 11bp on average, with eurozone covered bonds outperforming with a spread tightening of 15bp compared to a slight widening of non-eurozone covered bonds by 5bp. The group of peripheral covered bonds unsurprisingly benefitted the most from the CBPP3 and showed a double digit tightening, with Portuguese covered bonds 50bp tighter, followed by Spanish and Italian covered bonds with spread tightening in the 30s area. Core eurozone covered bonds remained overall relatively stable and stayed within a range of -6 to +2bp. Covered bonds from outside the eurozone, which are not eligible for the CBPP3, widened slightly, but there was no significant differentiation between European and overseas covered bonds.

The overall spread development does, however, not reflect the spread volatility which occurred in between the starting and end-point of the period under observation. This can be best demonstrated by looking at the spread changes of peripheral covered bonds, which reacted the most sensibly to changes in market sentiment. Following the CBPP3 announcement on the 3rd of September 2014, spreads tightened massively followed by another tightening pace after the details of the purchase programme were released on the 2nd of October 2014. Following a modest spread correction at the end of 2014, another tightening wave was triggered by the ECB's announcement of the expanded asset purchase programme, including sovereign as well as supranational

and agency bonds, on the 22nd of January 2015. In summer 2015, geopolitical risks and uncertainties around Greece led to a spread correction with a widening of around 10-15bp on average for peripheral covered bonds. In September 2015, the combination of a number of effects triggered a more pronounced widening pace, with the iBoxx Covered moving around 20bp wider and peripheral covered bonds widening around 40bp. The key drivers, which are also interrelated, were:

- Strong primary market activities following a supply backlog due to the geopolitical risks and the summer break;
- High new issuance premiums for new bonds due to the large gap between artificially low secondary market levels and real prices in the primary market;
- The change of ECB's covered bond purchasing pattern shifting from mainly secondary market purchases (80% secondary vs. 20% primary market) to a stronger focus on the primary market (50%). This widening pace ended on the 10th of March 2016, when the ECB decided to expand the size of its asset purchase programme to EUR 80 bn monthly purchases and extended the programme with the CSPP (QE3 in the figures below), allowing for the purchases of certain corporate bonds. This led to a continued spread tightening of the iBoxx EUR Covered (-15bp on average) and an even more pronounced tightening of covered bonds from the periphery of up to 30bp.

> Figure 9 and 10: Spread development of covered bond indices since the CBPP3 announcement on the 3rd of September 2014 to the 14th of June 2016



Source: Markit iBoxx, UniCredit Research

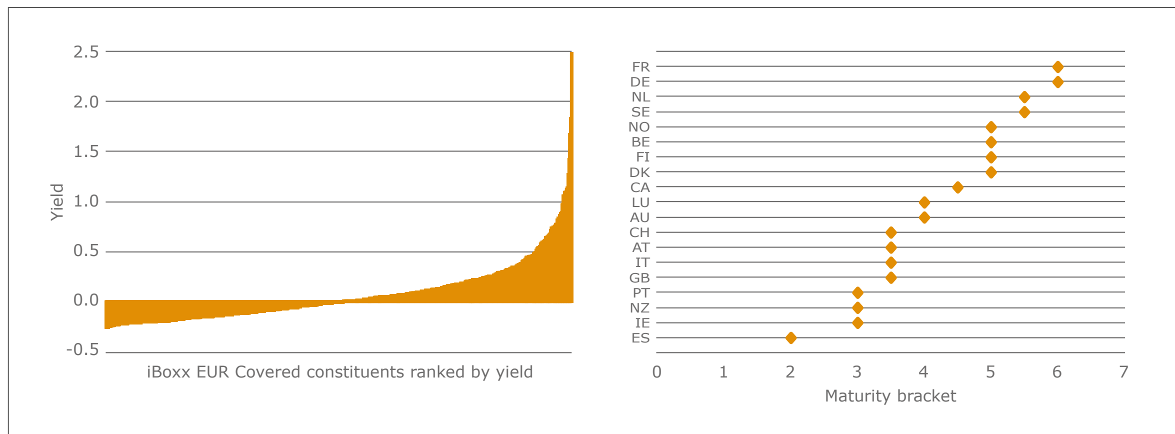
TIGHTER SPREADS AND NEGATIVE YIELDS

The discussed significant spread impact from the CBPP3 on covered bonds in combination with an overall extremely low yield environment resulted in a large portion of covered bonds being driven to negative yield levels (as shown in Figure 11). The low yield environment so far reached its peak in June 2016, with 10Y Bunds yields at a negative level of -0.0355%. Looking at the iBoxx Covered constituents, out of 737 bonds, 373 were

showing a negative yield, representing more than 50% of all bonds. Another 118 (16%) had a barely positive yield of below 0.1%, 190 bonds (26%) had a yield in the range of 0.1% to 0.5%, while only 42 (6%) were in the range between 0.5% to 1%. Just 14 bonds (2%) still offered a yield of 1% or above, which is in most cases attributable to ultra-long durations, e.g. maturities in the 2030s or longer (please see Figure 11). This also meant, that even when going for longer maturities, the yield of covered bonds in a number of countries still remained negative, e.g. French and German covered bonds with a maturity of up to around six years had yields largely in negative territory (please see Figure 12).

> Figure 11: Yields of covered bonds in April 2015

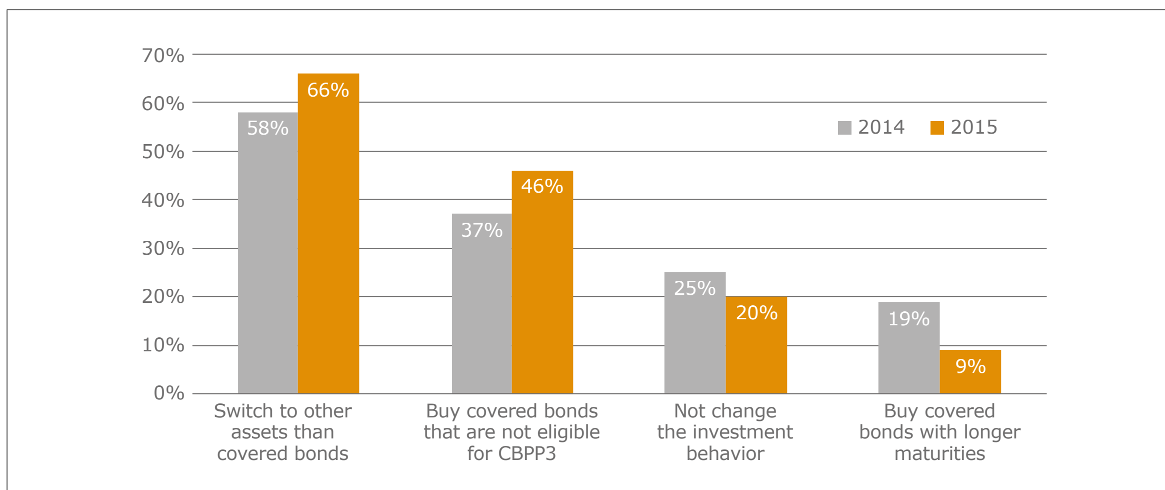
> Figure 12: Time to maturity brackets at which yields are still negative



Source: Markit iBoxx, UniCredit Research

In addition, the already low liquidity in secondary markets dried up further due to the CBPP3. As a consequence of low covered bond yields and low liquidity, some covered bond investors decided to abandon covered bonds and to switch to other asset classes. This development is also reflected in an investor survey done by Fitch in 2014 and 2015 and published at the beginning of the following year. Fitch's Covered Bond Investor Survey Year-End 2015 is based on the response of 35 institutions (52 in 2014). Investors were asked to choose from four different options, with multiple answers possible. The four options were 1. Switch to other assets than covered bonds; 2. Buy covered bonds that are not eligible for CBPP3; 3. Not change the investment behaviour; and 4. Buy covered bonds with longer maturities. According to the survey in 2015, 66% of the participating investors (up from 58% in 2014) said they expect to switch to other asset classes than covered bonds as at least one of their reactions to factors as the TLTRO, the CBPP3 and quantitative easing (QE). 46% of investors (vs. 37% in 2014) selected the option of buying covered bonds that are not eligible for CBPP3. 20% of the investors (vs. 25% in 2014) did not plan to change their investment behaviour and some 9% (vs. 19% in 2014) stated to buy covered bonds with longer maturities. Survey respondents identified decreasing secondary market liquidity (74%) and European quantitative easing (60%) as the top challenges for the covered bond market. The decreasing liquidity also ranked first in the 2014 survey, highlighting respondents' concern about market behaviour for the period after the end of the APP, including the CBPP3.

> Figure 13: Investment expectations in the context of TLTRO, CBPP3 and QE



Source: Fitch Ratings, UniCredit Research

CBPP3 MARKET SURVEY[1]

In order to factor in the views of market participants surrounding the issue of purchase programmes, we carried out an anonymous survey in April 2016 on the covered bond purchase programme. Of the 88 participants to our survey, 36% were investors, a further 32% were issuers with a final 32% coming under the "other" heading. This group includes among others employees of banks and rating agencies.

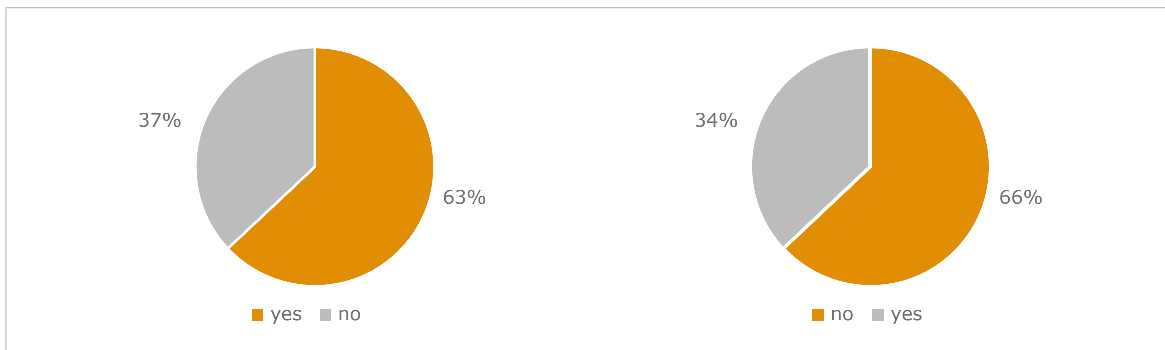
Since the announcement of quantitative easing (QE) by the European Central Bank (ECB), there have been discussions at many levels about whether the implementation of such measures was in fact at all necessary. This range of views is also reflected in the results of our questionnaire: 63% of respondents were of the view that the introduction of QE was necessary, while 37% refuted this (please see Figure 14). There is no clear picture either as to the necessity of including covered bonds in the purchase programme. Although a majority of two thirds (66%) were of the view that including covered bonds in the context of QE was not necessary, a minority of 34% supported the opposite view, stressing that including covered bonds in the purchase programme was definitely justified (please see Figure 15).

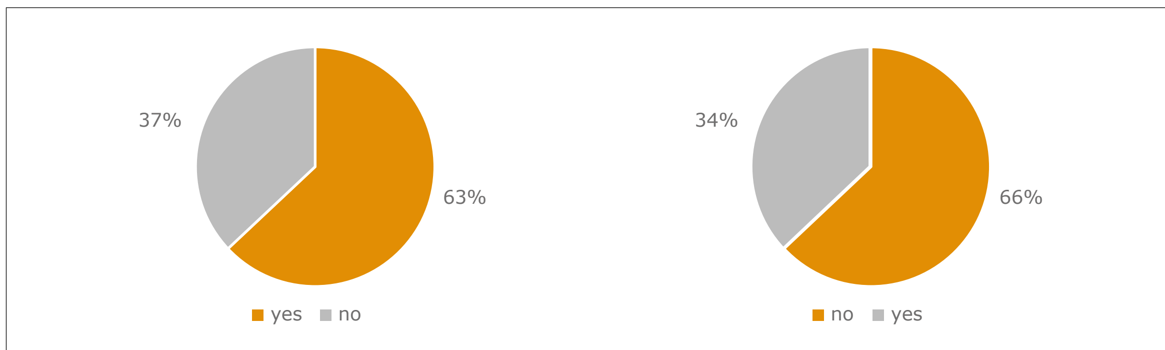
The picture is even less clear-cut when it comes to an assessment of the question of whether the purchase programme is having a positive or negative impact on covered bonds. 51% of respondents were of the view that there were positive effects, and 47% saw negative effects. A further 2% could see both positive and negative effects. From a detailed analysis, it is clear that the issuer group in particular sees positive aspects, whereas a majority of investors see the purchase programme in a negative light. A substantial majority of respondents see an impact from the inclusion of corporate bonds in the QE programme. 87% of responses expect an impact on spreads and 74% on liquidity in the market. As many as 59% indicated that the corporate bond purchase programme might also have an impact on the supply of covered bonds.

1 This market survey is based on collected feedback from ECBC members and other market participants.

> Figure 14: Do you think it was necessary to introduce QE?

> Figure 15: Do you think it was necessary to include covered bonds and launch CBPP3?



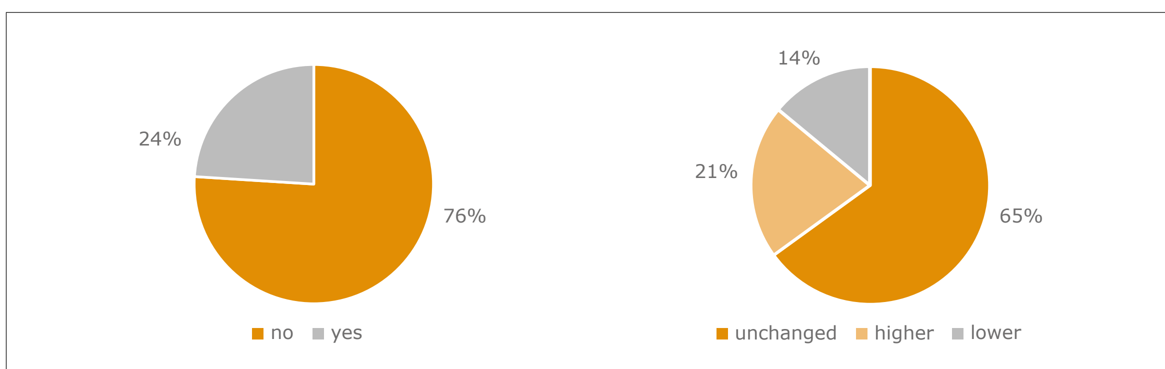


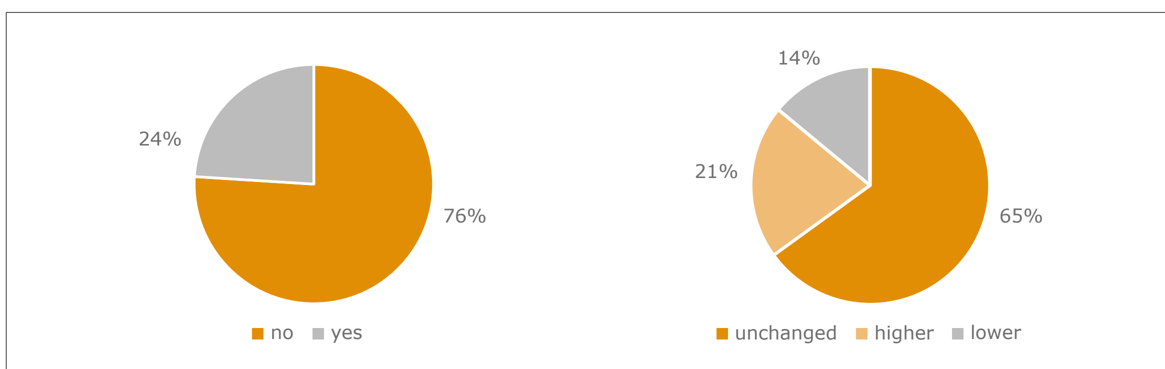
Source: NORD/LB Fixed Income Research

According to the respondents' expectations, the TLTROs announced should have also an impact on the covered bond market. Tighter spreads on covered bonds are expected by 55% of those questioned, whereas 40% assume there will be no change. Supply activity could decline under the influence of the TLTROs, a position which 61% of respondents support, while 33% do not see any impact on the primary market and hence expect unchanged new issuance activity. Since the TLTROs make it possible for banks to raise short-term funds of four years, it is hardly surprising that market participants expect an impact on the average maturity of the paper to be issued. 76% assume that the newly issued covered bonds will have a longer maturity on average than without the influence of the TLTROs. However, 19% also indicated that the TLTROs would not have any effect on the new issue offer. The TLTROs are also likely to have an impact on liquidity in the covered bond market with 64% of respondents indicating that liquidity is likely to decline, while 36% do not expect this to happen.

> Figure 16: Is there scope left to further increase the purchases in covered bonds?

> Figure 17: In light of the expansion of the monthly purchases to EUR 80 bn (including corporate bonds), what do you expect for the monthly covered bond purchases





Source: NORD/LB Fixed Income Research

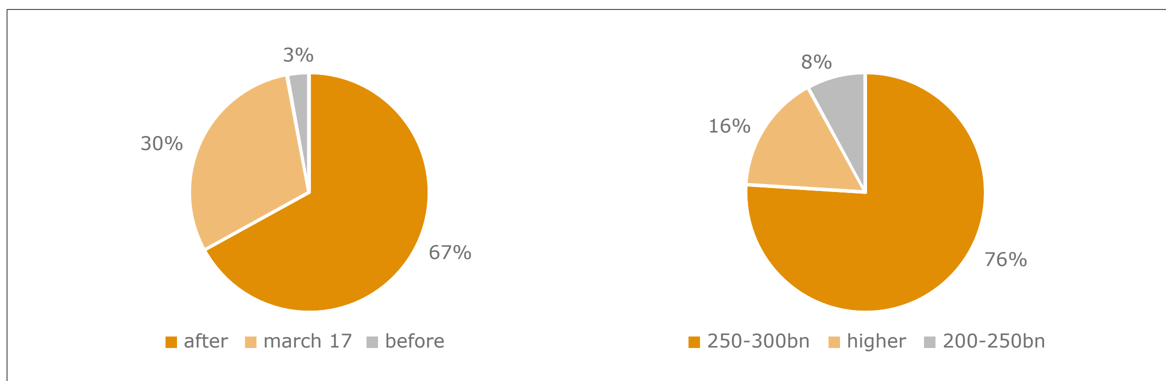
A clear majority of 76% of respondents are of the view that there is no further scope for increasing purchases in the context of CBPP3, although a minority of them (24%) still see scope for an extension in the volume of purchases (please see Figure 16). The ECB's announcement that it plans to increase monthly purchases across all purchase programmes from EUR 60 bn to EUR 80 bn, raises the question of whether covered bond purchases will also be expanded. Only a minority of 21% expect this to happen. The majority expects the

purchase volume to remain unchanged at its existing pace (65%). Only 14% expect a reduction in the pace of purchases (please see Figure 17).

Now that the ECB has postponed the potential end of the purchase programme from September 2016 to March 2017 for the time being, with the provision that inflation expectations must be back in line with the area close to 2% indicated by the central bank, the majority of respondents expect the potential end of the purchase programme to be postponed at least one more time (67%). It is worth noting that only a small minority of 3% expects central bank purchases in the covered bond market to be brought to a premature end. As things stand at present, 30% of those surveyed could envisage monetary policy measures in the covered bond market ending in March 2017, which is the latest date indicated by the ECB (please see Figure 18).

> Figure 18: When do you expect CBPP3 to end?

> Figure 19: What will be the total amount in covered bonds held by that time (CBPP1-3; 31/03/2016: EUR 194 bn)?



Source: NORD/LB Fixed Income Research

As regards the total volume which the Eurosystem will hold by the end of CBPP3, 76% or around three quarters of those surveyed expect a target volume of between EUR 250 bn and EUR 300 bn. If the purchases remain at a monthly level of around EUR 8 bn, the upper end of the range of EUR 300 bn would be reached in March 2017. However, whereas 67% assume that CBPP3 will be extended, only 16% thought that a higher figure than EUR 300 bn would be reached by the end of the purchase programme. Only 8% of participants see a scenario with a figure of between EUR 200 and EUR 250 bn, which would represent a much slower pace of purchases and probably an end to the covered bond purchase programme before March 2017, as being within the realm of possibility (please see Figure 19).

In the context of an exit strategy for the covered bond purchase programme, respondents were more or less unanimous in their views, with 91% expecting purchases to be reduced gradually. Only 9% believe that the purchase programme will be brought to an abrupt end without any reduction in the pace of purchases.

An end to the purchase programme will inevitably have an impact on the market since a major buyer will then no longer be active in the market. However, the Eurosystem has already announced that, in the future, it will reinvest assets maturing in the market, which we estimate could have an effect of around EUR 40 bn p.a. in the medium term. With regard to spreads in the secondary market, a significant majority of 81% expect a widening should the purchase programme be brought to a close. Only 11% expect no impact or tighter spreads (8%). There should not be any implications for primary market supply. At least this is the view of around half of respondents (55%). In contrast, around one in three (33%) of respondents expect a decline in issuer activity in the primary market, whereas as many as 12% could even envisage an increase in issuance activity. The end of the purchase programme should also have an impact on liquidity in the secondary market: 59%

of participants surveyed expect an improved liquidity, whereas 27% do not anticipate any impact. A further 14% are of the view that the liquidity situation will not deteriorate after the end of the purchase programme.

CONCLUDING REMARKS

The ECB's third covered bond purchase initiative has had important ramifications for the covered bond market, both in primary and secondary markets. Despite the fact that purchases under the CBPP3 have gradually softened since March 2015, the strongest increase in covered bond supply activity has been experienced since September last year, i.e. almost a year after the start of the purchase programme. This contributed to a hoped for modest expansion of the EUR benchmark covered bond market in 2015, after two consecutive years of significant shrinking. However, the significant spread impact from the CBPP3 on covered bond spreads in combination with an overall low yield environment drove a large portion of covered bonds into negative yield territory. This has prompted an increasing number of investors to rethink their allocations into covered bonds in favour of other asset classes.

Most of the market participants we surveyed are of the view that it was not necessary to include covered bonds as part of the ECB's QE instruments. Views diverge however about whether CBPP3 has positive or negative implications for the market. There are differences of opinion on this point, especially between issuers and investors. In addition, the majority of market participants do not expect purchases to end in March 2017; in fact, they expect an extension. Buying activity is also not likely to come to an abrupt end; a tapering is expected instead, as has taken place at other central banks in the context of their QE policy. However, an end to the purchases will have an impact on the covered bond market. Survey participants expect rising spreads, unchanged supply and higher liquidity in the market.

1.3 CAPITAL MARKETS UNION AND THE POTENTIAL ROLE OF THE ECBC AND DUAL RECOURSE INSTRUMENTS

By Boudewijn Dierick, BNP Paribas, Moderator of the ECBC Task Force on Long-Term Financing & Chairman of the ECBC Rating Agency Approaches Working Group

CAPITAL MARKETS UNION: WHAT IS THE PURPOSE THE EC IS TARGETING?

The Capital Markets Union (CMU) plan, outlined in the 2015 European Commission's Green Paper, aims to develop better regulation by means of market initiatives that can support growth and lending to the real economy, in its role as market catalyst. The CMU should help channel private funds to all companies, including SMEs, and infrastructure projects in order to facilitate expansion and thereby create jobs. By linking savings with high-growth investment opportunities, the CMU will offer new opportunities for both savers and investors.

Brexit, portmanteau for "British Exit" from the European Union (EU), might have far reaching effects on the European Commission's agenda. The CMU is the brainchild of Commissioner Jonathan Hill who resigned in the aftermath of the British referendum and the victory of "Leave" camp on the 23rd of June 2016. The possible departure of the UK, a strong supporter of capital markets funding, can have an effect on the approach that the European Commission will have to the CMU plan. However, there is broad support across the EU for the CMU as a concept, though its components might change in order to accommodate different priorities within the remaining 27 Member States and we will have to see how this will impact timing and next steps.

ECBC ROLE

The ECBC decided to assist and support the development of any market initiative going forward that has the potential to play a crucial role in financing growth and the real economy while preserving the strength of the traditional covered bond market it represents.

The ECBC established a Task Force on Long-Term Financing, the purpose of which was to investigate the possibility and viability of the creation of new capital instruments that make use of some key features that have made covered bonds one of the safest and most successful financial tools in use in Europe, and which played a central role in the crisis management toolkit of banks during the financial crisis by providing a safe and reliable source of funding. This article reflects the main findings of the ECBC Task Force which formed the basis of the ECBC letter to the European Commission in response to the Green Paper on Building a Capital Markets Union.

The ECBC response to the Green Paper aims to provide clear building blocks for a market initiative on a pan-European dual recourse long-term funding instrument, which would allow for the financing of asset classes beyond the traditional covered bond collateral types of mortgages and public sector assets such as small and medium-sized enterprise (SME) or infrastructure assets.

The ECBC's proposal represents a market initiative creating a new pan-European funding instrument, the European Secured note (ESN). This initiative would require a limited legislative intervention at national level and would respond to several of the priorities for early action foreseen in the Green Paper, in particular: (i) widening the investor base for SMEs, and (ii) building sustainable high-quality securitisation.

On several occasions, the European Central Bank, the European Commission, the European Investment Bank and a number of national regulators have praised the ECBC for the ESN project.

This initiative, designed outside of the traditional covered bond space, combines existing techniques and market best practices for the establishment of a funding solution for lenders that is also accessible in a stress scenario.

Traditional covered bonds have ensured financial stability and access to capital markets during the crisis thanks to very precise macro-prudential characteristics. It is important to clearly distinguish any funding solutions for SME and infrastructure loans using similar dual recourse techniques from the traditional covered bond space.

One of the key success factors is the common adoption of the same set of micro foundations and technology, in particular in terms of eligibility criteria, definitions, risk parameters, data disclosure and IT solutions across European countries. If correctly implemented, supported by a minimum level of regulatory recognition as a very high-quality product under a clear legislative and supervisory framework, it could facilitate issuers and investors in terms of due diligence, risk analysis, pricing and funding diversification.

HOW WOULD SUCH INSTRUMENTS DIFFER FROM TRADITIONAL COVERED BONDS?

Despite the similarities between the on balance sheet version of the ESN (please see below for more details) and covered bonds, it is important to highlight the features that distinguish covered bonds from ESNs. The main distinguishing feature is the different collateral used to secure ESN in comparison to the collateral of covered bonds. Covered bonds use highly standardised and low-risk assets, mainly mortgage loans and claims against public sector entities, as collateral. The high level of standardisation of cover assets is a key element that facilitates the analysis of covered bonds, limits research effort and increases comparability within the covered bond sector. Using highly standardised assets also makes it easier to define eligibility criteria for the cover assets that can be used on a relatively broad basis, i.e. in a larger number of jurisdictions.

The use of low-risk assets as collateral is one cornerstone of the high level of investor confidence that covered bonds enjoy. The concept of dynamic collateralisation based on asset substitution through the issuer is more acceptable for investors if new assets which are added to the cover pool will meet certain minimum criteria. For issuers the use of high quality collateral means more a stable credit quality of the cover pool and ultimately less frequent asset substitution. The use of other, potentially more risky asset classes for ESN makes a clear distinction between traditional covered bonds and ESN necessary as the risk profile of the two instruments could vary significantly.

A further distinguishing factor between covered bonds and ESN, at least at an initial stage, would be the established track record that covered bonds enjoy. Together with robust national legal frameworks, the long standing track record of covered bonds has helped to make them more reliable and stable. The long track record, which is the basis for a deep and diversified investor base, helps to support market access of covered bond issuers also in time of stress. The robust market access itself in an important stabilising factor for covered bonds. Drawing a clear line between covered bonds and ESN will help to protect the track record of covered bonds against potential dilution that could occur through the introduction of instruments that bear similarities to covered bonds but may have a different risk profile.

DESIGNING DUAL RECOURSE INSTRUMENTS FOR THE LONG-TERM FINANCING OF THE REAL ECONOMY

With the spirit of the Capital Markets Union in mind, the ECBC Task Force on Long-Term Financing tried to design new bank funding tools aiming at improving banks' ability to lend to the real economy, while at the same time stimulate the growth of SMEs by promoting the use of SME loans as collateral for new ESNs. The outcome of the discussion was the proposal of two possible ESN structures, each with slightly different characteristics, aimed at providing different benefits to the lender as well as to the borrowers and investors. The first type of ESN would be closer in design to covered bonds in the sense that the originating bank would be the issuer of the ESNs and the investor would have dual recourse to both the pool and the issuer. The second type of ESN would resemble more closely what is referred to as high-quality securitisation. This could involve risk transfer (and capital relief) for the issuing institution (as the collateral would be transferred onto an SPV[1]), but also still could retain a form of dual recourse. In both cases, the collateral could be SME loans or infrastructure loans. Though, the first on balance sheet appears more appropriate for SME loans and is focused on funding only. The off-balance sheet solution, instead, could be more suitable for infrastructure loans.

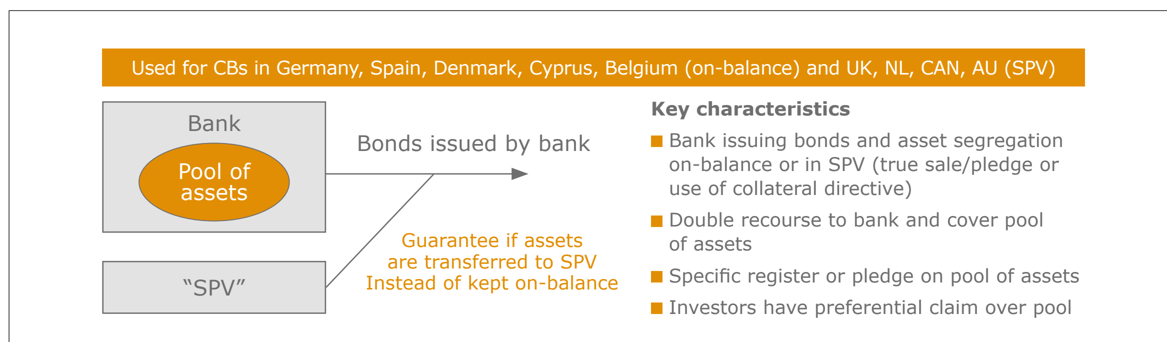
1 Special Purpose Vehicle (SPV).

These two major lines of development (on-balance sheet and risk sharing) could be implemented through a bottom-up approach, which would aim at amending the current legislative frameworks by adopting common definitions, risk parameters and market best practices (even if this may be implemented *de facto* through different legal options/solutions at national level). This combination of common European guidelines, flexibility and adaptability in the implementation at national level should ensure a smooth adoption of this structure in what remains a heterogeneous market, as well as supervisory and legislative landscape.

ON-BALANCE SHEET EUROPEAN SECURED NOTES (ESN) USING COVERED BOND FUNDING TECHNIQUES

The on-balance sheet ESN would be similar in structure to a covered bond. As such, it could have the obvious advantage of benefiting from regulatory recognition, thus providing the issuer with an additional tool to fulfil liquidity requirements such as the Liquidity Coverage Requirement (LCR). In fact, the transformation of SME loans into an ESN could improve the regulatory and prudential treatment of such assets, by making the bond UCITS[2] compliant, and therefore exempt from bail-in, and eligible for a number of prudential and regulatory requirements, such as under Solvency II. In this context, two elements are necessary in order for the ESN to successfully play this role: (i) a robust specific legal framework around the creation of such an instrument; and (ii) a sufficiently high level of transparency regarding the asset pool and its performance.

> Figure 1: On-balance sheet european secured note



Source: ECBC

The existence of a legal and supervisory framework is one of the major strengths of covered bonds. This should also be developed for on-balance sheet ESNs, whereby the asset pool would have to fulfil specific criteria. These include, but are not limited to: a harmonised definition of SME loans allowed as eligible collateral; clear rules on the segregation of the pool for the safety of the investor; appropriate levels of over-collateralisation (OC); and clear *pari-passu* priority claims of the investor to the issuer's assets in the case of default and insufficiency of the pool to cover the value of the bond.

In addition, the eligibility criteria for SME loans need to be developed. A good starting point for this may be the European Central Bank's (ECB) collateral framework which allows the use of credit claims as collateral for repo operations[3]. This alignment would ensure greater marketability and liquidity of the ESN. The second requirement, i.e. transparency, is very much linked to the first point, as it is a necessary condition for the accurate assessment of the true underlying risk of the SME assets used in the pool. High levels of transparency would facilitate due diligence and allow investors to effectively understand the underlying risk. More importantly, it would allow issuers to effectively manage their portfolio. Therefore, it is of paramount importance to develop an effective transparency framework, which would entail a close cooperation with the SMEs whose loans are included in the pool.

2 http://ec.europa.eu/finance/investment/ucits-directive/index_en.htm.
3 https://www.ecb.europa.eu/pub/pdf/scpops/ecbocp148.pdf.

Also, the framework of the Italian version of the ESN could serve as a blueprint for some of its characteristics (please see the section below for more information).

RISK SHARING EUROPEAN SECURED NOTES (ESN) – USING HIGH QUALITY SECURITISATION TECHNIQUES

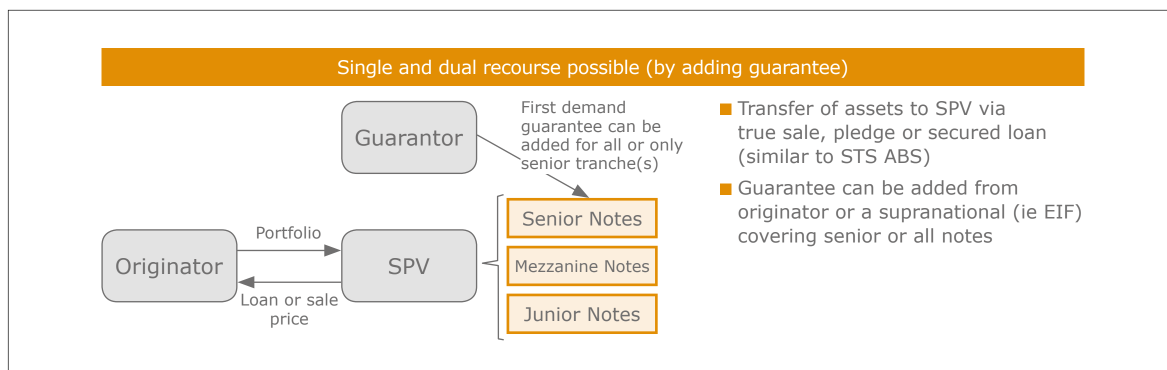
This ESN structure would provide benefits to both the issuer and the investor which would share some risks and be remunerated accordingly. It could offer both funding and some capital relief to the issuer, which would thereby be able to use freed-up capital for additional lending; this would also have the advantage of lowering capital requirements. For the investor, this ESN structure, while maintaining the alignment of interests between originator and investors, would potentially be more interesting in terms of yield, which is a central aspect in the current environment of low interest rates.

This alternative ESN structure would, in some respects, have analogies with the securitisation techniques in the sense that the assets used in the pool would be transferred to an SPV via true sale or pledged using, for example, the collateral directive to prevent the need of a true sale at closing. In this case, as for traditional securitisation, the pool could either remain static or have a replenishment period of a few years, which would represent a difference *vis-à-vis* traditional covered bonds where the pool is dynamic (which would also be a characteristic of the "on-balance sheet ESN") throughout the life of the covered bond programme. In fact, the dual recourse principle could apply, although in a different way to that for the "on-balance sheet ESN", for example via the issuer providing a guarantee for part or all of the ESNs issued.

As with traditional securitisation, this second ESN structure would have one or more tranches of notes and each tranche would be secured by the portfolio of SME credit claims. Two basic general principles should be satisfied: (i) the originator must comply with the retention requirements ("skin in the game") by either retaining the junior tranche of 5% or more, at least 5% of each tranche or a 5% portfolio of similar risk on its balance sheet; and (ii) public/international institutions could play a role in investing in or in guaranteeing some tranches (senior to equity) of the security in the spirit of promoting the development of the securitisation market and the financing of the real economy through SMEs.

The design for this kind of instrument would be one where the originator (issuer), and/or another highly-rated financial institution, guarantees the senior tranche of the ESN. The equity and/or mezzanine tranches could be guaranteed by institutions such as the European Investment Bank Group (EIB Group, in particular the European Investment Fund), government-owned development banks (such as KfW Development Bank in Germany, Cassa Depositi Prestiti (CDP) in Italy, Instituto de Crédito Oficial (ICO) in Spain or Caisse des Dépôts et Consignations (CDC) in France), again, to encourage public involvement and the sponsoring of securitisation as a means of financing the real economy.

> FIGURE 2: OFF-BALANCE SHEET EUROPEAN SECURED NOTE



Source: ECBC

This ESN structure could, through its features, aim at tackling the fragmentation of EU capital markets, and encourage a cross-border market for SME financing throughout the Union. Moreover, the legal safeguards and flexibility of using an on-balance sheet approach and/or risk sharing techniques would reduce the pro-cyclicality of the ESN instrument, thus rendering it especially useful in enhancing the resilience of long-term financing in times of crisis.

It is important to note that, as for the "on-balance sheet ESN", the "risk sharing ESN" would need to rely on robust transparency requirements, as well as a legal framework to safeguard investors and issuers. In addition, this ESN structure would also depend on the willingness of such international/public institutions to support the instrument through guarantees. Nonetheless, there is a clear intention by EU and national authorities to support the securitisation market, as well as the financing of the real economy. Of course, it is pivotal that the risks involved are accurately identified, standardised and mitigated where necessary. This is a *conditio sine qua non* for the involvement of other parties in these transactions.

STEPS FORWARD: THE WORK OF THE TASK FORCE AND THE ROUNDTABLES

Following on from the results of the ECBC Long-Term Financing Task Force meetings, the ECBC kicked off the ESN project in October 2015 with a high level Roundtable in Milan, attended by a wide range of representatives from the European banking industry, investors' community and regulators.

Following the Roundtable in Milan, the ECBC has been holding several high level meetings with key stakeholders from both the private and the public sector in order to push forward this new instrument initiative aimed at fostering investment in SMEs and infrastructural projects. Italy was the first Member State to adopt a regulation on an ESN-like instrument in April 2016.

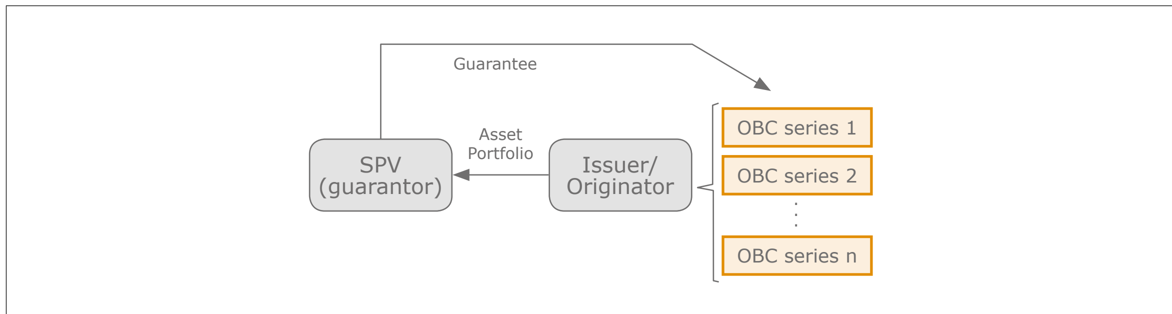
The ESN project has been gaining traction also in core EU countries such as Germany and Austria where the initiative is considered a smart and effective way of funding a number of infrastructural projects. It is important to highlight the value of such a product in Germany, where the "Energiewende", i.e. the transition to a low carbon, environmentally sound, reliable, and affordable energy supply, and other infrastructure projects will need additional funding in the coming years. Among other things, funding such projects via ESNs would be advantageous with respect to the, much used, syndicated loan methodology.

Following the introduction of the Italian legislative ESN framework on the 6th of April 2016, the Secretariat organised a second Roundtable in Milan in May 2016 to follow up and build on the recent developments. During the meeting, a broad range of stakeholders and authorities, both national and European, debated on the nature of the ESN, the state of play in the interested counties, funding needs of SMEs and infrastructures, and the possible eligibility criteria for the cover assets.

THE FIRST ESN FRAMEWORK: THE ITALIAN BLUEPRINT

The Italian government proposal to amend the securitisation law in order to introduce the ESN framework has been approved by the parliament on 6th of April 2016 and subsequently converted into law. The primary legislation allows the issue of bonds (which may be called Obbligazioni Bancarie Collateralizzate – OBC), collateralised by SME loans, leasing, factoring, ship loans and other types of commercial assets. The structure is similar to the existing covered bonds (Obbligazioni Bancarie Garantite – OBG), though the law clearly differentiates between the two products. Secondary regulation will specify some features of the new instrument such as the exact definition of eligible assets and identification definition of licensable issuers.

> FIGURE 3: THE ITALIAN ESN STRUCTURE



Source: ECBC

OBCs will be under public supervision. This is a key element as public supervision is a pre-requisite for the ESN to be UCITS compliant, and therefore exempt from bail-in, and eligible for a number of prudential and regulatory requirements such as under Solvency II. Other characteristic features will be the bankruptcy remoteness of the segregated assets, which will be assigned to an SPV. This is the so-called true sale mechanism. Two major rating agencies have already expressed their support to the Italian ESN underscoring the success of the implementation in the "Bel Paese".

To further support the development of the ESN initiative, the ECBC has worked on building a market platform where regulators, treasuries, Central banks and Supervisory authorities can meet with key market players to discuss a smooth implementation of the ESN.

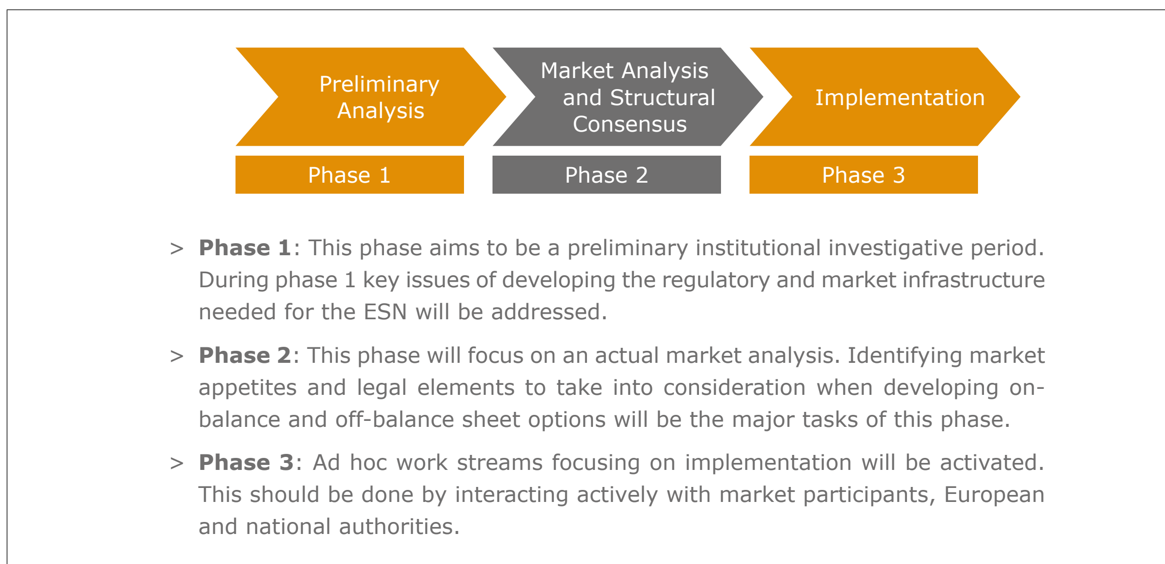
THE WAY FORWARD: THE ROLE OF INSTITUTIONS AND THE MARKET

Looking ahead, the success of these ESN instruments would rely on both a robust legal framework and a high level of transparency regarding the underlying assets. The development of centralised credit registers[4] with harmonised levels of information would provide the ideal tool for the achievement of full transparency (while complying with confidentiality laws), and the subsequent increased level of security of these ESNs. All parties involved would be able to accurately assess risks and thereby differentiate their portfolios accordingly, contributing to the quality of the instruments. This links closely to the other condition, i.e. a robust legal framework, which among other things would focus on determining which assets can be used as collateral. Having transparent information regarding these SME loans is a central aspect of this issue.

Moreover, the issuer, regulatory and investor community should work together to develop common eligibility criteria for assets (which could be inspired by the European Central Bank (ECB) collateral eligibility criteria for credit claims as well as EIB Group activity). Establishing a pan-European standard in terms of securities backed by SME or infrastructure loans would be a cornerstone of the strength of this product. Regulatory frameworks and existing laws should be amended to allow these new asset classes to be used as collateral within the regulatory and prudential framework. In order to drive the effort forward, contributions from the institutional side as well as the market side should include the following points which have been designed by the ECBC Long-Term Financing Task Force:

4 One example of this could be the Analytical Credit Dataset (AnaCredit) "The development of a steady state approach for an analytical credit dataset will continue in 2015 in close collaboration with the FSC. This entails drafting a new ECB regulation and guideline for the collection of granular credit data and the development of an IT tool for data collection, maintenance and dissemination.", source: http://www.ecb.europa.eu/stats/pdf/2015_ESCB_statistics_work_programme.pdf?ef1338e0f89fd91d3fd02f033aad73a6.

> Figure 4: Three phases of the ESN project



Source: ECBC

CONCLUSION

The success of covered bonds and in particular their resilience during the financial crisis have made them an obvious choice as a model for the creation of a new pan-European funding instrument. The creation of such instruments is an important step towards establishing deeper and more integrated capital markets, which is a key objective of the Capital Markets Union initiative. Drawing from the experience of a long standing but also dynamically expanding covered bond market will help to save time and increase efficiency when creating a new funding instrument. At the same time it is important to draw a clear line of distinction between covered bonds and the ESN. ESNs are steadily taking shape with structures and certain key features that will allow broad market acceptance. Contributions from the institutional side as well as the market side are helping to further increase the chances of a successful introduction of ESNs in the European markets.

1.4 LIQUIDITY AND TRADING VOLUME IN THE EU COVERED BOND MARKET

By Steffen Dahmer, JP Morgan, Moderator of the ECBC Liquidity Task Force & Chairman of the ECBC Market Related Issues Working Group, Michael Weigerding, Commerzbank AG, Joost Beaumont, ABN AMRO BANK N.V., Jonny Sylven, Association of Swedish Covered Bond Issuers and Kaare Christensen, Association of Danish Mortgage Banks

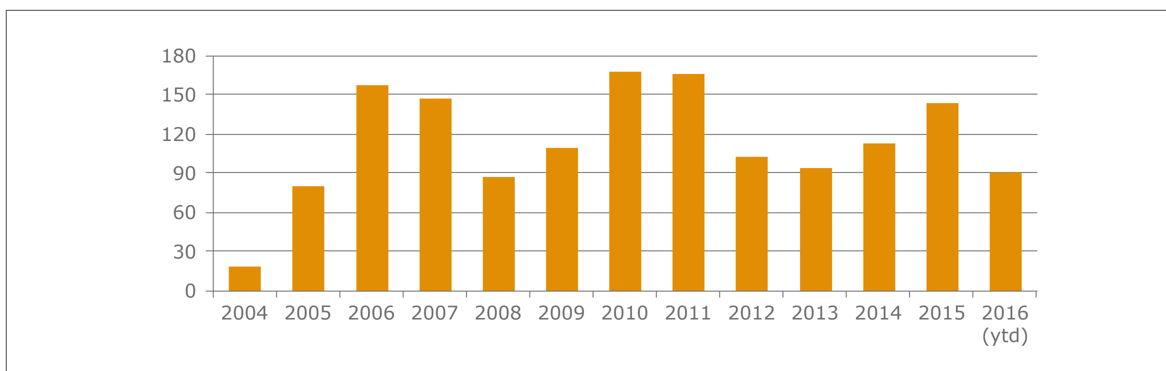
INTRODUCTION

The international covered bond benchmark segment which started as interbanking market-making (head to head) market in the 1990's, transformed during the crisis into a pure client (investor) market-making market. This makes the covered bond market very much comparable to the supranational, sub-sovereign and agency (SSA) and sovereign market. A functional Repo market increases constantly the liquidity of the covered bond market, as consequences the covered bond benchmark market can be named as one of the most liquid market segments. There are still two camps, one which views covered bonds thanks to the nature and the rating as part of the rates world, and the other which clearly see credit elements and would value it as strongest product of the credit world.

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

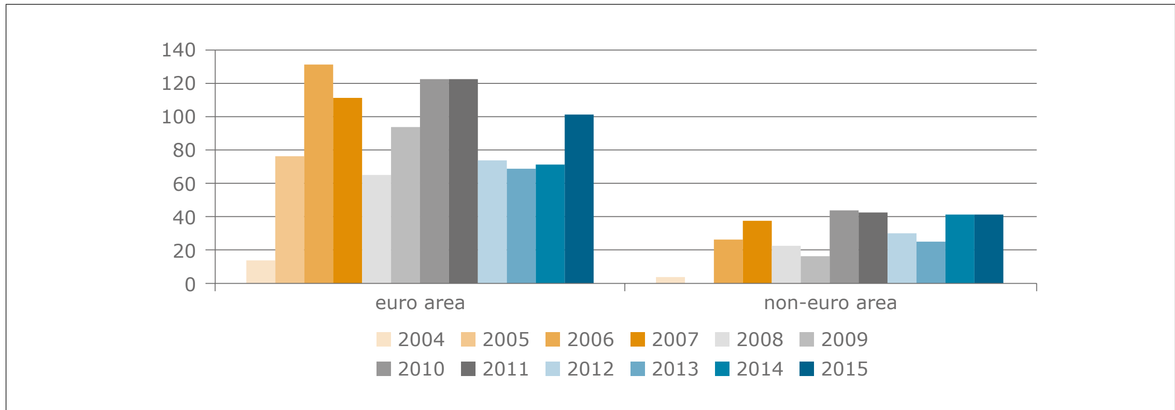
We continue to see the trend that EUR 500 m is becoming more and more the standard benchmark size for issuers, although issuers with larger annual funding appetite still favouring a EUR 1 bn deal or larger. In the US $ market the 1 bn and even larger is the standard however a few examples in the last 1-2 years did also proof the acceptance of a USD 500 m benchmark. The Swedish or Danish Kroner covered benchmarks are often significant by size and therefore far larger than the Euro or Dollar benchmarks. Obviously smaller benchmark volumes lead often to smaller secondary turnovers given that the various covered bond markets are dominated by a majority of buy and hold investors. Furthermore, redemptions have also been at rather high levels in the past few years, resulting in negative net supply. This implied that the covered bond market shrank in 2013, 2014, and 2015. This year gross issuance has been roughly in line with redemptions so far. New jurisdiction such as Singapore, Turkey, Korea and others helping to lighten the net issuance reduction but were still not enough to stop the trend.

> FIGURE 1: GROSS SUPPLY OF EURO BENCHMARK COVERED BONDS (EUR BN)



Source: Bloomberg, ABN AMRO

> FIGURE 2: GROSS SUPPLY OF EURO BENCHMARK COVERED BONDS BY REGION (EUR BN)



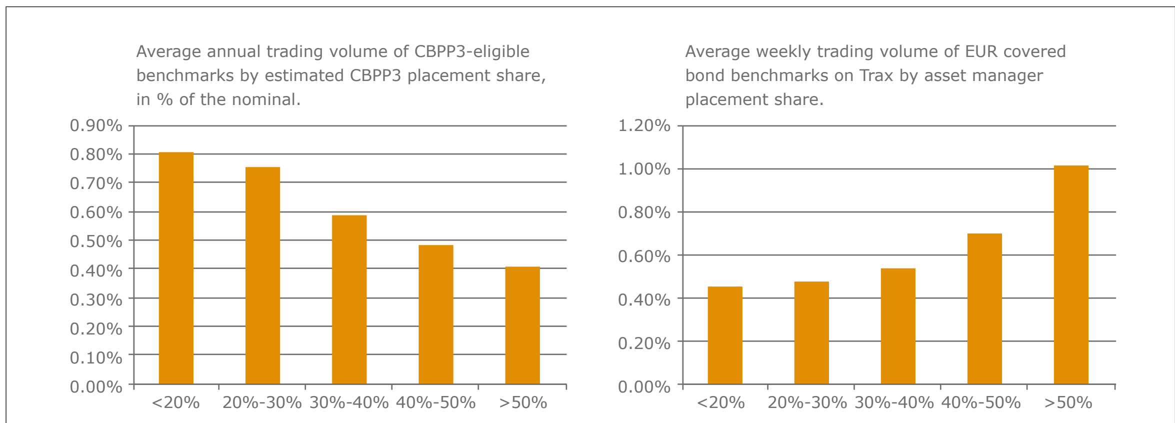
Source: Bloomberg, ABN AMRO

In sum, lower net supply, new deal size developments, a change of regulatory requirements and the nature of the investor base have a direct impact on secondary liquidity.

Gross supply of euro benchmark covered bonds has clearly increased in recent years. After gross issuance declined in 2012 and 2013, it has started to rise again in the past few years. In 2014, the rise was mainly driven by an increase in both the number of new issuers as well as a rise in the amounts issued from jurisdictions outside the euro area. However, last year, the rise in gross supply of euro benchmark covered bonds was merely due to increased issuance from banks located within the euro area. This is related (at least partly) to the Eurosystem's third covered bond purchase programme (CBPP3), which has made it increasingly attractive for banks to issue covered bonds. At first sight, this should have supported liquidity. However, the rise in gross supply from euro area issuers was fully offset by primary allocation to the EUR central banks under CBPP3. As a result, CBPP3 allocation has dampened turnover and reduced liquidity, the size of the traded volume drop is remarkable. Although many other traditional investors have also become mainly long term investors for various reasons, the below graphs clearly indicate a higher placement share with fund managers or a high oversubscription level usually go hand in hand with greater trading activity on the secondary market. In sum, the CBPP3 purchases, of course, seem to have impacted covered bond's trading volume.

> FIGURE 3: HIGHER CBPP3 SHARE DAMPENS MARKET TURNOVER

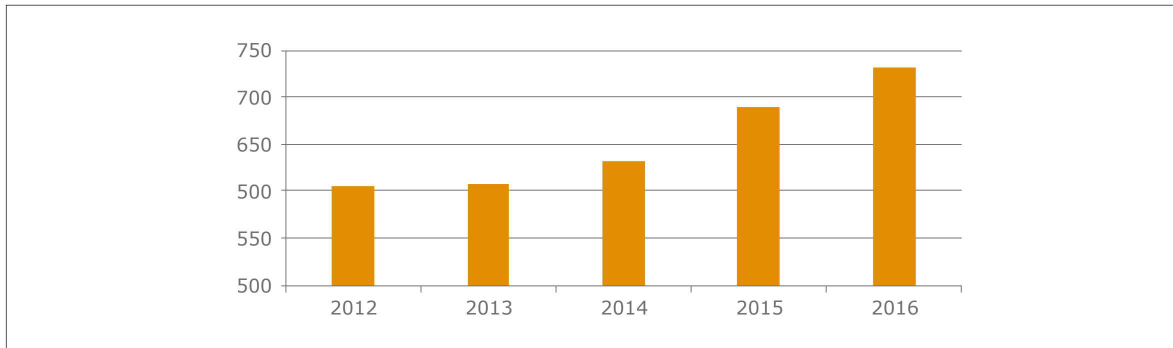
> FIGURE 4: ASSET MANAGERS TRADE MORE FREQUENTLY



Source: Trax, Commerzbank Research

Meanwhile, the number of benchmarks outstanding in the Markit iBoxx euro covered bond index has steadily increased in recent years. In June 2016, the iBoxx included 733 benchmarks, which was 100 more than at the end of December 2014. Thus, the number of flavours that investors can choose from has risen, which in the end should support liquidity.

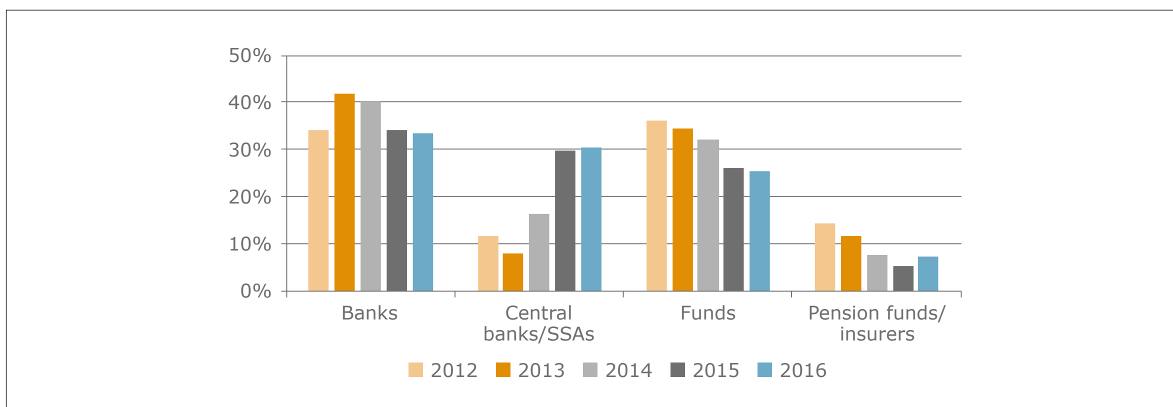
> FIGURE 5: NUMBER OF ISINS IN IBOXX EURO BENCHMARK COVERED BOND INDEX



Source: iBoxx (Markit)

Let us again look at the evolution of 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. Figure 6 below shows the average share per investor type in new euro benchmark deals. The graph clearly illustrates the crowding out impact of CBPP3. The share of central banks/SSAs has risen sharply, actually tripling from around 10% in 2012 to some 30% in 2016. This has come at the expense of other investors, such as banks, asset managers and institutional investors. However, asset managers have seen the biggest drop in their share, followed by institutional investors. 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.

> FIGURE 6: AVERAGE SHARE BY INVESTOR TYPE IN NEW ISSUANCE OF EURO BENCHMARK COVERED BONDS

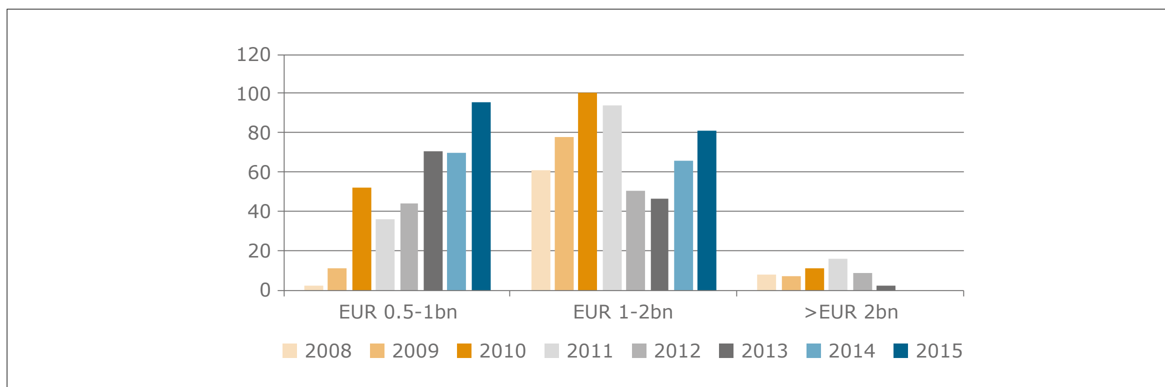


Source: Bloomberg, ABN AMRO

Finally, the larger the issue size, the better the liquidity. But also in this case, it seems that recent developments point in the direction of a reduced liquidity. Figure 7 below depicts the number of new deals broken down by issue size. The number of deals with an issue size below EUR 1 bn increased strongly in recent years. Whilst only two deals had a size smaller than EUR 1 bn in 2008, 96 deals had such a size in 2015. In contrast, no

new issues had a size above EUR 2 bn in the past two years. Meanwhile, the number of deals sized between EUR 1 bn and EUR 2 bn rose again during 2014 and 2015, although the total remains still below that seen in 2010 and 2011. Therefore, also from an issue-size perspective, it seems that liquidity has deteriorated rather than improved in recent years.

> FIGURE 7: NUMBER OF NEW EURO BENCHMARK COVERED BOND DEALS, BROKEN DOWN BY SIZE



Source: Bloomberg, ABN AMRO

TURNOVER ON THE EUR COVERED BOND MARKET HAS STEADILY DECREASED FOR MONTHS

On first glance, trading volume from Bloomberg, the largest on e-platform for covered bonds, was relatively stable since 2014: The aggregated covered bond turnover (including non-benchmarks) from January to April 2016 amounted to EUR 58 bn, which compares to EUR 59 bn over the same period 2014. However, the turnover captured might have been supported by the fact that e platforms have gained importance, not least due to CBPP3's order process. After adjusting for a shift from voice to e trading[1] the total covered bond trading volume estimated from the largest e-platform data tells a different story: Total turnover in 2016 actually decreased by around a third compared to two years earlier.

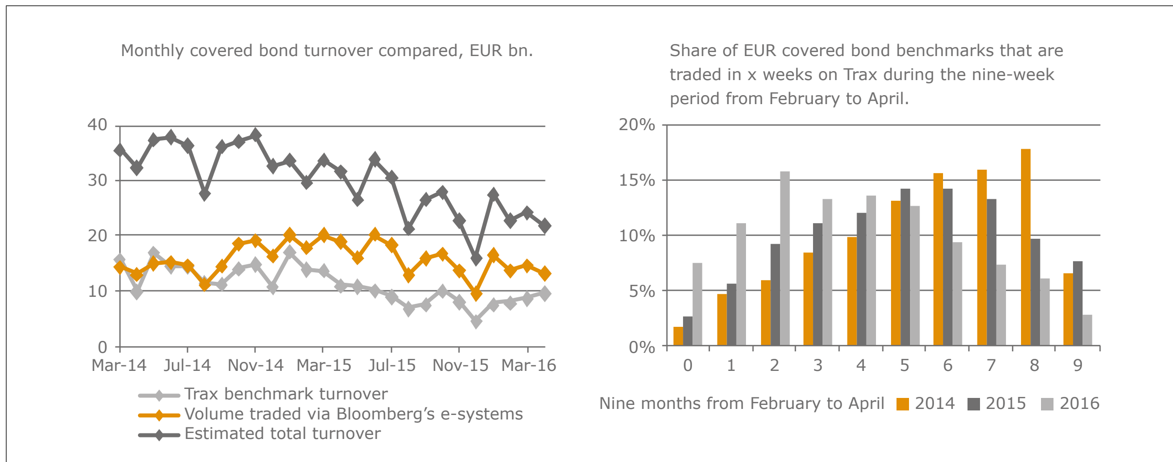
Direction and scope of this change are confirmed by MarketAxess' Trax turnover volume. Trax statistics compile turnover figures from banks using the company's post-trade services. As the data capture both voice and e-trading they are not biased by a shift in the latter's importance. Additionally, the weekly Trax data show how trading activity has decreased for individual instruments: From February to April 2016, e.g., c. 8% of EUR benchmark covered bond have not been traded at all. Two years ago, that percentage was below 2%. The share of benchmarks traded less than every other week has doubled from 30% to 60% from 2014 to 2016. Usually, weekly turnover does not exceed EUR 5 m per bond. Although Trax data does not cover all trades in the market, these figures give an impression of the magnitude of the volume drain on the covered bond market.

The density of turnover driven by private investors has, of course, fallen by a higher amount. After all, one has to adjust the total turnover for the CBPP3 secondary market purchases. This first requires some mathematical adjustments to the monthly figures reported by the ECB (as they are based on amortised costs rather than nominal levels etc.). On balance, in our model calculation CBPP3 purchases account for around a fifth of overall secondary market turnover.

1 We have incorporated an increase of the e-share from 40% to 60% from September 2014 to January 2015 in our data (see *Pfandbrief Weekly*, 24 September 2015).

> FIGURE 8: COVERED BOND TURNOVER HAS LOST GROUND SINCE 2014

> FIGURE 9: TRADING ACTIVITY DECREASING FROM YEAR TO YEAR



Source: Bloomberg, Trax, Commerzbank Research

Source: Trax, Commerzbank Research

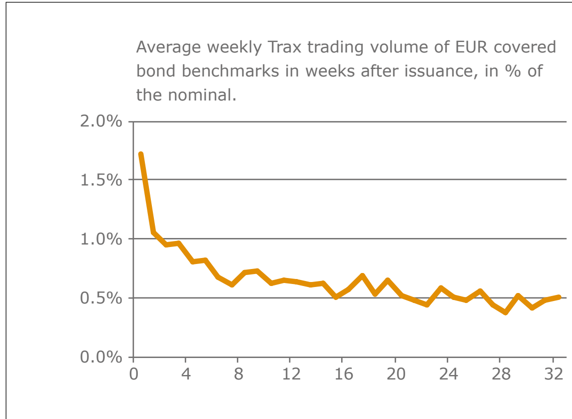
FURTHER DRIVERS OF TRADING VOLUME AND LIQUIDITY ON THE COVERED BOND MARKET

While the turnover reduction appears substantial, its causes are not that clear cut. As it is accompanied by the EUR central banks' quantitative easing (QE) measures, the idea that CBPP3 has supported the activity drain seems plausible at first glance, as it has crowded out other investors (please see above). However, it is difficult to isolate the influence of this factor on the trading volume of EUR covered bonds and to estimate its magnitude. After all, volume has several other determinants and many of them apply to other covered bond or fixed-income segments as well, i.e., do not negatively affect the relative liquidity of EUR benchmarks. One of the most important turnover drivers is, of course, the volume outstanding: Around two-thirds of the turnover in EUR benchmarks is made up of covered bonds from Spain, Germany, France and Italy. This is predominantly due to the size of these segments as EUR benchmarks in jumbo size, e.g., have on average double the trading volume than benchmarks with less than EUR 1 bn of nominal outstanding. When adjusted for size, the difference between both segments wanes. Therefore, the steadily decreasing size of new EUR benchmarks over recent years seems to have had a negative impact on volume.

Another important turnover factor is the primary market. For one, a bond's age determines its trading volume. A new benchmark loses three quarters of its initial trading volume in the first four weeks after issuance. Thereafter, weekly turnover only amounts to 0.5% of the nominal volume on average, with a declining tendency. A lively primary market that limits the average age of the outstanding bonds therefore is positive for a market's trading volume. For another, switching interest induced by new issues is one of the most important turnover driver particularly for segments that lack a genuine trading activity. Roughly speaking, Trax trading volumes of an issuer's covered bonds outstanding[2] on average doubles in the week where the bank launches a new benchmark. Trading volumes of other covered bonds in the issuer's country climb by around one fifth. Individual examples show that the switching interest may even set in as soon as several weeks before the actual pricing of a new deal, in case there is a roadshow ahead. Hence, the lively issuance activity since autumn 2015 should have spurred the trading activity on the covered bond market.

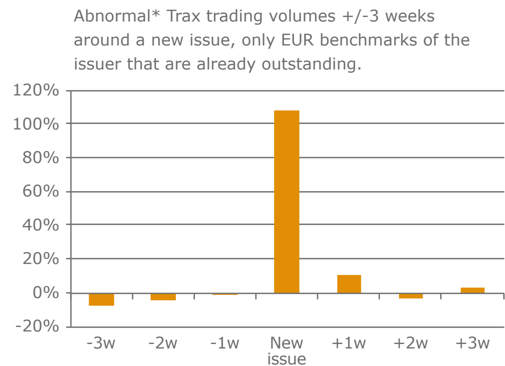
2 In our analysis, new benchmarks have been stripped out for nine weeks.

> FIGURE 10: TRADING VOLUME DROPPING RAPIDLY AFTER ISSUANCE



Source: Trax, Commerzbank Research

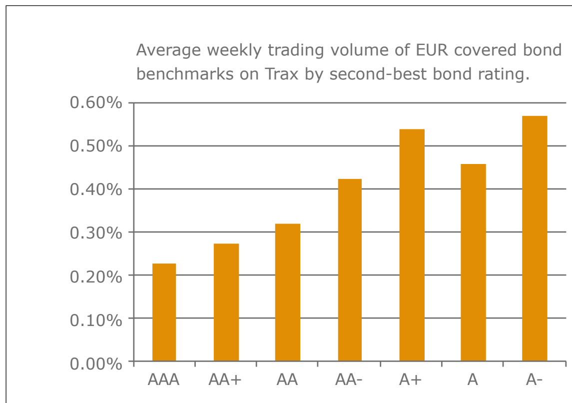
> FIGURE 11: A NEW ISSUE IS A MAJOR TURNOVER DRIVER FOR BONDS ON THE ISSUER'S CURVE



* deviation from the six-week average around new issuance
Source: Trax, Commerzbank Research

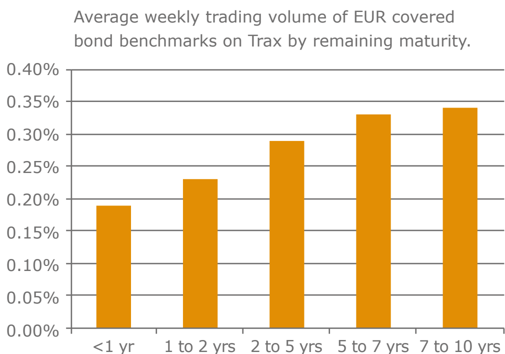
Trading volume is also influenced by factors that are not directly liquidity-related. For instance, higher-beta covered bonds tend to feature higher trading activity. Trax turnover of benchmarks featuring a single A as second-best rating, for instance, came in around twice as high as for AAA rated instruments, relative to their volume outstanding. Multi Cédulas also register higher relative trading volumes than Single-name Cédulas. Moreover, turnover is greater in bonds with a longer remaining maturity and thus higher duration. Among other things, this beta bias should be due to the fact that, since the sovereign debt crisis ebbed, active investors have relied to a greater degree on volatile names to generate outperformance while buy-and-hold clients prefer stable qualities.

> FIGURE 12: WEAKER RATINGS FEATURING HIGHER TRADING VOLUMES



Excluding Multi-Cédulas; Source: Trax, Commerzbank Research

> FIGURE 13: HIGHER TURNOVER IN LONGER-DATED BENCHMARKS



Source: Trax, Commerzbank Research

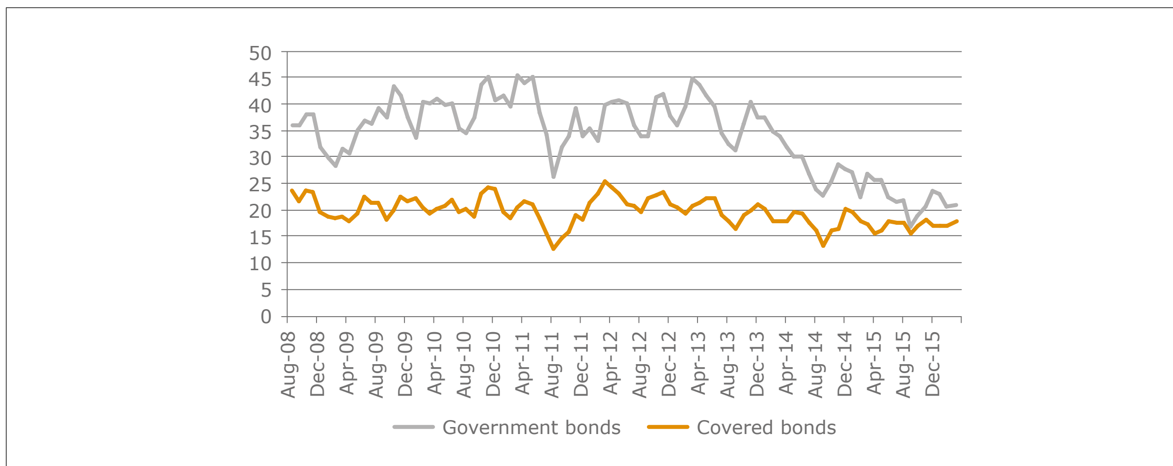
THE SWEDISH COVERED BOND MARKET

The Swedish market for covered bonds is of great importance for the domestic capital market. Before Sweden implemented a law for covered bonds in 2003, there was a liquid market for mortgage bonds that had been around since the beginning of the more modern capital market in Sweden in the 1980's.

The outstanding volume of covered bonds in SEK was EUR 165.7 bn at year-end 2015. That was nearly twice as much as outstanding volume of government bonds. The Swedish bond market investors appreciate liquidity. Because of these the larger issuers issue their bonds as benchmarks which mean that large amounts (SEK 3 billion and more) are issued and that a number of dealers, under normal circumstances, show both bid and offer prices. Also, only benchmarks are deliverable in the future contracts. When a new benchmark-loan 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 size he requires to match the lending. Sweden has a liquid and smoothly operating repo market with almost all banks and broker firms involved in the trading. Mortgage companies 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 throughout a long period of time. The new regulations with higher capital requirements, larger information requirements (MiFID II) and other potential obstacles like leverage ratio, structural reforms and so on will have a negative impact on liquidity in a small market like the Swedish. The Swedish central bank (Riksbanken) has been aggressive in its QE- policies and is aiming to buy 1/5 of outstanding government bonds, this year. Riksbanken is not going to buy covered bonds. Activities in the market will although suffer. This far turnover is not significantly lower and the local Financial Supervisory Authority has performed a study[3] of the liquidity in the covered bond market. The result of that study is that the liquidity is still good.

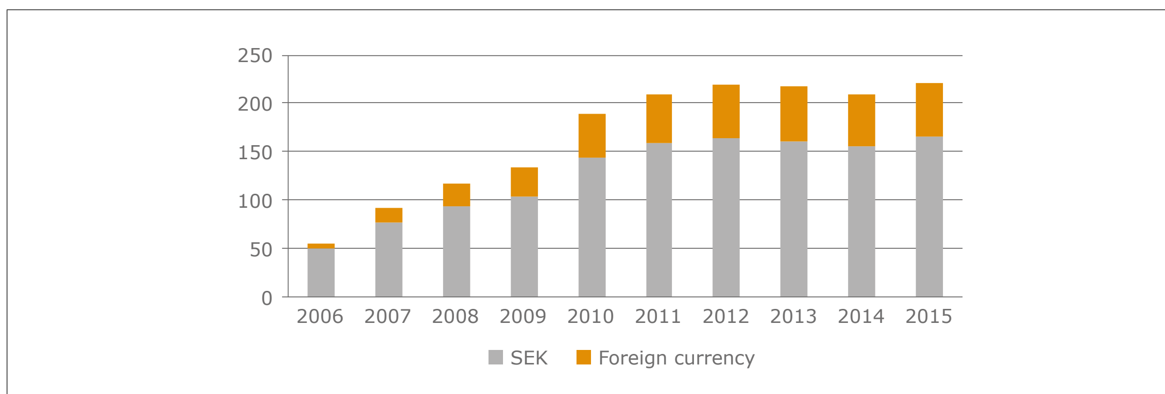
> FIGURE 14: DAILY TURNOVER OF GOVERNMENT AND COVERED BONDS, 3M MOVING AVERAGE, WITHOUT REPOS, BN SEK



Source: Riksbanken

3 Just in Swedish: http://www.fi.se/Tillsyn/Rapporter/Listan/oforandrad-likviditet-i-marknaden-for-sakaerstallda-obligationer/.

> Figure 15: Outstanding volume of covered bonds, bn EUR



Source: ASCB

THE DANISH COVERED BOND MARKET

With an outstanding volume of EUR 378 bn, Denmark has Europe's largest covered bond market funding mortgage loans. After the German Pfandbrief market, the Danish covered bond market is the second largest market in Europe when including covered bonds backing other assets such as public loans and ship loans. The total Danish covered bond market stands at EUR 383 bn, including EUR 5 bn covered bonds financing ships.

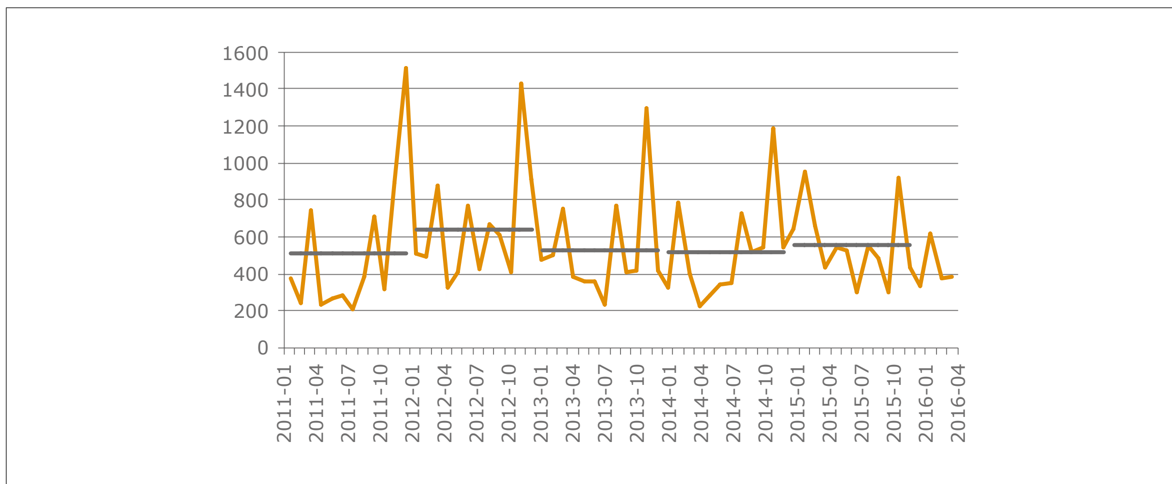
The Danish covered bond market is approximately five times the size of the Danish government bond market. The penetration of covered bonds as the primary funding tool in the private sector in Denmark is further emphasised when comparing covered bond funding with other funding tools, such as bank lending or corporate debt issuance. Excluding stock issuance, covered bonds backed financing makes up more than half of total financing to the private sector in Denmark.

Danish mortgage covered bonds are issued by six specialised mortgage banks, Nykredit/Totalkredit, Realkredit Danmark, Nordea Kredit, BRFkredit, DLR Kredit and LR Kredit and one universal bank, Danske Bank. Meanwhile, Dansk Skibskredit, is the only issuer of ship covered bonds. The type of bonds making up the Danish covered bond market fall into three major segments: callable bonds, bullet bonds and floater with or without a cap. All bonds are UCITS compliant and the vast majority are CRD compliant.

Turnover in Danish covered bonds

Reported trades in mortgage covered bonds to the Danish stock exchange, Nasdaq OMX Nordic, including over the counter trades and excluding repos, show no sign of diminished turnover in 2015 compared to recent years. Average monthly turnover in the period 2011 – 2015 has come in at close to DKK 550 bn (app. EUR 73.7 bn). In 2015, average monthly turnover was DKK 555 bn (app. EUR 74.4 bn), cf. Figure 16, or approximately 19% of the outstanding volume, which is on par with previous years.

> FIGURE 16: TURNOVER IN DANISH MORTGAGE COVERED BONDS, MONTHLY TURNOVER IN DKK BN



Source: Nasdag OMX Nordic

Note: Data is for nominal value Non Repo Mortgage Bond transactions including over-the-counter. Shares are average monthly turnover to outstanding amount. Horizontal lines indicate yearly averages MiFID transaction reporting, compiled and analysed by the Danish central bank show, that transaction activity is intact in large as well as small series. Also, transaction volume in trades of no less than EUR 250 m per trade remain level with previous years.

Turnover in 2015, was propelled by massive early repayment activity in the first half of the year. Hence, issuance in the primary market of callable bonds has been a driver for turnover in 2015. Meanwhile, as covered bonds issued outside the Euro are not eligible for purchase under the ECB CBPP3, the Danish covered has not been directly affected by the most recent quantitative measures by the ECB. However, an indirect effect cannot be ruled out. As intended, ECB purchases have depressed yields on euro covered bonds, sending investors searching for higher yields. Foreign investors have extended their ownership share of Danish covered bonds from an average of 19% over the year in 2014 to 21.5% in 2015.

Previously, the data was characterised by high turnover around the time of the November/December refinancing auctions of bullet bonds financing adjustable rate mortgages. Over the years, the spike has somewhat diminished as mortgage banks have spread the refinancing auctions from one to four annual settling periods.

Danish specifics affecting turnover in Danish covered bonds

Pass through, tap issuance, quarterly refinancing auctions and frequent early repayment activity notably in fixed rate mortgages 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 to by Danish mortgage banks, incorporates pass through and means that mortgage covered bonds are tapped on the go, in sync with demand for mortgage loans. Following the initial tap issuance, mainly bullet bonds and to an extend floaters are refinanced by the issuance of new bonds at refinancing auctions over the life of the loan.

Another specific influencing liquidity in the Danish covered bond market is borrowers' early repayments. 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. This is option is primarily used when interest rates rise, as borrowers with fixed rate mortgages can reduce their loan balance. This type of early redemption activity gives rise to an increase in transaction both when bonds are bought back, and when new bonds are issued. However, yet another early repayment option exist on the fixed rate mortgage (fixed to maturity – primarily 30 years). The

product is financed by callable bonds with a matching maturity. Borrowers in fixed rate mortgages retain an early repayment option, securing the right to buy back the bonds at par. The option is priced into the product by the market when the bonds are initially sold. Hence, borrowers do not have to pay an early repayment fee (which is sometimes the case in other markets) to investors, if they chose to prematurely opt out of the loan. It is not the early repayment in itself that adds to turnover, as the existing bonds are merely cancelled. However, turnover is elevated due the issuance of new bonds, as was the case in 2015, when fixed 30 year rates hit a low of 2%, igniting high early repayment activity.

Challenges to liquidity in the Danish covered bond market

Whereas, transaction activity in the Danish covered bond market remains on par with previous years, the external forces currently shaping the financial sector are altering the role of market makers. Due to tap issuance, the market maker function of universal banks is handed a central role already in the early stages of the Danish liquidity system. As professional investors are mostly unwilling to buy in small batches, market makers pool newly issued bonds in palatable bites. 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 environment have put pressure on the profitability of market making. Increasingly, market makers will to a lesser extent be providers of market liquidity, but instead be match makers between buyers and sellers in the market. In 2015, the Central Bank of Denmark (Danmarks Nationalbank) found evidence, that the five largest universal banks in Denmark have reduced their net positions available for market making by DKK 100 bn since mid-2014[4]. On the receiving end has been among others institutional investors which could lead to lower turnover going forward.

Although approximately 80% of the outstanding volume of mortgage covered bonds are in series sizes above EUR 500 m, giving rise to an LCR classification of Level 1B for the AAA rated Danish covered bonds, the new liquidity rules do create a challenge managing smaller series sizes. Issuers need to bulk up series size to secure competitive prizes, while maintaining an attractive product selection to mortgage customers. If investors are unsure if a bond series will reach the critical mass – as bonds are tap issued – to qualify as Level 1B- or Level 2A-assets under the LCR, the pricing of the specific series may be negatively affected. Already, the number of covered bond series in circulation have been reduced over the past years, but the new legislation is driving issuers to explore the possibility for further reduction.

4 Financial Stability Report H2 2015, Danmarks Nationalbank.

1.5 MREL AND TLAC: THE CONSEQUENCES OF BAIL-IN REQUIREMENTS FOR COVERED BONDS

By Alexandra Schadow, LBBW and Maureen Schuller, ING Bank

RESOLUTION ONLY POSSIBLE WITH ENOUGH BAIL-IN-ABLE INSTRUMENTS

The Bank Recovery and Resolution Directive (BRRD) has applied to all EEA states since it was implemented in national law in 2015. At the same time, the BRRD is also embedded in the European Banking Union's single Rulebook, which also comprises the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM), whereby the two latter mechanisms initially apply only to the member states of the European Monetary Union. The goal of the BRRD is the harmonisation of the recovery and resolution instruments for banks subject to the premise that potential losses are initially borne by the shareholders and then by the creditors according to a prescribed ranking. This is governed by the "no-creditor-worse-off" principle, which ensures that no creditor may incur greater losses than it would have under normal insolvency proceedings. However, there are liabilities that are explicitly barred from a possible bail-in by the regulations of Article 44(2) BRRD. These also include covered bonds that are UCITS compliant (Article 52 (4) of Directive 2009/65/EC). Only one restriction is formulated that allows a bail-in for covered bonds if the liabilities from the covered bond exceed the corresponding collateral in the cover pool and the resolution authority believes a bail-in for this "uncovered" part is appropriate. This would, however, correspond to a cover shortfall.

Basically, if resolution is necessary, four instruments are available: sale of businesses, bridge institutions, asset separation and bail-in. Within the framework of the bail-in, the resolution authority can exercise write down and conversion into equity powers in order to absorb losses and to carry out recapitalisation measures. This approach presupposes all banks have adequate "bail-in eligible" capital. Article 45 BRRD stipulates a special requirement for this: the *minimum requirement for own funds and eligible liabilities (MREL)*. The same idea is behind the *total loss absorbing capacity (TLAC)* requirement, which is applied via the Financial Stability Board (FSB) to the Global Systemically Important Banks (G-SIBs). The goal of both requirements may well be the same, but there are several differences in their content. We therefore provide a comparison of the most important components of MREL and TLAC.

> Figure 1: Comparison MREL and TLAC

Key features	MREL	TLAC
Scope	All banks within the scope of BRRD	G-SIBs only
Timeline	Effective from 1 January 2016 Appropriate transitional period	Effective from 1 January 2019
Calculation	Own funds + eligible liabilities ——— Own funds + total liabilities (total assets)	Total capital + TLAC eligible liabilities ——— Risk weighted assets (RWA) *and* Tier 1 capital ——— Exposure measure
Determination	Case-by-case for each institution including Pillar 1 and Pillar 2	Common Pillar 1 requirement: 1 January 2019 16% of RWA/6% of Basel III leverage ratio 1 January 2022 18% of RWA/6,75% of Basel III leverage ratio Pillar 2 requirement case-by-case possible
Capital buffers	Included	Excluded
Subordination requirement	No	Yes
Priority	- not a precondition in the BRRD	- structural subordination, e.g. holding company - statutory subordination - contractual subordination

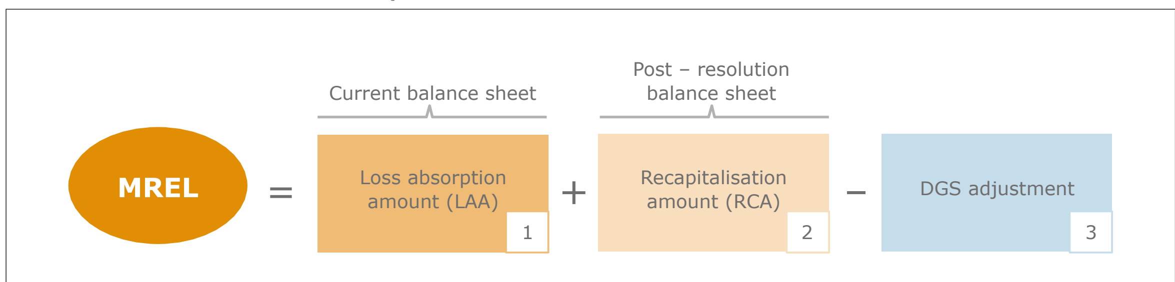
Key features	MREL	TLAC
Eligible instruments	Own funds=Tier 1 capital + Tier 2 capital Eligible liabilities: - liabilities and capital instruments that do not qualify as CET 1, AT 1 or T 2 instruments and that are not excluded from the scope of the bail-in tool by virtue of Article 44(2) - issued and fully paid up - not owed to, secured or guaranteed by the institution itself - not arising from a derivative - not arising from a preferred deposit - remaining maturity of at least one year	Total capital=Tier 1 capital + Tier 2 capital TLAC eligible liabilities: - liabilities that can be effectively written down or converted into equity without giving rise to material "no creditor worse off" claims - be paid in and be unsecured - not subject to set off or netting rights - minimum remaining maturity of at least one year - not be redeemable by the holder - not insured deposits - not sight and short term deposits - not liabilities arising from derivatives - not liabilities which are preferred to normal senior unsecured creditors under the relevant insolvency law - not any liabilities that are excluded from bail-in by law

Sources: BRRD, EU Commission, FSB, LBBW Research

MINIMUM REQUIREMENT FOR OWN FUNDS AND ELIGIBLE LIABILITIES (MREL)

Article 45 (2) BRRD mandates the European Banking Authority (EBA) to propose to the EU Commission a Regulatory Technical Standard (RTS) that is intended to provide the basis for determining the minimum requirement for MREL. After publication of the Consultation Paper in November 2014, the EBA submitted its final proposal in July 2015 (EBA/RTS/2015/05). Then, in November 2015, the EU Commission announced its intention to amend the EBA's proposal. The EBA responded promptly in February 2016 with the rejection of the major amendments made by the EU Commission. Ultimately, the EU Commission got its way and the Delegated Act was published on the 23rd of May 2016 with two major amendments regarding the setting of an MREL ratio and the transitional period for fulfilment of the requirement. Unlike the EBA, which proposed a minimum requirement of 8%, the EU Commission insisted that the MREL should be set on a bank-specific basis and did not set a minimum ratio. The EU Commission replaced the transitional period originally set at a maximum 48 months by the EBA with an appropriate period that can be set by the resolution authority. The EBA and the EU Commission agree with regard to the basic approach for determining the MREL: the MREL is calculated from three components: the loss absorption amount (LAA), the recapitalisation amount (RCA) and the possible adjustments caused by the corresponding Deposit Guarantee Scheme (DGS).

> Figure 2: Determination of MREL requirements



Source: SRB, LBBW Research

> The LAA takes account of a bank's capacity to absorb losses. The LAA is determined on the basis of the regulatory capital components (8% of RWA), which have to be fulfilled at least in compliance with the Capital Requirement Regulation (CRR; Regulation 575/2013), the combined buffer requirements and additional Pillar 2 requirements (bank-specific) under the Capital Requirement Directive (CRD IV; Directive 2013/36/EU). These provide the basis for determining the first component. But the pertinent authority

may deviate from this on the upside or on the downside if it deems this to be necessary due to certain conditions (e.g. business model, funding model and risk profile).

> The second component, RCA, is defined as the recapitalisation that is necessary after a resolution. This initially entails the fulfilment of the regulatory capital requirements, which are obligatory for the licensing of the bank. The CRR's regulatory capital requirements (8% of RWA) including the Pillar 2 requirements of the CRD IV are the starting point here. In addition, at this point potential business sales and other measures taken as part of the implemented resolution strategy are also taken into account. Any additional requirements to obtain the market's confidence in the bank after the resolution are also taken into account. If a bank is classified by the resolution authority as not systemically important, it would be liquidated immediately in the event of a default. In this case, the RCA component would be equal to zero.

> Possible contributions of a DGS as part of a resolution may be deducted. This is in turn mainly determined by the size of the covered deposits of an individual bank and the capacity of the DGS. The compensation that is to be expected here in the wake of a resolution can lead to a lower MREL requirement.

Thus the basic approach is fixed by the Legal Act. Implementation is planned for 2016 and it has been carried out and is being carried out in parallel, depending on the country, via the SRB (European Monetary Union) or at the national level in very different ways. This has also been reinforced by the discussion about TLAC, which is ultimately supposed to serve the same purpose.

TOTAL LOSS-ABSORBING CAPACITY (TLAC)

After the consultation paper of November 2014, the FSB also formulated a requirement in November 2015 calling for a minimum loss-absorbing capacity (TLAC) for Global Systemically Important Banks (G-SIBs). This is mainly intended to make it possible to absorb losses and carry out recapitalisation measures in the case of resolution in order to put an end to the "too big to fail" (TBTF) problem. In the final standard the TLAC ratios were amended: as of January 2019 G-SIBs must have a TLAC corresponding to the higher of 16% of RWA or 6% of the Basel III leverage ratio (previously: 18% and 6%). As of 2022, these ratios increase to 18% and 6.75% respectively (previously: 20% and 6%).

Within the framework of the minimum Pillar 1 TLAC requirement there is a limitation to the Basel 3 minimum capital requirements; unlike in the MREL capital buffers are ruled out explicitly. In addition, the TLAC eligible liabilities are also recognised, whereby these must account for at least 33% of the TLAC. The question now is which liabilities are TLAC eligible. Decisive here for the FSB is that an explicit subordination must exist. Three possibilities are proposed for this. First **structural subordination**: the TLAC-eligible liabilities may not be ranked the same as or senior to any excluded liabilities. This can best be achieved by issuing bonds at a holding company level, which is then placed structurally and organisationally right at the top of the resolution entity. Second, **contractual subordination**: here bonds become TLAC-eligible in that they are made subordinate on a contractual basis. These would then occupy a position between the normal senior unsecured bonds and T2 bonds. The third possibility is **statutory subordination** in which bonds are allocated a statutory subordinated status in the order of creditors that is junior to all excluded liabilities.

WHERE ARE WE AT THE MOMENT?

In our view, the parallel appearance of the MREL requirements, on the one hand, and the TLAC, on the other have given rise to confusion especially among investors in bank bonds. At the same time, in those countries with G-SIBs the national implementation of the BRRD has been used above all to make the Global Systemically Important Banks fit for TLAC. While the TLAC requirements were already relatively concrete, the concrete implementation requirements of MREL were still in the process of being drafted. As a result, the requirements were often mixed, whereby the individual countries went down very different roads especially with regard to subordination or have not yet decided it. The motivation is and was very different: for example, the protec-

tion of private investors, the creation of new bail-in eligible capital or the funding-cost strategy with regard to new instruments. The need to make the two concepts compatible with each other has been acknowledged. At the end of 2015, the EU Commission already announced it intended to put forward a draft bill for the implementation of the TLAC requirement in European supervisory legislation in 2016. After the press had been informed in January 2016 that the EU Commission was publishing a Working Paper with three options for the harmonisation of MREL and TLAC, in April 2016 the EU Commission presented a further Working Document with several proposals for the coordinated implementation of the two requirements whereby it narrowed the range of choices from three to one option (preferred option). Figure 3 highlights the most important points.

> Figure 3: Preferred option for implementing TLAC into EU law

Main Issues	Option for a harmonised implementation of MREL+TLAC	Key Questions
Scope of application	Split of MREL into minimum Pillar 1 requirements and firm-specific Pillar 2 requirements Pillar 1 requirement = TLAC for G-SIBs	Extension to other banks Implementation in CRR
Level of application	Introduction of the concept of resolution entity/group in the EU MREL currently on a individual and consolidated basis	External/internal TLAC in the context of SPE/MPE Considering EU as one jurisdiction
Calibration of the requirement	Denominator of MREL should be RWA and exposure measure (like TLAC) MREL denominator currently own funds and total liabilities Additional Pillar 2 requirements only if reasonable and necessary	Criteria for Pillar 2 requirements
Eligibility of instruments	Introduction of the subordination concept for MREL Amendment of Tier 2 eligibility criteria in CRR for compliance with TLAC	Same eligibility criteria for MREL, TLAC and Tier 2 Same eligibility criteria for Pillar 1 and Pillar 2
Supervisory regime	Consequences of breaching the MREL/TLAC requirements	Trigger restrictions for a breach in Pillar 2 (dividends, coupons, etc.) Split of requirements in hard and soft ones
Deduction of cross-holdings	Loss-absorbing instrument held by another bank should be excluded	Deduction from the Tier 2 capital

SPE= Single Point of Entry, MPE= Multiple Point of Entry
Sources: European Parliament, LBBW Research

The report on the implementation of MREL that the EBA must submit to the EU Commission under Article 45 (19) BRRD by 31 October 2016 could also prove helpful here as this report in turn forms the basis for a possible draft bill for the harmonised application of MREL to be put before the European Parliament and the Council of the EU by the EU Commission. At this stage, it will be possible to take up points such as the consideration of different business models when setting MREL or the adjustment of certain parameters. Attention will focus here on the identification of the business models and the adequate minimum MREL requirements that are suitable for these business models. But issues such as the method of calculation, the appropriate transitional periods or the suitability of the concept for banking groups are also to be examined here. With regard to the business models MREL already provides for special treatment of mortgage banks. However, there is one exception in the BRRD regarding mortgage banks financed by covered bonds. If they are not allowed to receive deposits the resolution authority can exclude them from the MREL requirement. This, in turn, is only possible in the case of a realisable winding-up according to national insolvency proceedings or other types of measures in accordance with the resolution tools in the BRRD and within the resolution objectives. But in our view this does not cover by far the diversity of the business models in which covered bonds play an important role in refinancing.

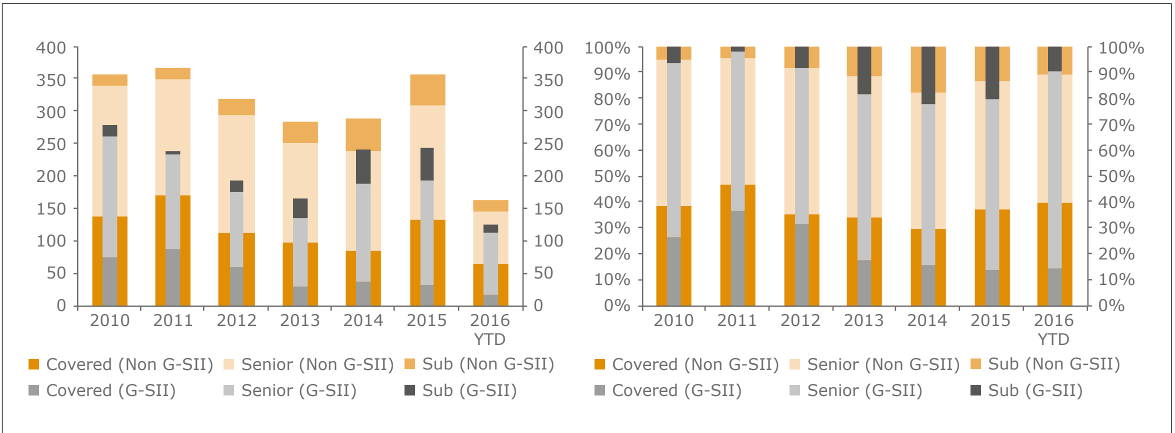
With regard to MREL and TLAC we believe we are currently going through a transitional phase that will, however, probably end up in the medium term in a harmonisation of the two instruments. The outcome is already partly anticipated and the banks are trying to prepare for it at an early stage – despite all open points. In our view, it is clear that the requirements will have serious repercussions on the banks' liabilities structure. Depending on which road is embarked on with regard to subordination, certain asset classes will be favoured in order to fulfil the required MREL and TLAC ratios. Covered bonds are excluded here. We believe this harbours positive and negative aspects. On the one hand, this important and crisis-proof funding tool for the banks enjoys explicit protection against a bail-in. This is likely to keep the costs of funding through covered bonds attractive on a permanent basis. On the other hand, the bail-in exception for covered bonds in combination with very high requirements on MREL and TLAC could lead – for fear of holding inadequate loss-absorbing capital resources – to the covered bonds being given increasingly less scope. A sort of asset encumbrance would be prevented through the backdoor. In our view, therefore, much depends on the consideration of the different business models combined with the risks and their funding structure. The dilemma between creating a level playing field for all banks and achieving an unnecessary levelling down must be resolved here, not least in the interest of investors who are currently confronted with the fact that they should include ever more bank-specific components in their investment decisions while the information required for this is often not adequately transparent. There follows an attempt to cast some light on the different liabilities structures of issuers and their repercussions on covered bonds.

SYSTEMIC IMPORTANCE HAS BECOME A SUPPLY NEGATIVE FOR COVERED BONDS

Significant developments in the field of solvency capital instruments and financial institution resolution protocols, including scope for the use of so-called "bail-in" tools, have ramifications for the covered bond market. These stretch beyond the simple exclusion of the covered bond product from the scope of a hypothetical bail-in. A discernible more opportunistic use of covered bonds within the overall funding decision of a given banking entity has been one of the side effects of the new regulatory terrain. The importance of covered bonds in the diversified funding mix of global systemically important institutions (G-SIIs) is nowadays a token of what it once was. In 2015, European G-SIIs issued a little over EUR 30 bn in covered bonds, 14% of their aggregate funding print (Figure 4 and 5). Non G-SIIs attracted almost 40% of their funding via covered bonds. G-SIIs continue to have a comparatively stronger focus on subordinated funding, and this is a trend that is likely to persist in light of the stricter capital and expected loss absorption requirements for these institutions. Further clarity on the treatment of senior unsecured debt instruments in the loss absorption resolution hierarchy will only, in our view, reinforce the emphasis on the issuance of debt instruments eligible for loss absorption at the expense of fresh covered bond product.

> FIGURE 4: FUNDING DEVELOPMENTS FOR EUROPEAN BANKS

> FIGURE 5: FUNDING SOURCE DISTRIBUTION EUROPEAN BANKS



Source: Dealogic, ING

INTEGRATING MREL AND TLAC

As described hitherto in greater detail, the Delegated Act published by the EU Commission in May 2016 concretised first efforts in harmonising MREL and TLAC requirements.

> The MREL will be determined as a percentage of the *total risk exposure measure* (i.e. risk-weighted assets), or as a percentage of the *leverage exposure measure*. This aligns the denominator approach to determining the MREL and TLAC. However, the calculated MREL will be expressed as a percentage of own funds plus total liabilities of the institution.

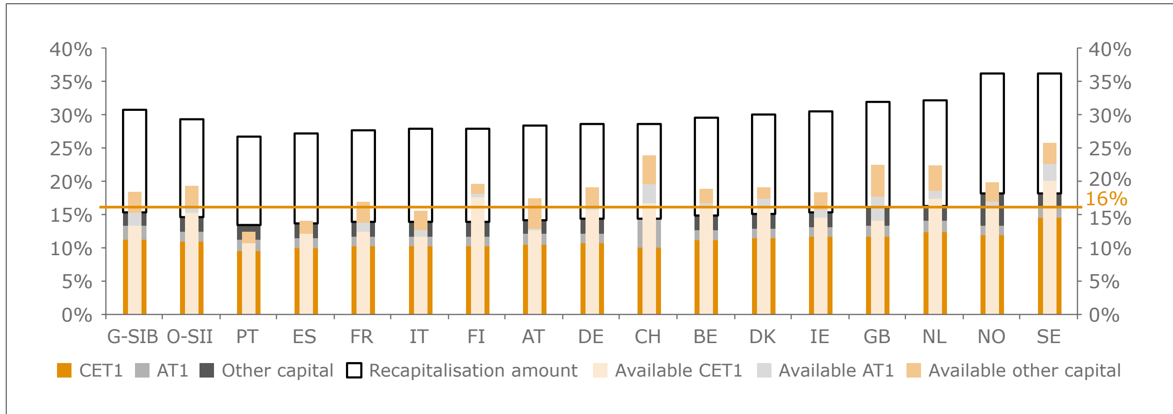
> The MREL's *loss absorption amount* and *recapitalisation amount* both take the higher of the 8% capital ratio or 3% leverage ratio as a basis. Resolution authorities will ultimately determine the MREL for banks on an individual basis and may decide not to apply the recapitalisation amount in full. However, aggregating the basis loss absorption and recapitalisation amounts provides for an indicative MREL "loss absorption minimum" of 16% of the risk exposure measure or 6% of the leverage exposure measure. This matches the minimum TLAC requirements for G-SIIs as per the 1st of January 2019 (18% and 6.75% respectively by the 1st of January 2022).

> In the case of MREL, the default definitions for the *loss absorption* and *recapitalisation amounts* add the additional own funds requirements and combined buffer requirements for banks to the aforementioned indicative loss absorption minimum. Resolution authorities may decide to partially apply these additional requirements when setting a bank's MREL. This brings the MREL into line with TLAC. In the case of TLAC the capital buffer requirements must be met in addition to the 16% TLAC minimum. The unadjusted default setting for the MREL (adding the additional own funds requirements and combined buffer requirements twice should this also include the minimum capital requirement) is higher however than the TLAC requirement (adding in the capital buffer requirements only once).

Figure 6 gives an indication of the average default MREL requirements for 55 European covered bond issuers that have been identified as systemically important institutions. The loss absorption amount matches the expected fully phased in capital requirements of the banks and the recapitalisation amount is set equal to the loss absorption amount (i.e. including the additional own funds and combined buffer requirements twice). The figure suggests the somewhat higher expected MREL requirements for G-SIIs compared to O-SIIs. Nordic banks may also face stricter loss absorption requirements than, for instance, Southern European banks.

The calculated loss absorption requirements are compared with the average capital ratios of the banks at the end of 2015. The O-SIIs seem better positioned than G-SIIs to meet a larger proportion of their loss absorption requirement with capital. The figure also illustrates that most banking sectors already meet the 16% loss absorption floor with solvency capital. To avoid exposing senior unsecured bondholders to loss absorption risk, only the Southern European banks would have to attract further capital to meet the (indicative) 16% loss absorption floor.

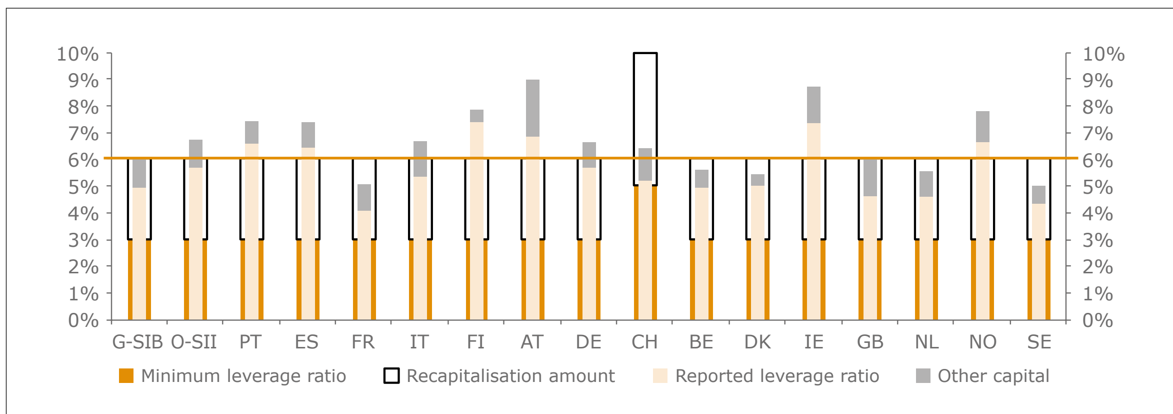
> FIGURE 6: POTENTIAL LOSS ABSORPTION REQUIREMENTS VS. AVAILABLE CAPITAL BUFFERS (2015 YE, % RISK EXPOSURE AMOUNT)



Source: Issuer reports, SNL, ING

The list of banking sectors with capital loss absorption shortfalls expands if the minimum leverage ratio requirements are taken as a reference (Figure 7). The minimum leverage ratio is 3%, equating to a 6% minimum loss absorption requirement as a percentage of the leverage exposure measure. Switzerland applies a 5% minimum leverage ratio equating to a 10% minimum loss absorption requirement. The UK regulator intends to apply a countercyclical leverage ratio buffer (CCLB) and an additional leverage ratio buffer (ALRB) for its systemically important institutions (initially only for G-SIBs) on top of the 3% minimum. This illustrates that ultimately the loss absorption requirements based upon the applicable leverage ratio can be higher than 6%. The French, Belgian, Danish, Dutch and Swedish banking sectors do not yet fully meet this 6% loss absorption minimum with capital instruments. The Finnish, Austrian, German, Irish, UK and Norwegian banking sectors, on the other hand, have sufficient capital under both approaches, and may consequently be among the less active issuers of eligible loss absorption instruments. When existing senior instruments are included in these calculations most banking sectors appear to be in decent shape vis-à-vis fulfilling loss absorption requirements.

> FIGURE 7: POTENTIAL LOSS ABSORPTION REQUIREMENTS VS AVAILABLE CAPITAL BUFFERS (2015 YE, % LR DENOMINATOR)

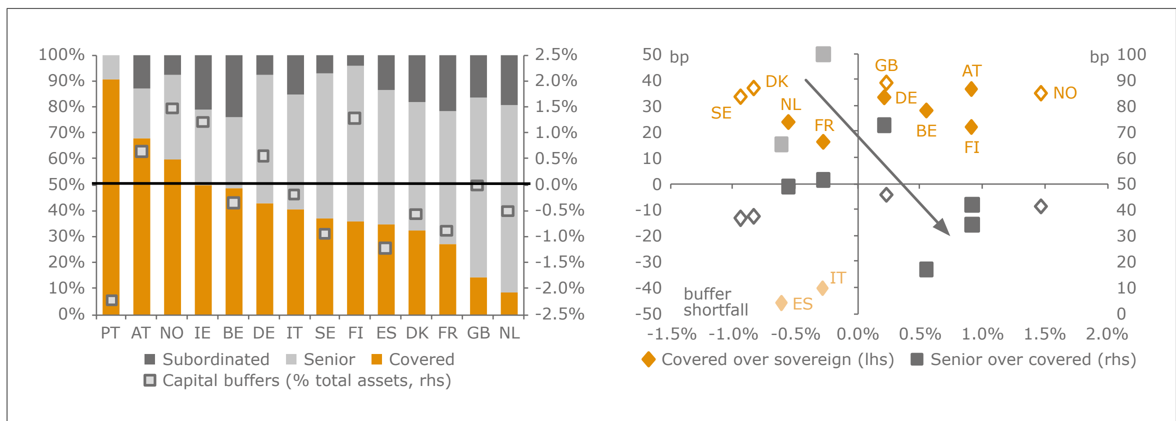


Source: Issuer reports, SNL, ING

SUPPLY AND SPREAD IMPLICATIONS

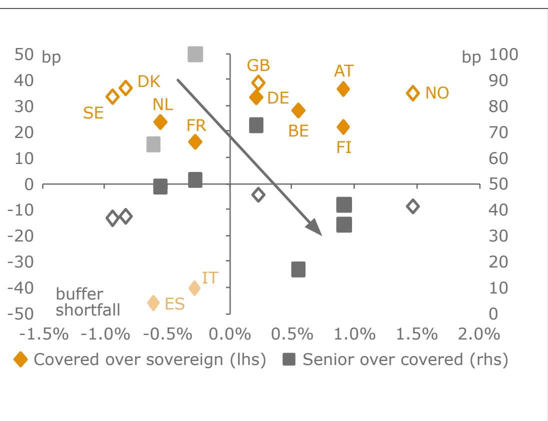
That said, building loss absorption buffers with subordinated debt or (structurally, statutorily or contractually) subordinated senior unsecured paper will remain an important driver for bank funding decisions. Figure 8 plots the share of covered bonds in the supply aggregate of European banks in 2015 and 2016 YTD. The average leading loss absorption buffer shortfalls or surpluses (based on capital instruments only) are depicted on the right hand side as a percentage of the banks' total assets. Jurisdictions with higher shortfalls, such as Spain, France or the Netherlands, indeed tend to see less supply activity in covered bonds and more issuance in subordinated debt. The opposite trend holds for Norway and Germany where more covered bond product is issued versus subordinated paper.

> FIGURE 8: BUFFER SHORTFALLS AND FUNDING MIXES



Source: Dealogic, SNL, ING

> FIGURE 9: BUFFER SHORTFALLS AND SPREAD LEVELS



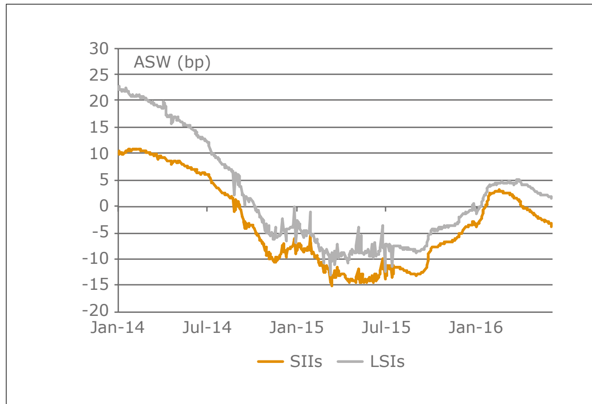
Source: Markit iBoxx (31 May 2016), SNL, ING

The impact of loss absorption buffer shortfalls on covered bond spreads is less straightforward. Although lower loss absorption buffers coincide with lower supply pressure in covered bonds, they are also broadly indicative of lower bank capitalisation levels. Figure 9 compares 5yr equivalent covered bond spreads (over sovereign) with the estimated buffer shortfalls. The figure indeed suggests that loss absorption buffers have limited impact on covered bond spreads. However, larger buffer shortfalls do tend to coincide with wider senior unsecured over covered bond spreads, reflecting the higher potential loss implications for the senior bonds in the case of a bail-in scenario.

GOING CONCERN RESOLUTION PROSPECTS ARE SPREAD POSITIVE

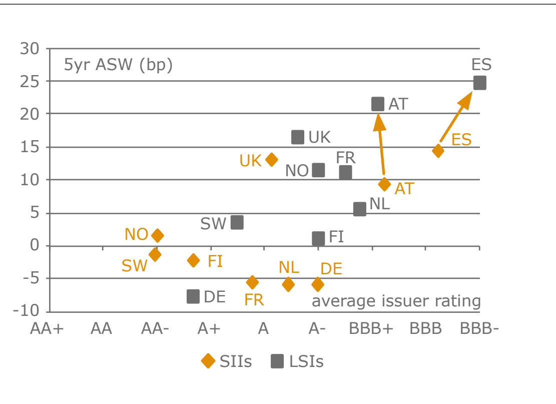
Higher loss absorption buffer requirements compel stronger bank capitalisation levels and support credit ratings. These coincide with lower covered bond supply pressure. Therefore, it would appear that a bank's systemic significance corresponds with observable funding cost advantages. Figure 10 illustrates the durable spread premium of systemically less important institutions versus those with heavier systemic importance for a selection of core Eurozone countries. These wider spreads indeed partly reflect weaker issuer credit ratings. We refer to figure 11 for an overview of average 5yr equivalent covered bond spreads for both systemically important institutions and those less so, by average issuer credit ratings. However, worth noting is that in a jurisdiction such as Austria, where the average issuer credit ratings of institutions with less systemic significance are negligibly different from the ratings of the pillar systemic banks, spreads are wider.

> Figure 10: Systemic vs. non-systemic bank spreads



Source: Markit iBoxx, ING

> Figure 11: Covered bonds of LSIs trade wider than SIIs



Source: Markit iBoxx (31 May 2016), ING

Systemically important banks have stronger going concern prospects. Smaller institutions on the other hand may be more at risk of insolvency and resolution protocols, and consequently have less need for loss absorption buffers that would facilitate complete recapitalisation in case of failure. For covered bonds, insolvency proceedings together with the segregation and a standalone administration of the cover pool are likely to result in more timely payment uncertainty for bondholders than a going-concern resolution strategy involving a bail-in of unsecured creditors. This can have covered bond rating implications. Moody's for instance, suggested in May that it may reconsider applying the existing covered bond anchor for minor European banks that are likely to have a resolution strategy of insolvent liquidation, and where the covered bonds are likely to remain with the bankruptcy estate. However, the prospects of selling assets or transferring a covered bond programme to another bank entity are, in our view, stronger for smaller institutions than for larger programmes. The perceived systemic importance of covered bonds in a jurisdiction remains an important consideration in this regard. That said, differences in systemic significance are not necessarily the only driver of these observed spread discrepancies. Smaller size, less frequent issuers also typically have a confined and limited investor base to take up their covered bond product.

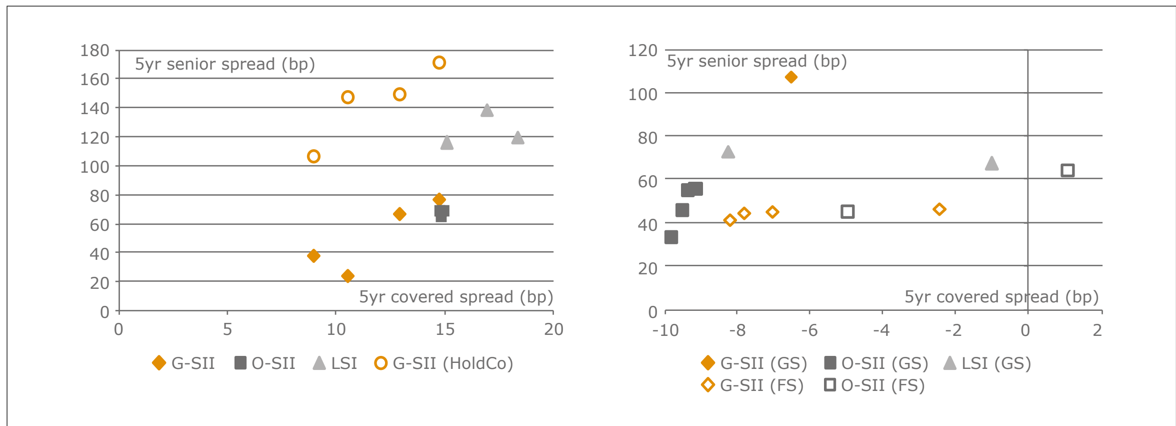
THE IMPACT OF DIFFERENT LOSS ABSORPTION MODELS

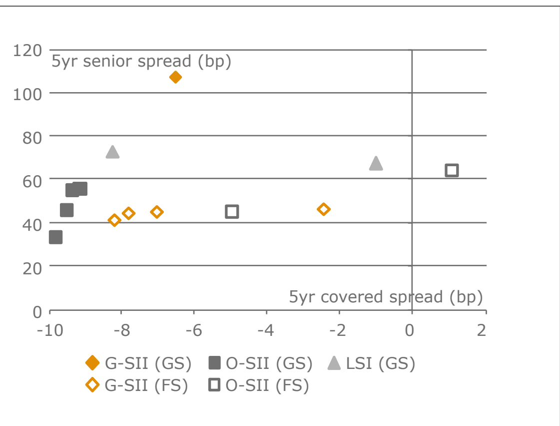
While the systemic importance and buffer requirements of a given bank will impact funding decisions and costs, so too will the applicable loss absorption model. Whether the hierarchical loss absorption protocol is contractual, structural or statutory will translate to different results to different banks in terms of the expected loss and supply consequences for (existing legacy) unsecured and secured bondholders. Figure 12 depicts the relationship between the 5yr equivalent covered bond and senior unsecured spreads of a selection of SIIs that (may) issue eligible loss absorption paper from a resolution entity that does not have any excluded liabilities on its balance sheet, i.e. a holding company (**structural subordination model**) versus their less systemically important comparables (LSIs). The chart confirms the significant (expected loss) premium for holding company senior unsecured paper, qualifying for loss absorption, versus senior unsecured paper issued from operating companies. For systemically important institutions, the credit risk perception reflected by the covered bond spreads is approximately linear to the credit risk priced in by the senior unsecured bonds (both OpCo and HoldCo). Systemically less significant institutions (non HoldCo) are quoted wider than systemically significant institutions in both covered bonds and in senior unsecured. However, the expected loss premium is comparatively higher versus (OpCo) senior instruments of SIIs than the covered bond product of SIIs.

Figure 13 plots a similar relationship for two different **statutory loss absorption solutions**. Under the German solution (GS), all existing senior unsecured bonds rank statutorily ahead of other unsecured claims in a bail-in scenario. In the case of the advocated French solution (FS) the outstanding existing senior unsecured bonds are expected to obtain "preferred" status over a lower ranking "non-preferred" senior unsecured asset class within the loss-absorption hierarchy. The figure confirms the roughly linear relationship between covered bonds and senior unsecured bonds under the German solution, irrespective of the systemic significance of the institution. This relationship is notably steeper than observed for the advocated French solution. This illustrates the different expected loss assessment for senior unsecured paper made statutorily eligible for loss absorption purposes, versus senior unsecured debt receiving preferred status in the loss absorption hierarchy. The latter is likely to become a scarcer debt instrument and represents a better yielding alternative to covered bonds with (ultimately) moderate loss absorption risk.

> FIGURE 12: SENIOR-COVERED SPREADS (STRUCTURAL SOLUTION)

> FIGURE 13: SENIOR-COVERED SPREADS (STATUTORY SOLUTION)





Source: Markit iBoxx (31 May 2016), ING

Source: Markit iBoxx (31 May 2016), ING

CONCLUDING REMARKS

As loss absorption frameworks and resolution strategies take further shape, charting and navigating this regulatory terrain will remain an important analytical dimension for covered bond investors. This extends well beyond the specific exclusion of covered bonds from any bail-in solution and may indeed prove to be something of a turbulent way forward with harmonisation efforts likely to remain challenging in light of the existing institutional and country specific differences.

1.6 EXTENDABLE MATURITY STRUCTURES – THE NEW NORMAL?

By Franz Rudolf, UniCredit and Karsten Rühlmann, LBBW

Just a few years ago, extendable maturity covered bond structures were the exception rather than the rule. However, analysts and rating agencies increasingly focused on the valuation of liquidity risks and thus refinancing risks in the wake of the financial crisis. By making structural adjustments to their programmes, issuers were able either to mitigate the related risks or transfer them in their entirety to investors. In addition to soft-bullet structures, where extension periods are typically 12 months, conditional pass-through structures with much longer maximum maturities have also increasingly gained ground in the last years.

Below, we take a closer look at current developments of covered bonds with extendable maturities and examine the motives of issuers on the one hand and the reactions of investors on the other.

WHAT ARE THE MAIN DIFFERENCES BETWEEN THE REDEMPTION REGIMES?

The most fundamental idea of covered bonds is safeguarding a steady flow of payments to investors following an issuer event of 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 over-indebted 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 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 refinance register. Some covered bond structures may also be able to raise new debt either in a technically "unsecured" way or even 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 many options so he is free to pick the most efficient one.

In cases involving hard-bullet structures, issuers try 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. Soft-bullet structures that have a limited extension period (usually one year) aim to manage the liquidity challenge at the expense of investors. However, since the soft-bullet timeframe might still turn out to be insufficiently long, the idea of pass-through aims to completely eliminate any refinancing risk by eliminating pressure to sell assets at the expense of a maximum timeframe for the payment deferral.

In a nutshell, the three major redemption regimes for covered bonds work as described below:

> **Hard-bullet covered bonds:** payments have to be made when due according to the original schedule. Failure to pay on the Standard Maturity Date (SMD) triggers default of the covered bonds, and the covered bonds accelerate.

> **Soft-bullet covered bonds:** payments have to be made when due according to the original schedule. Failure to pay on the SMD as a consequence of an issuer default does not trigger covered bond default. The extension period grants more time (typically at least 12 months) to repay the covered bonds, setting a new Final Maturity Date (FMD). Failure to pay on the FMD triggers default and acceleration of the covered bond.

> **Conditional pass-through covered bonds (CPTCB):** payments have to be made when due according to the original schedule. Failure to pay by the SMD as a consequence of an issuer default does not trigger default of that covered bond. The affected covered bond goes into pass-through mode. All other

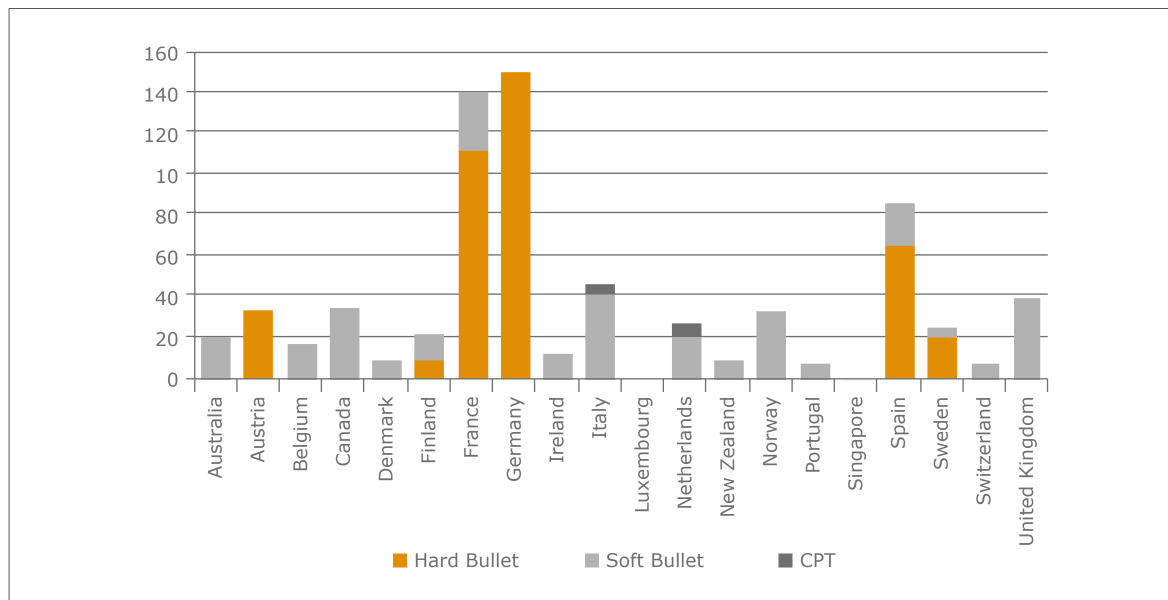
outstanding covered bonds are not affected and would only trigger the pass-through mode one after another if they are not redeemed on their respective SMDs.

Are pure hard-bullet jurisdictions becoming a rarity?

Covered bond jurisdictions in which only hard-bullet covered bonds are issued are rare in the meantime. A glance at the iBoxx € Covered benchmark index reveals that Germany, Austria, Luxembourg and Spanish single cédulas are still sticking to hard bullets. But also here are some changes in sight. In all other jurisdictions, soft-bullets, or to some extent conditional pass-through covered bonds, are now the standard. And in the last 12 months, we have seen several new developments.

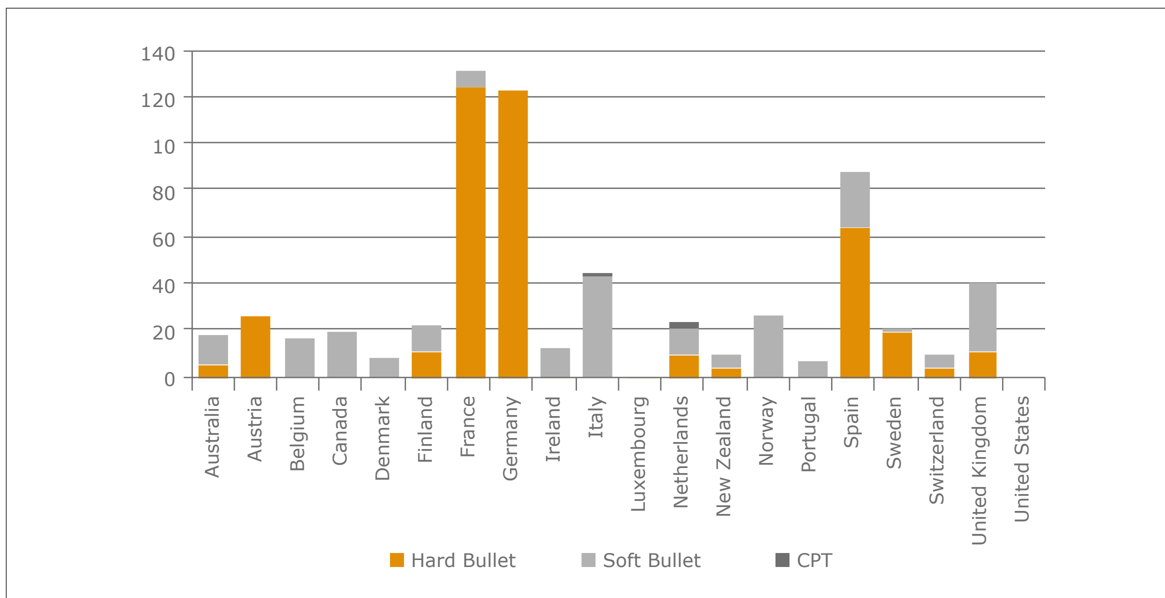
A comparison of maturity structures at the end of April 2016 with the previous year shows that the proportion of extendable structures (soft bullet or CPT) has risen by nearly 8% to 45.0%. There were major shifts especially in France, the Netherlands, UK and Australia with soft-bullets. Furthermore new jurisdictions like Singapore or Turkey also entered the market with extendable covered bonds. In case of CPTCB structures Aegon joined the group of NIBC, van Lanschot, Unicredit SpA and Banca Monte dei Paschi di Siena. In addition, Portuguese Caixa Economica Montepio Geral started a consent solicitation process to switch to CPT and Austrian Anadi Bank also implemented a CPT structure, being used for repo purposes.

> FIGURE 1: DISTRIBUTION OF EUR BENCHMARK COVERED BONDS BY MATURITY PROFILE AS OF APRIL 2016



Source: Markit, Institutions, LBBW Research

> Figure 2: Distribution of EUR benchmark covered bonds by maturity profile as of April 2015



Source: Markit, Institutions, LBBW Research

Current developments in the market for soft bullets

In the last 12 months the trend towards extendable maturity structures has continued. In addition to numerous conversions of existing covered bonds, soft bullet structures were also seen in new issues.

Key points of the terms of the consent solicitations were similar. For example, the early participation fee was 0.05% of the nominal in all programmes. In most cases, the quorum for minimum participation was set at 2/3 in the first meeting and 1/3 in the second meeting, if any. Crédit Agricole took a different approach with a comparatively low quorum of just 1/5. Moreover, in the second meeting a minimum quorum was no longer needed. The required approval rate was either 2/3 or 3/4 depending on the institution. With the exception of Halifax Bank of Scotland, all issuers successfully completed their consent solicitation procedures.

Issuer	Date	Early Participation Fee	Quorum	Approval Rate	Result
Halifax Bank of Scotland	07.07.2015	5bp	Meeting 1: 2/3 Meeting 2: 1/3	3/4	First meeting on 29.07.2015 achieved consent for four out of seven bonds for which votes had been called; the second meeting produced a positive result for only one bond.
ING Bank	25.08.2015	5bp	Meeting 1: 2/3 Meeting 2: 1/3	2/3	First meeting on 15.09.2015 resulted in a positive vote for all covered bonds concerned. Consequently, all ING Bank benchmark covered bonds have a soft bullet structure.
Commonwealth Bank of Australia	01.09.2015	5bp	Meeting 1: 2/3 Meeting 2: 1/3	3/4	Full conversion of all outstanding benchmark covered bonds approved at the first meeting on 24.09.2015. Consequently, more than 80% of all outstanding CBA covered bonds have a soft bullet structure.

Issuer	Date	Early Participation Fee	Quorum	Approval Rate	Result
Barclays Bank	16.10.2015	5bp	Meeting 1: 2/3 Meeting 2: 1/3	3/4	Full conversion of all outstanding benchmark covered bonds approved at the first meeting on 09.11.2015. Consequently, more than 80% of all outstanding covered bonds have a soft bullet structure.
Westpac	01.03.2016	5bp	Meeting 1: 2/3 Meeting 2: 1/3	3/4	First meeting on 01.04.2016 achieved consent for five out of six bonds for which votes had been called; the second meeting also produced a positive result for the one remaining USD bond.
Crédit Agricole	01.04.2016	5bp	Meeting 1: 1/5 Meeting 2: -	2/3	First meeting on 21.04.2016 achieved consent for six out of seven bonds for which votes had been called; the second meeting also produced a positive result for the remaining bond.

Source: Consent Solicitations, LBBW Research

As the number of consent solicitations increased, market participants also began to call for more transparency. Investors demanded that both the level of the quorum and the approval rate should also be published together with the results. Barclays Bank was the first institution to provide such a breakdown. A further point of criticism was that the premium was paid only to investors that voted for a conversion. There were demands for all covered bond creditors to receive compensation regardless of how they voted. That demand was first met by Crédit Agricole, which paid all investors an amount equal to 5 basis points of the face value of their bonds after the successful conversion.

Aside from the consent solicitation procedures, further issuers used the soft bullet structure for their newly issued covered bonds. French institutions remained the most active banks in this regard. In May 2015, BNP Paribas (SFH) came to the market with a benchmark soft bullet covered bond for the first time. Further issues with soft bullet structures followed from BPCE (SFH) in July, Crédit Mutuel-Arkea (SFH) in September and Crédit Mutuel-CIC(SFH) in December. The last-named bank just amended its base prospectus in July 2015 to enable it to issue soft bullets. In the end, the only banks still issuing hard bullet benchmark issues in the French market were Compagnie de Financement Foncier (SCF) and Caisse Francaise de Financement Local (SCF). In contrast to the SFHs, only three SCF issuers – Axa Bank Europe, Société Générale and Crédit Mutuel Arkéa (since August 2015) – have given themselves the option to issue extendable maturity structures in their programme documentation.

Stadshypotek AB from Sweden is a further new soft bullet issuer. The issuer amended its base prospectus in November 2014. The first soft bullet benchmark issue finally followed one year later. In addition, since the last publication of its base prospectus in June 2015, SEB AB has been able to use soft bullet structures. However, it has yet to make use of the option.

Association of German Pfandbrief Banks plans maturity deferral as a further option for the cover pool administrator

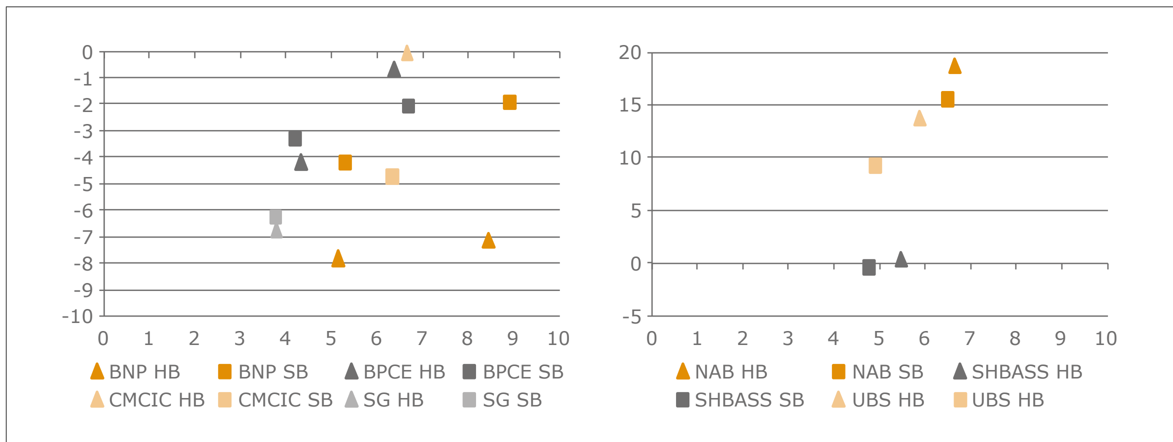
At the end of October 2015, the Association of German Pfandbrief Banks (vdp) presented its views on a possible inclusion of a maturity deferral option in the German Pfandbrief Act (PfandBG) to the German Ministry of Finance. According to the proposals, the cover pool administrator is to be given a further option to avoid the secondary insolvency of a cover pool. However, the aim is to clearly distinguish the option from the extendable maturity structures existing in the market. This is the reason why the term "soft bullet" is avoided. An

important difference is that, unlike contract-based soft bullets, the maturity deferral is to be incorporated into the law. To date, only the Polish covered bond legislation contains such a feature. In addition, the rules on the extension period (proposal: 12 months) and the extension interest rate (proposal: 0.5 percentage points above a reference rate that is normally used by the banking industry for one-month payment periods in the respective currency) are to be the same for all bonds. A further important distinguishing feature is that the decision on an extension is not automatic – in other words it is not linked to a certain event. Instead, the cover pool administrator, who is normally appointed as alternative manager after an issuer's insolvency, may decide to extend the maturity at his discretion. No final decision has been taken whether to introduce the proposed change. If implemented, the planned change in the law is to cover Pfandbriefe currently outstanding as well. The new rule is not intended to affect the liquidity provisions for payments of principal and interest in the next 180 days under §4 (1) (a) PfandBG.

Still no signs of clear spread differentiation

In jurisdictions in which single institutions have both hard and soft bullets outstanding under one programme, it is possible to analyse the spread differentiation, if any, between the two structures. Bonds with similar maturities can be found mainly in France, but also in Australia (National Australia Bank), Sweden (Stadshypotek) and Switzerland (UBS). An analysis of these issuers still reveals no clear spread differentiation between soft and hard bullet covered bonds. One would expect investors to demand higher pickups to compensate for the risk associated with a maturity extension. However, the analysis shows that the spreads of soft bullet paper (SB) are even trading slightly below those of hard bullets (HB) in many cases.

> FIGURES 3A & 3B: ASSET SWAP SPREADS SOFT BULLET COVERED BONDS VS. HARD BULLET COVERED BONDS



Source: Markit, Bloomberg, LBBW Research

The lack of spread differentiation by investors also suggests that issuers are increasingly switching to soft-bullet structures largely for reasons of costs, especially as such structures offer further benefits. They are treated preferentially by rating agencies with regard to lower overcollateralisation requirements. Moreover, the fact that liquidity can be managed more easily also plays an important role. For example, in jurisdictions such as the Netherlands, pre-maturity tests have to be carried out in the case of hard-bullet issues. These involve certain rating requirements. In addition, a certain amount of liquidity must be maintained for the maturities of the next 180 days, which results in additional costs.

Conditional pass-through structures gain momentum

In 2013, conditional pass-through structures were introduced in the covered bond benchmark universe. NIBC was the pioneer issuing a EUR 500mn 5Y benchmark covered bond in October 2013, followed by further

benchmark issues on a yearly basis. While for the first two years, conditional pass-through structures were widely discussed but remained a niche product, it was in 2015 that this redemption format gained momentum. Additional issuers took the conditional pass-through path with UniCredit SpA joining in February 2015 with a EUR 1bn 10Y OBG, van Lanschot Bankiers bringing its inaugural EUR 500mn 7Y benchmark in April 2015, followed by Aegon in November 2015 with a EUR 750mn 5Y, and Banca Monte dei Paschi di Siena converted its programme from soft bullet to conditional pass-through. In Portugal, Novo Banco has a CPT-program in place and Caixa Economica Montepio Geral started a consent solicitation process to switch to CPT at the time of writing this article.

In CPTCB programmes in general, following an issuer event of default, any repayments, including early repayments and excess spread, remain with the cover pool until a covered bond series reaches its SMD. 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 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 overcollateralisation in the programme as well as provisions to address transactions risks like servicing. If the test is failed, the commonly used structure to all covered bonds becoming 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 overcollateralisation (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 32 years to 38 years, depending on the respective program documentation.

PASS-THROUGH VS. SOFT-BULLET

The decisive difference between soft-bullet redemption formats and (conditional) pass-through formats raises the question of the length of the deferral term. The longer the deferral period of the soft-bullet payment regime, the closer the two redemption formats become. The remaining differences are not essential and could be replicated in any case: the (implicit) SARA clause (Selected Asset Required Amount) that e.g. NIBC posts is also frequently found in soft-bullet structures. Thus, during the deferral period, the scope of actions taken by each cover pool administrator is quite similar: both will not hold on to an unnecessary amount of liquidity but will instead use it to partially redeem the deferred principal amount. Furthermore, both will try and find opportunities to liquidate assets (in line with the SARA clause) in order to allow redemption to occur as quickly as possible.

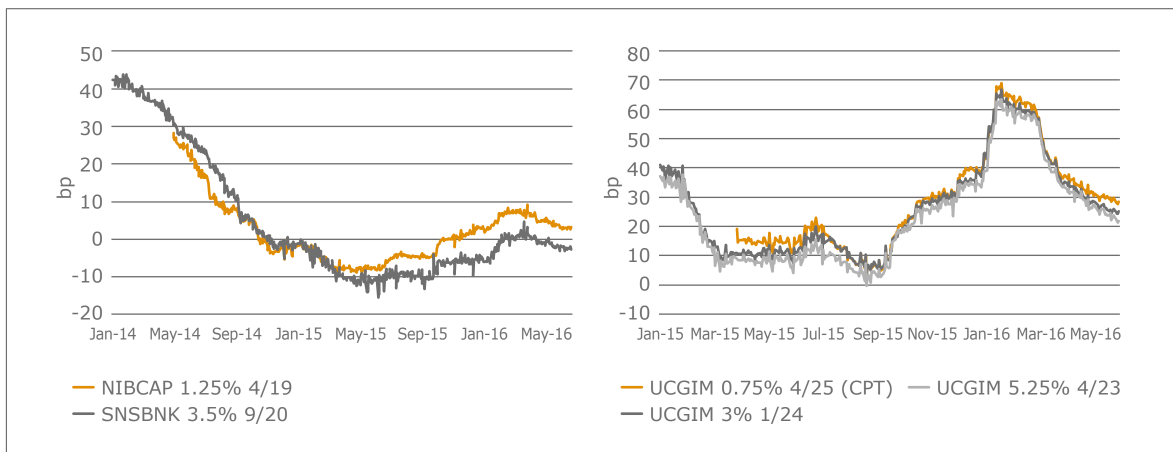
However, the one-year deferral period of most soft-bullet covered bonds provides the cover pool administrator with a relatively limited timeframe in which the required amount of cover pool assets can be liquidated. In

contrast, the opportunities in a (conditional) pass-through case are technically unlimited. Hence, market risk is mitigated with soft-bullets covered bonds and eliminated with CPTCBs.

Issuers' perspective

Issuers currently find themselves in complex situations: At the peak of the sovereign debt crisis, quite a few issuers were seeking funding by retaining transactions which should have been used to collateralise European Central Bank (ECB) open market operations. The ECB applies two different haircut schedules for covered bonds: one for those rated A- or higher and another less-favorable one for those rated in the BBB-range. Non-investment-grade covered bonds do not qualify. However, during the crisis, country ratings in the periphery dragged down the senior unsecured ratings of banks, which, in turn, resulted in lower covered bond ratings. In addition, quite a few assumptions of rating agencies, regarding the legal frameworks, market environment, refinancing cost, foreclosure periods of cover assets, etc., changed for the worse and, therefore, made it necessary for issuers to post ever-higher overcollateralisation. Taking a look at the agencies' analyses of cover pool losses, it appears as if there was a unanimous view that the most significant source of losses was market-related rather than credit-related. Hence, eliminating market risk instantly reduces overcollateralisation requirements by a significant share. This means that issuers are either able to issue more covered bonds against the same amount of collateral and/or are able to achieve higher ratings for their covered bonds with the same amount of overcollateralisation – in any case, a massive increase of efficiency for the entire covered bond funding exercise.

> Figures 4a & 4b: Pricing comparison of CPT-structure vs. soft-bullet structure



Source: UniCredit Research

Usually, one would expect an increase of (funding) efficiency to carry at a positive price. Since the investors accept a greater deal of uncertainty regarding the repayment date without claiming default, one might expect a slightly higher spread for the CPTCB compared to a bullet bond.

However, when comparing NIBC as an CPTCB issuer with SNS issuing soft-bullet covered bonds, the spread difference between conditional pass-through and soft-bullet appears very narrow and is rather attributable to a slightly better senior unsecured rating of SNS than to the difference in structure (see figure 4a). With the CBTCB of NIBC 19 at ms+2bp, the bond trades some 6bp richer than what would be considered a fair SNS spread for the same duration. A similar picture evolves when comparing UniCredit S.p.A.'s two OBG programmes (see figure 4b), with marginal spread difference rather relating to duration than to different formats. Hence, from the point of view of a mere funding spread, the efficiency gain currently comes almost for free. The lack of spread differentiation between maturity types might also be a reflection of the perception among investors

regarding the importance of the maturity type in comparison with other drivers. This is demonstrated in Fitch's *Covered Bonds Investor Survey Year-End 2015*. One of the questions to investors was: *Apart from quantitative easing, what are, in your opinion, the most important factors driving pricing?* The answers provided ranked the covered bond maturity type (hard bullet, soft bullet, conditional pass-through) as the least important behind "country of the issuer" (which had almost double the score of maturity types), "covered bond ratings", "type of asset", "legal framework", "cover pool credit quality", and "bank rating".

However, this is just the pure refinancing cost side. If the total administrative package taken into account, the conditional pass-through format generates less ALM necessities, lower need for derivative transactions and lower need for holding liquid assets, which usually generate negative carry. The only element that remains on the "cost side" for issuers is that opting for conditional pass-through format currently is still not a common format in the covered bond universe and not all investors are yet comfortable with it, thus reducing the potential investor base – in particular, since it is more efficient to opt for a pass-through format the lower the senior unsecured rating (or anchor rating) becomes.

Investors' perspective

Before going into the details of comparing various redemption formats, it is vital to depict the critical point in the life-cycle of a covered bond. Assuming they have the same issuer and identical collateral pools, the cash flows of a hard-bullet, soft-bullet and CPTCB are identical as long as the issuer does not default. In case of an issuer default, the cash flows of either redemption format are still identical if the available cash retained in the cover pool is sufficient. The only "interesting" case from an investor's point-of-view is in the case of (i) insufficient liquidity – because this is the time when a bullet covered bond is prone to default – and a pass-through will start to defer payments or (ii) insufficient collateral – because this is the case when all series of a covered bond programme, irrespective of the repayment regime, accelerate and become due, including fire-sales with large hair cuts.

The following considerations are based on the investment decision between a bullet covered bond and a CPTCB of the same issuer out of two different programmes but based on cover pools that have exactly the same risk characteristics.

Several investors seem to have problems with the very long final maturity date of CPTCBs which can substantially exceed the scheduled maturity. Therefore, they prefer hard-bullets, which carry the obligation to be repaid on the SMD. However, while there are structural differences between the redemption regimes, arguably many of these differences blur quite a lot upon a closer look.

The total damage of any adverse event can be split into a probability of the occurrence of the adverse event and the impact it has once it occurs – the critical question an investor has to answer is whether the adverse event is a deferral of payments or the technical default of an investment. In a hard-bullet case, both events happen simultaneously, while, in a soft-bullet case, and even more so in the case of a CPTCB, the events drift apart.

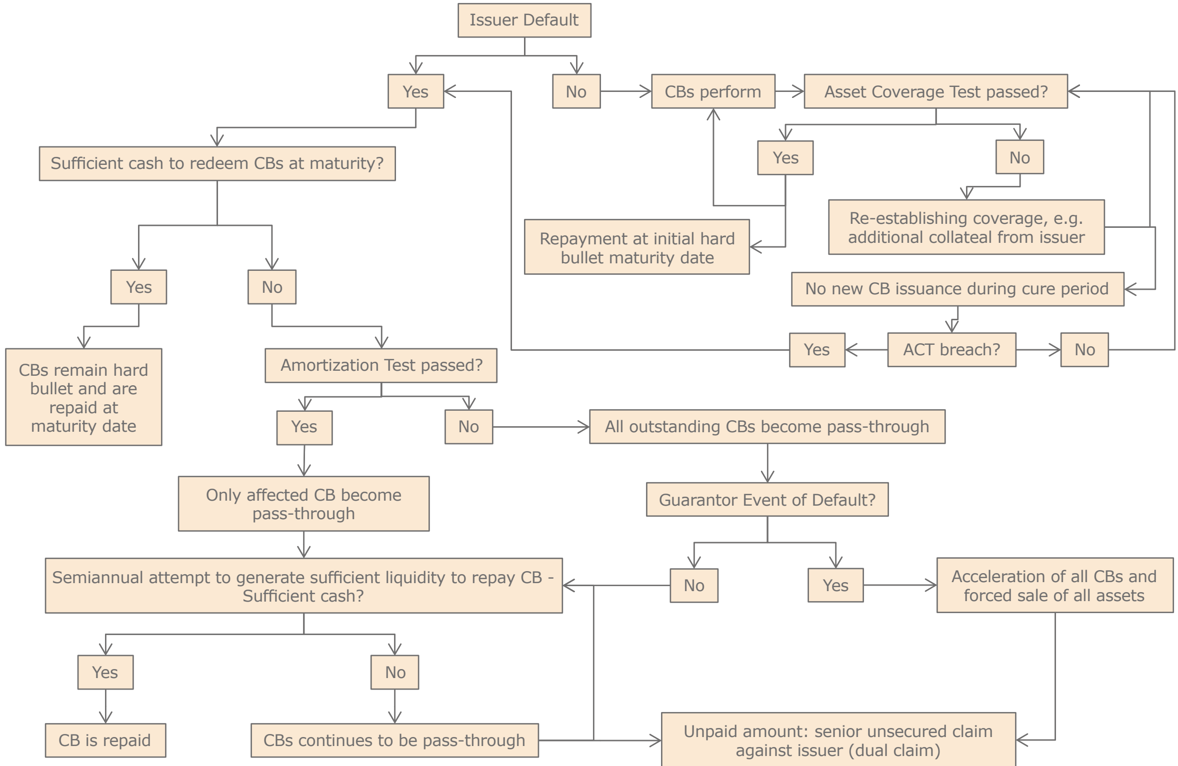
First, we take a look at investors that consider the technical default of a claim more adverse than a payment deferral. In case of a default, the result in terms of cash-flows are quite likely to be similar for both cases, bullet and conditional pass-through. The result in a bullet case would, quite likely, be a creditors' meeting to decide how to treat the leftovers: fire sale or natural amortisation; result unknown ex ante. Thus is the case for a CPTCB; the roadmap is clearer in the CPTCB since there is an ex ante definition of what is about to be done. All bonds fall due and natural amortisation of the collateral will be split pari passu unless a bondholders' meeting votes for something different. The difference comes in the form of the likelihood of the adverse "default" event. In both bullet and pass-through cases, a default could be triggered by asset-quality deterioration and, therefore, in both cases the issuer ex ante would have to post the same amount of overcollateralisation for the same result of assessed credit risk. However, precautionary measures to address liquidity risk in the

cover pool have to be performed by the issuer of bullet covered bonds only. Whether or not the liquidity buffer turns out to be sufficient can only be assessed ex post. In other words, any liquidity buffer is nothing but a suboptimal hedge for liquidity risk. By way of aligning the cash flows from the cover pool to the covered bond investors, CPTCB issuers perform the only existing perfect hedge against liquidity risk. Therefore, the likelihood of a default of the covered bond is lower for the CPTCB. Consequently, an investor that is sensitive to a default of a claim as opposed to being sensitive to payment disruption should rather be focused on CPTCB.

An investor that is rather sensitive to payment disruptions apparently has the opposite rationale. In case of the occurrence of the payment disruption, the impact is probably quite similar irrespective of the payment regime (see rationale above). It might be the case that the net present value of the recovery payment is higher in a bullet regime due to a self-selection of the investor base; investors that fear a payment disruption might rather be inclined to vote for a shorter recovery period at the expense of a slightly lower nominal recovery rate. Investors that decided to invest in a CPTCB might be inclined to maximise nominal recovery at the expense of a longer recovery period. The true difference appears when considering the likelihood of the adverse event "payment disruption". Credit driven occurrence would be similar in both repayment regimes, whereas the likelihood of a liquidity-driven occurrence is much higher for the CPTCB due to the fact that liquidity-driven default-precaution is passed on to investors in the form of the negative event "payment deferral". In the bullet case, the liquidity-driven default-precaution comes in the form of additional overcollateralisation requirements/ liquidity buffers. The liquidity buffers certainly are no perfect hedge against the occurrence of the adverse event "payment deferral" but are certainly better than taking no precautions.

However, given the important role covered bond ratings play nowadays within the regulation framework and in cooperation with central banks (e.g. spread-risk factors under Solvency II, CRR risk-weightings, liquid asset classification under LCR rules, ECB repo haircuts), risk aspects are not the only drivers of an investment decision. Rating-sensitive investors would benefit from the higher and more stable rating of the CPTCB. However, empirical evidence does not indicate significantly tighter spreads of CPTCB compared to slightly lower-rated covered bonds. In our view, this partly reflects the current overall compressed spread environment as well as the fact that some investors cannot buy conditional pass-through transactions due to internal restrictions. As we mentioned above, the likelihood of a payment deferral might be larger than that of a bullet case. Therefore, the uncertainly regarding duration might increase without compensation in form of higher yield. The benefit comes in the form of the investment being more suitable for the regulatory challenges constraining investors in many respects.

> FIGURE 5: COMMON CONDITIONAL PASS-THROUGH STRUCTURE



> FIGURE 6: OVERVIEW OF KEY ASPECTS IN CONDITIONAL PASS-THROUGH STRUCTURES (CPT)

	Pros	Cons
Issuer	Collateral efficiency by reduced OC requirements	
	Less ALM necessities	
	Higher covered bond rating and less dependency on issuer rating level	
	Overall increased funding efficiency	
Investor	Higher covered bond rating and less dependency on issuer rating level	Lower OC levels
	Higher rating stability	Uncertain final redemption date
	Higher expected recovery rate	Increased complexity in analysing structures
	Same regulatory treatment as bullet formats	

Source: UniCredit Research

Rating agencies' perspective

Rating agencies' methodologies have changed quite substantially in the past few years. Recalling Moody's plain and simple rating methodologies for covered bonds back in 2003/04, when covered bonds were all rated 2/3 notches (for mortgage and public covered bonds respectively) above the senior rating, which later was expanded to 4/5 without big analysis supporting it, life has become more complicated. However, analysis is

also more precise and detailed from an academic point of view. The step-by-step analysis of assessing issuer credit risk followed by the assessment of legal/regulatory/market related etc. aspects, and finalised by the assessment of the credit risk/liquidity risk etc. of the cover pool, was a milestone. Starting from the joint default basis, the degree of detail of rating agencies' analyses increased exponentially. The high end of complexity is probably to be found in the analysis of the cost of raising liquidity against a static cover pool in a post insolvency situation. This necessitates an assessment of potential funding sources, assumptions on amounts that need to be raised, valuation adjustments and, last but not least, assessment of the role and the abilities of the cover pool administrator running the matter after issuer insolvency. Against this backdrop, rating agencies have unsurprisingly welcomed the development regarding CPTCBs. Default risk is essentially reduced to credit-risk-driven events.

S&P explicitly stated that conditional pass-through structures can help reduce risks, thereby adding to the stability of its covered bond ratings. CPTCBs reduce, in particular, the asset-liability mismatch risk, which typically contributes more than two-thirds to S&P's overcollateralisation requirements. Fitch stated that in its covered bond methodology, a covered bond programme with no asset-liability mismatch risk, can be rated on a de-linked basis from the issuer. This is because there should be no obligation to liquidate cover assets at any cost, thereby removing the majority of payment interruption risk for covered bonds after an issuer default and leading to a discontinuity risk profile that is more in line with amortising structured finance transactions. The reason that Fitch has not entirely delinked the CPTCB rating from the issuer rating – in contrast to structured finance (SF) transactions – is because covered bonds allow for significantly more flexibility regarding cover pool composition and issuance capacity than typical SF transactions.

Moody's stated that CPTCB can remove refinancing risks effectively. Thus, the credit quality of CPTCB can be much less dependent on, or even independent of, the supporting bank's credit strength. However, the type of structure that the issuer decides to use will determine the degree to which the programmes can effectively mitigate refinancing risk. Moody's identified different mechanisms that lead to different levels of mitigation for refinancing and time subordination. The level of overcollateralisation at deal inception is a key parameter in this respect. Even in CPTCBs, a fire-sale of the cover pool at high discount rates might occur, if OC levels are insufficient and as the breach of certain test, e.g. the amortisation test, may lead to an event of default. Additional key elements are the evaluation of swap agreements, servicing and counterparty risks as well as legal risks (set-off risk, commingling risk, claw-back risk).

CONCLUSION

Covered bonds with extendable maturities are becoming more and more common on the covered bond market. In the meantime, you can find them in almost every covered bond jurisdiction. The largest share goes to soft-bullets where extension periods are typically 12 months. Another interesting addition to the existing soft- and hard-bullet structures are CPTCBs. In most scenarios, the cash flows of the various redemption profiles would be similar, all else equal. In a worst-case scenario, after issuer default and in a situation where their cover pool is not sufficiently liquid, CPTCB promise a lower nominal loss at the expense of investors accepting a potentially much longer deferral period compared to those of hard-bullet and typical soft-bullet structures. Hence, investors have to make up their minds, which adverse event they are more inclined to accept, i.e. payment deferral or technical default. From a regulatory perspective, CPTCB offer higher ratings, higher rating stability and less asset encumbrance. The higher complexity, the fact that CBTCB could switch into pass-through mode, together with the CBTCB very long theoretical final maturity dates represent a big hurdle for many investors. But despite of this, we have seen a higher acceptance for both – soft-bullets and CBTCB – in the last few months.

1.7 AN ANATOMY OF A SUCCESSFUL COVERED BOND JURISDICTION

By Agustin Martin and Aaron Baker, BBVA and Colin YS Chen, DBS Bank & Chairman of the ECBC Global Issues Working Group

Covered bonds, since their inception in 1769 in Prussia, have grown to become a significant bank wholesale funding instrument across Europe, praised for their stability and limited credit risk (to date, there has been no actual default of a covered bond programme); in fact, banks in certain jurisdictions such as Denmark fund their entire mortgage lending activities via covered bond issuances.

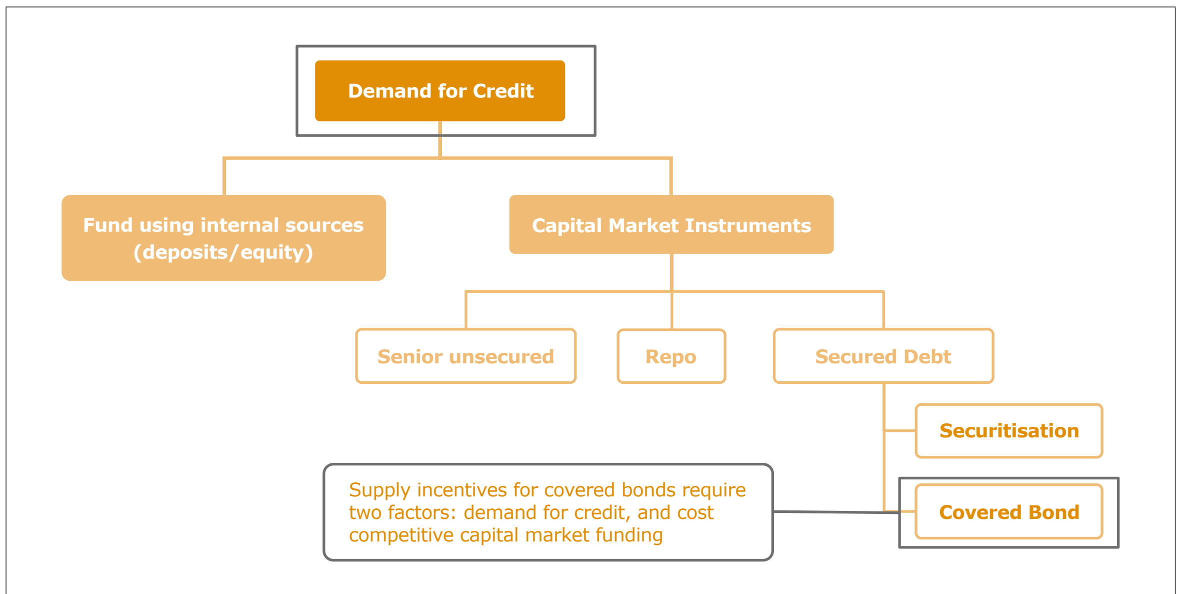
> Figure 1: Covered bond issuances outstanding by region of issuer (EUR bn)

Region	EUR bn
Developed Western Europe	1,567
Emerging Western Europe	1.7
Developed Non-Western Europe	207
Emerging Non-Western Europe	0.5

Source: Bloomberg, BBVA GMR

There are 17 European countries which have market quoted covered bonds outstanding with the largest markets being Germany, France, Spain and the Nordics. That said there are a multitude of other European countries which have seen no meaningful issuance despite the existence of covered bond legislation (28 countries in the EEA have a covered bond legislation) permitting their issuance including Bulgaria, Hungary and Lithuania.

> Figure 2: Funding demand for credit (simplified, loans omitted)



Source: BBVA GMR

Since 2013, covered bonds have become an increasingly global debt product, with a steadily declining proportion of Europe-based issuers, with Canadian and Australian issuers notably ramping up their issuances; in fact, YtD (April 2016), Canadian issuers have issued the most covered bonds (EUR 17 bn equivalent) per issuer nationality. Furthermore, we have seen recent additions to the covered bond family with South Korea, Singapore and most recently Turkish issuers all engaging in the covered bond market, whereas revamps of

covered bond frameworks to make them more internationally desirable have made rapid advances in emerging Europe, for example in Romania and Poland.

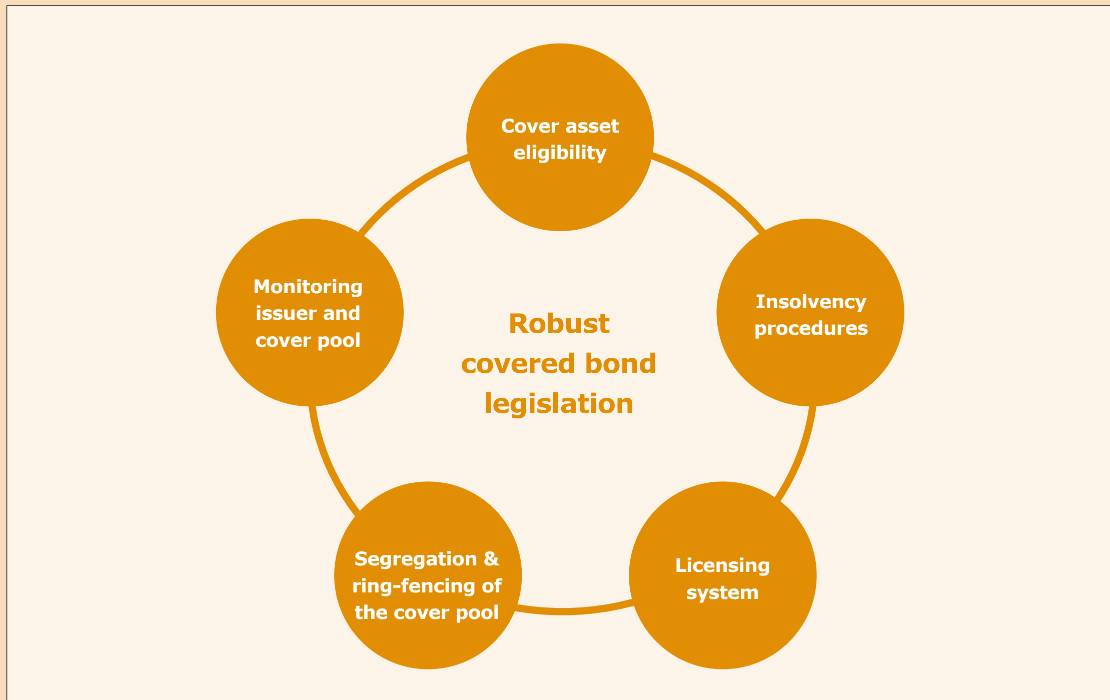
In this article, we attempt to answer the question of what are the necessary pre-conditions for the incorporation of a meaningful covered bond bank funding channel for issuers. We focus on Turkey and Brazil, given our expectation that these jurisdictions could see the development of substantial covered bond markets in the medium term.

ANATOMY OF COVERED BOND LEGISLATION

A traditional feature of all major covered bond markets is that they tend to be structurally supported by dedicated legislation which carves out covered bonds from general insolvency proceedings, and segregates the secured assets ('cover pool') should an issuer default. This legal protection, in contrast to other forms of secured funding such as securitisation, is a crucial characteristic for covered bond investors.

Covered bond legislation basically falls into two parts, a) primary legislation, and b) secondary legislation. Primary legislation tends to carve out covered bond security and enable ring-fencing over the cover assets from general insolvency and/or bank resolution regimes. Secondary legislation refers to rules relating to the operation of covered bond programmes and supervisory responsibilities; this can include eligible assets, stress-testing, cover pool management and monitoring requirements.

> FIGURE 3: ESSENTIAL ELEMENTS OF A ROBUST COVERED BOND LEGISLATION



Source: BBVA GMR

In our view, covered bond legislation is a necessary but not a sufficient condition for the successful introduction of the covered bond product, albeit with the notable exception of the UK covered bond market before legislation was enacted in 2008. There have even been examples within developed covered bond markets where legislation has opened a door that no bank has actually needed to open such as the Spanish export-guarantee

loan covered bonds (Cedulas Internacionalizacion) whose legislation received royal assent in 2013, which has never reached a publically issued format, which supports our argument.

Shifting our gaze to Latin America, there are a multitude of covered bond legislations with various levels of robustness, when compared to European equivalents, including legislations present in Colombia, Uruguay, Peru, Paraguay, Panama and Chile with only arguably the latter having limited, locally distributed covered bond issuance with certain features which make the product less compelling for international investors. We would posit that there are four key factors which explain the success of a jurisdiction in issuing covered bonds, with each factor explained in more detail in Appendix 1.1:

> Figure 4: Key factors that are condition precedents for successful covered bond market

Key Factor	Explanation
Macro-conditions	Essentially the factors which predicate demand for residential housing, the principal collateral backing covered bonds including GDP, unemployment, inflation and credit demand.
Market infrastructure	Security enforceability for the underlying collateral, including foreclosure processes and real estate information in order to accurately gauge collateral value.
Financial markets	The degree to which the financing is in demand by end-users (to purchase properties), the degree to which funding is needed outside the deposit-based system and the degree to which financial, in particular bond, markets are developed alongside alternative debt products
Legal and regulatory provisions	Confidence in the legal and regulatory supervision as well as its comparability to established covered bond jurisdictions. In order to internationalise the market, issues relating to withholding taxes for foreign investors are also crucial.

Source: BBVA GMR

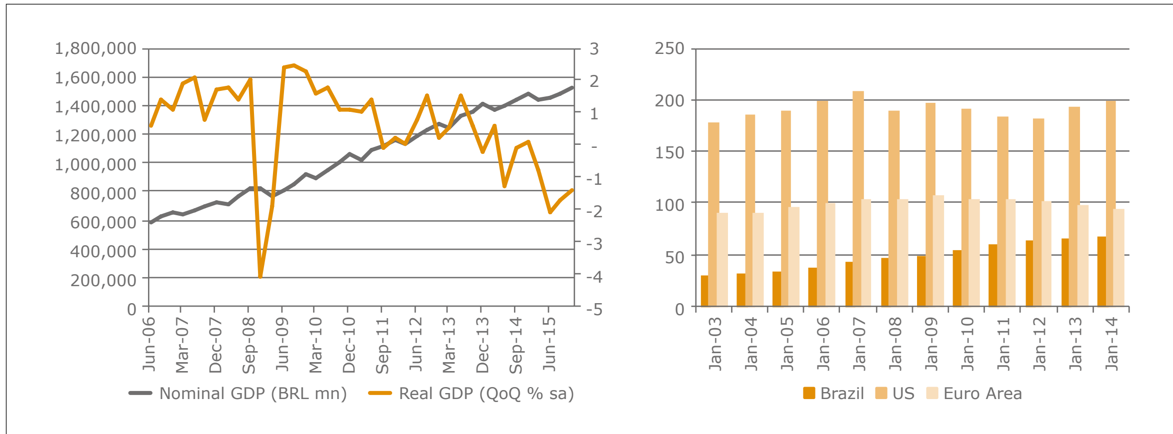
Moving to the specific cases of Turkey and Brazil, the former has had primary and secondary legislation in place since 2007, albeit updated in 2014 to enable the technical use of residential covered bonds for international investors, whereas the latter passed primary legislation in 2015 (still awaiting secondary legislation and regulatory requirements as at the time of writing). Turkey has already seen the first issuance by Vakifbank sold into Europe with much fanfare (over 4x subscribed, making it the largest book order in EUR covered bonds YtD), which closed on 26 April 2016; such robust demand indicates that the monetary conditions and yield compression in the European fixed-income markets can have beneficial spill-over effects for developing covered bond markets.

Mindful of this, we take a look at some of the key factors which we list in Appendix 1.1 which help to explain the initial green shoots of a covered bond market in Turkey versus the promised Brazilian covered bond programmes.

BRAZILIAN COVERED BONDS: WAITING FOR THE SAMBA TO START

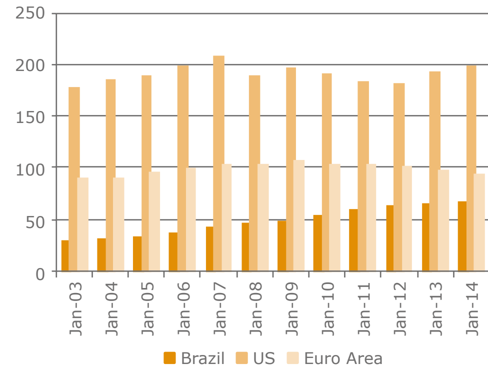
Brazilian covered bonds, by definition backed by residential mortgage assets, require not only demand for residential credit within the banking system, but also the exhaustion of more typical emerging market banking funding sources like deposits. Demand for residential mortgages is highly correlated with GDP growth, which in turn drives demand for credit within the economy for investment, residential or otherwise.

> Figure 5: Nominal and GDP growth rates



Source: Bloomberg, BBVA GMR

> Figure 6: Domestic private credit to GDP (%)

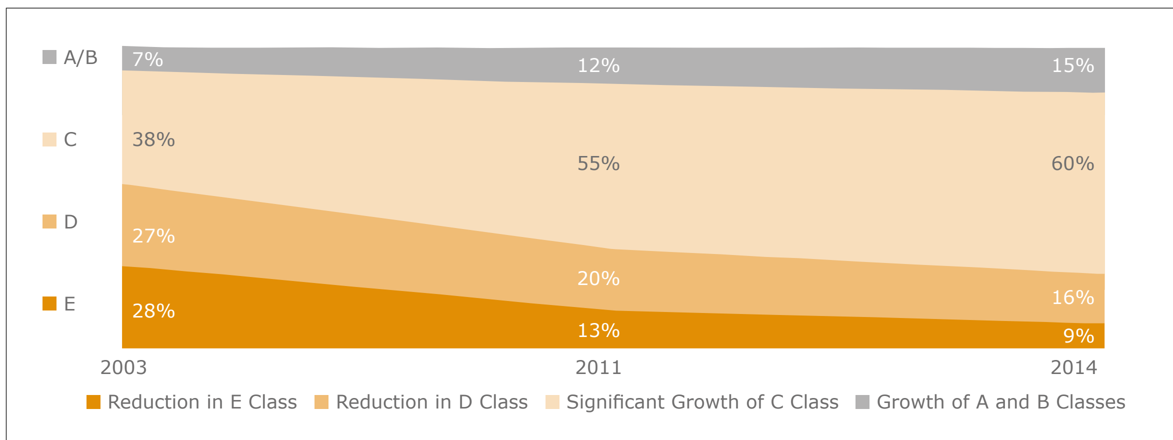


Source: World Bank

The ability of Brazilian banks to advance longer-term credit, crucial for products like residential mortgages, is helped by the relative stability of inflation numbers with inflation figures being in a range of 3-7% between 2006 and 2015, although more recently, this figure has surged to 9.4% as a result of wider macro-economic instability.

Demand for housing is underpinned not just by population growth (+11% between 2006 and 2013), but also more importantly, the emergence of a larger middle class i.e. the 'aspiring class' which tends to seek residential ownership thereby providing a structural underpinning to the housing market in Brazil.

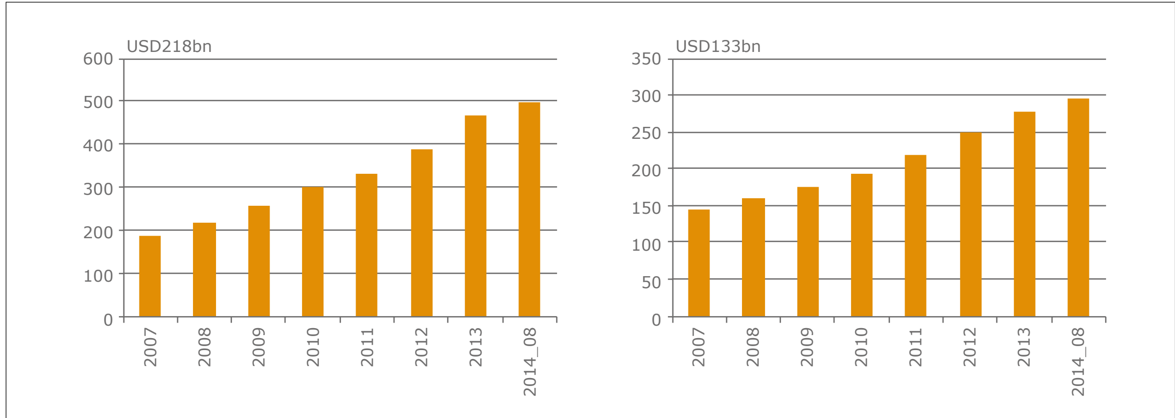
> Figure 7: Brazilian socio-economic classes (% of total)



Source: FGV, BBVA GMR

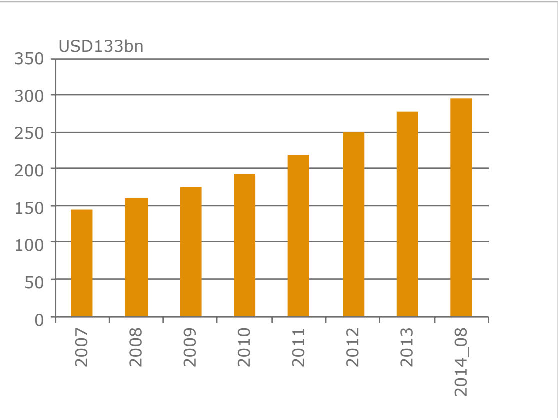
The main sources for financing residential housing demand is via the Savings and Loans Banking System (SBPE) and the Employee Retirement Fund (FGTS), which together account for over 90% of the financing of the Brazilian real estate market. According to the Central Bank of Brazil, 65% of savings accounts are funnelled through to real estate credit as a matter of regulatory preference whereas the FGTS are utilised for low-income housing.

> Figure 8: SBPE (BRL bn)



Source: BCB and Federal Savings Bank (CEF)

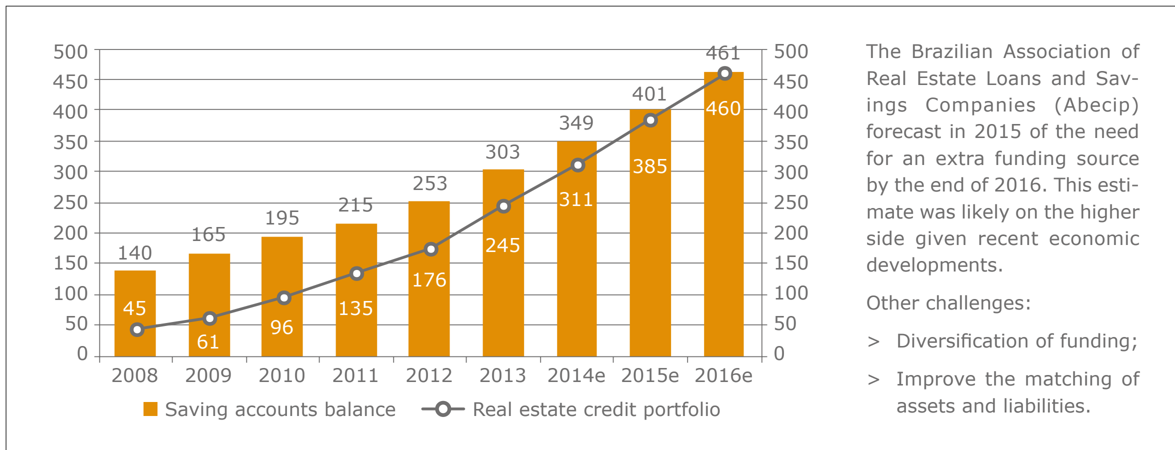
> Figure 9: FGTS (BRL bn)



Source: BCB and Federal Savings Bank (CEF)

The Brazilian banking system's capacity to sustain the growth in demand for housing credit is showing increasing signs of strain, with earlier estimations by the Brazilian Association of Real Estate Loans and Savings Companies (ABECIP) indicating that the savings account funding method could be exhausted in the next few years.

> Figure 10: Brazilian saving account balances still largely fund the banks' real estate credit provision



The Brazilian Association of Real Estate Loans and Savings Companies (Abecip) forecast in 2015 of the need for an extra funding source by the end of 2016. This estimate was likely on the higher side given recent economic developments.

Other challenges:

> Diversification of funding;

> Improve the matching of assets and liabilities.

Note: The "Savings Accounts Balance" corresponds to 65% of the total value of Savings, which must be allocated to housing loans.

Source: ABECIP

Naturally, the reliance on such short-term liabilities to fund longer-term assets poses a financial stability question with Brazilian regulators looking to alternative funding products which can be used to 'term-out' the funding for residential mortgages; covered bonds are an obvious bank funding product for such purpose.

BENEFITS OF COVERED BONDS IN THE BRAZILIAN FINANCIAL SYSTEM

The expected benefits of the incorporation of covered bonds as an alternative funding source for Brazilian real estate credit include:

> Increased overall funding for real estate credit beyond what the savings and loan system can sustain.

> Better matching of assets and liabilities with covered bonds known to have amongst the longest tenors for bank debt other than capital instruments.

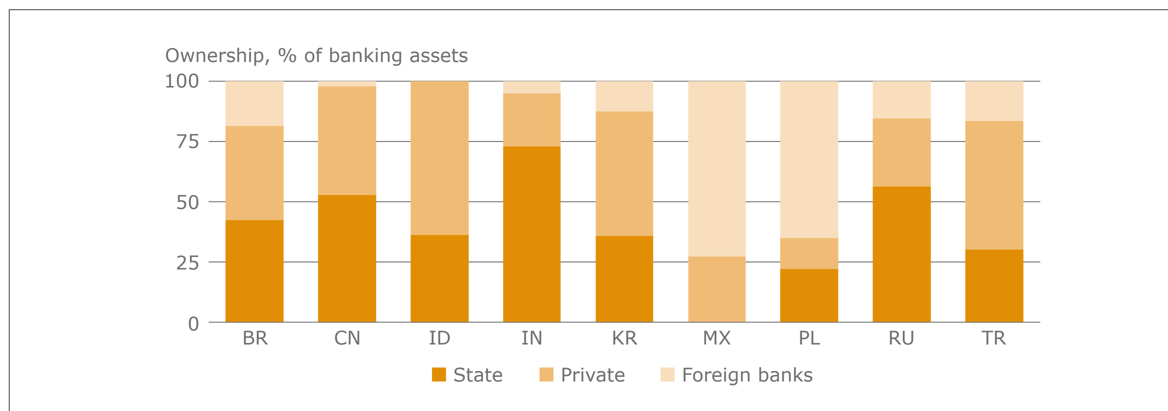
> Potential to attract foreign capital, especially from the product's European heartland as is clearly demonstrated by the cross-over, and more importantly the yield pick-up, seen in Turkey's first internationally distributed covered bond.

> Enables entry of medium-sized banks, which did not previously have sufficient deposit volumes to engage in the real estate financing market, promoting competition.

> Potential driver of the non-sovereign/state-backed long-term fixed-income market.

Before looking at a place where a covered bond market could fit into the banking system, it is important to note that by and large, covered bonds are funding instruments of private banks. This is because while they offer defined pricing advantages over senior unsecured issuances, their price advantage over sovereign and/or sovereign-related enterprises has only really been seen in peripheral Europe, in a market where there is arguably the over-arching authority of the EU to protect the systemic importance of the covered bond product. In Brazil, c.45% of the banking assets are in the hands of state banks, which while not necessarily unusual for emerging economies, does limit the potential size of any embryonic covered bond market.

> FIGURE 11: BRAZILIAN BANKING ASSETS HAVE A HIGH STATE OWNERSHIP RATE, BUT THIS IS NOT NECESSARILY UNUSUAL



Source: Fitch, BBVA GMR

Finally, it is important to note that wholesale real estate debt financing products are not non-existent in Brazil, and there are several competing alternative wholesale financing products to covered bonds. In Brazil there are:

> **Real Estate Investment Funds (FII)**: these are a type of mortgage REIT which enables the investment into real estate leases, property development and other real estate-related financing activities.

> **Certificate of Real Estate Credit Receivables (CRI)**: these are effectively securitisations backed by real estate loans and purchased by institutional investors.

- **Real Estate Letters of Credit (LCI)**: these are fixed-income securities, backed by real estate loans, which are tax-exempt for domestic investors and whose returns are typically backed by some percentage of a house price and/or interest-rate index.

The global covered bond community's expectation for many years has been that Brazil will join the covered bond fraternity, although there have been headwinds since 2H15, notably from macro-economic instability partly caused by the fall in commodity prices, which has led to a contraction in GDP and rising inflation.

Having said that, the principal condition precedent for the establishment of a covered bond market, legislation, still remains elusive in Brazil. In 2015, there was a stepped move towards the establishment of covered bonds in Brazil with the passing of primary legislation which set up the legal establishment of covered bonds and their asset cover pool segregation. As at the time of writing, we are still waiting for the secondary legislation to be passed, detailing the regulatory limitations for Brazilian covered bonds and crucially, in terms of domestic and international capital demand vs. existing real estate-related capital market products, the income tax exemption status.

In our view, Brazilian covered bonds would make an important contribution to private Brazilian banks' funding toolkit, especially in respect of reducing their asset-liability duration mismatch. The success of the product is predicated on there being sufficient domestic and international investor demand, in addition to continued increases in demand for real estate credit which has recently substantially tapered owing to wider macro-economic uncertainties.

TURKISH COVERED BONDS: BREAKING THE EMERGING MARKET COVERED BOND PARADIGM

Unlike Brazil, Turkish covered bonds have had legislation since 2007, alongside the first SME-backed issuances in 2011, albeit their widespread adoption and crucially, appeal to international investors had not been tested until recently. The market has taken time to get off the ground, in our view predominately due to:

- SME-covered bonds still lack material investor appetite amongst traditional covered bond investors.
- The release of the first version of the Turkish covered bond legislation was in 2007, shortly before the market turmoil caused by the credit crunch.
- The mortgage-backed covered bond framework required updating in order for it to be comparable to nearby European jurisdictions, which happened in 2014.
- Currency stability versus EUR in light of commodity market volatility, political uncertainty and market expectations of US monetary policy has helped settle EUR/TRY volatility, making the required covered bond swap more economical to use.
- Difficulties in breaking the emerging market investor focus on sovereigns/large corporates and covered bond investors who invest in developed markets prompting a disconnect in terms of investor attraction for Turkish covered bonds.

While the above list is not intended to be exhaustive, Turkish covered bonds blasted out of the starting bloc on 26 April 2016 when Vakifbank issued the inaugural EUR denominated EUR500mn Turkish covered bond, attracting over EUR3bn of demand from more than 300 accounts, shattering the illusion that covered bonds were solely an instrument for developed economies.

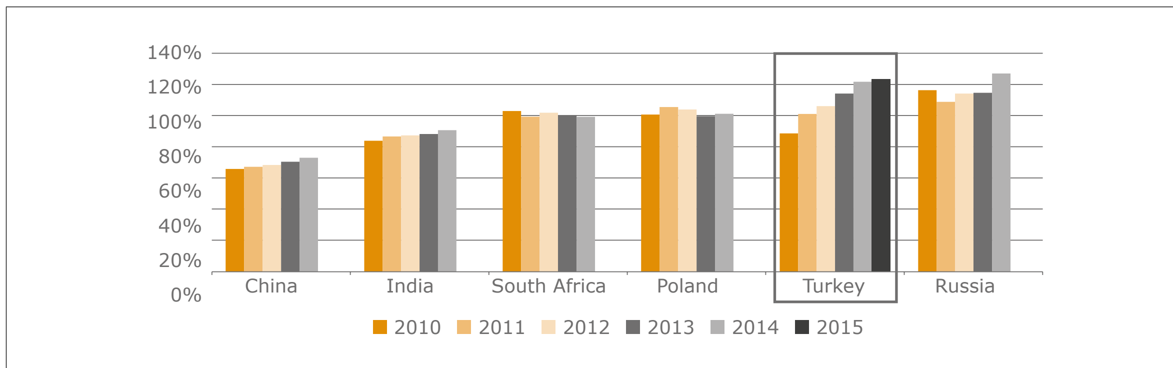
While Turkish covered bond legislation has been in place for several years already, even in its updated format, which has comparable features to the best practices of several European jurisdictions, there has been little interest from real-money investors; six Turkish banks have created covered bond programmes with four having issued notes. Prior to the Vakifbank transaction, which was not only the first Turkish covered bond to be placed with real money investors but also the first foreign currency denominated bond, demand for Turk-

ish covered bonds predominately came from multilateral development banks as part of their capital market development programmes.

In our view, the successful placement of the Vakifbank mortgage covered bond has been heavily influenced by the now stable government following the elections in November 2015, and favourable issuing conditions for covered bonds in the Euro market; the latter, given the role of CBPP3 in depressing spreads for the European product has only enhanced the relative value of the Turkish product with beneficial rotation of investors outside of European covered bonds into higher yielding alternatives.

Unlike the Brazilian situation, the Turkish banking system's capacity to fund loan demand with deposits has been surpassed for a number of years now with the Turkish banking system having a loan-to-deposit ratio of c.120%. This reliance on funding, other than deposits, is a function of Turkey's relatively low savings rate (Turkey's FY15 savings rate was 15% of GDP) and robust demand for loan growth, which has been supported by favourable demographics and GDP growth.

> Figure 12: Loan-to-deposit (LTD) ratios of Turkish banks have risen sharply over the last five years



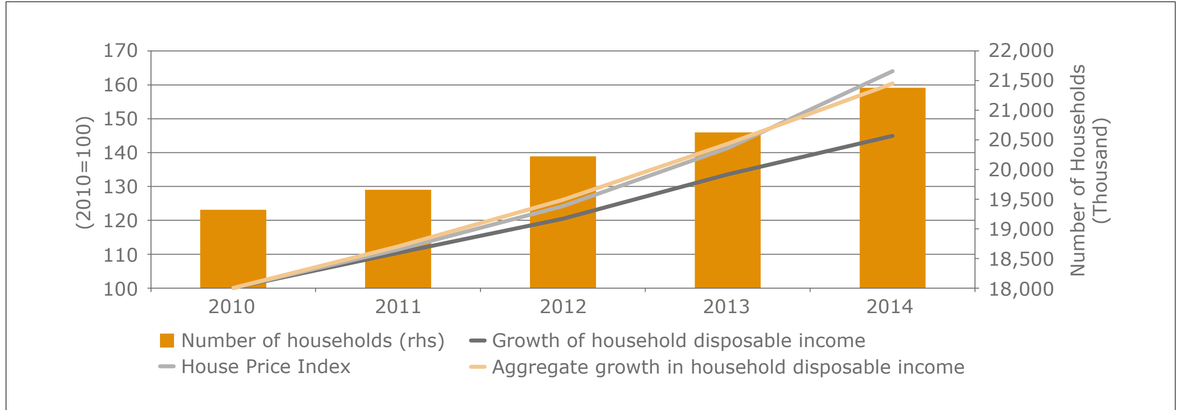
Note: System wide bank only figures for Turkey

Source: Moody's Investors Service, BRSA

Mortgages, the staple collateral in the majority of global covered bond programmes have increasingly made up a greater proportion of credit demand, with mortgage lending itself increasing 14% YoY as at YE15. In fact, investors tend to prefer residential mortgage collateral over riskier SME collateral with the difference in the average Moody's Collateral Score being almost double for Turkish SME backed covered bonds vs their mortgage equivalent (22% vs. 10.4%); this also pans out in sector NPL ratios with residential mortgages having a c.0.5% ratio versus more than 3.9% for SME NPLs.

The demand for mortgage credit has been enhanced, as in Brazil, by increasing household growth and increased household disposable income with a shortage in existing housing stock contributing to Turkish house prices being amongst the global top 5 in terms of house price appreciation, increasing 30% and 84% since 2010 in real and nominal terms respectively.

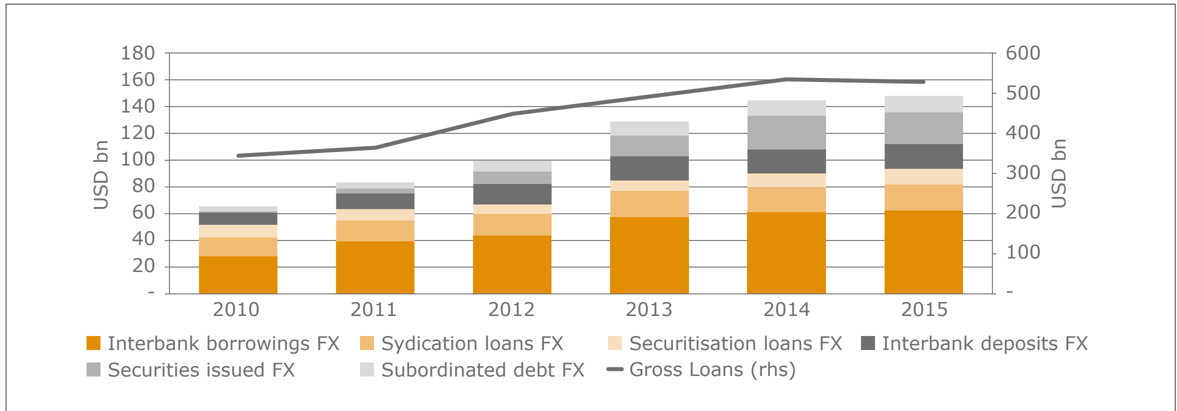
> Figure 13: House price increases supported by increase in disposable income and number of households



Source: Moody's and TurkStat

In order to fund lending beyond internal balance sheet sources including deposits, Turkish banks have increasingly sought to borrow from the capital markets with capital market borrowing at a bank system level effectively doubling in the last five years. Notably interbank deposits, syndicated loans, and securitisation loans (diversified payment right securitisations) make up the majority of the capital market funding instruments of choice. Senior unsecured issuances are increasing their footprint in the Turkish banks' capital market funding footprint and it is the comparative funding advantage of covered bonds versus senior unsecured which would provide increased impetus following the lead of Vakifbank with an increased penetration of the Turkish covered bond product.

> Figure 14: Turkish banks' capital market borrowing has more than doubled in the last five years



Source: Moody's Investors Service, BRSA, CBRT

Turkish covered bonds have the benefit of widening the investor base for Turkish bank debt products, especially to an investor segment whose traditional product has been subject to substantial reductions in market yields (i.e. European covered bonds); they also have key benefits which Turkish supervisors have noted.

At a system level, Turkish banks have duration gaps in their funding whereby their assets have a much longer duration than the funding liabilities, increasing the liquidity gap. Utilising covered bonds, when proxying the maturity profile of their European counterparts, can add longer term funding beyond duration levels which

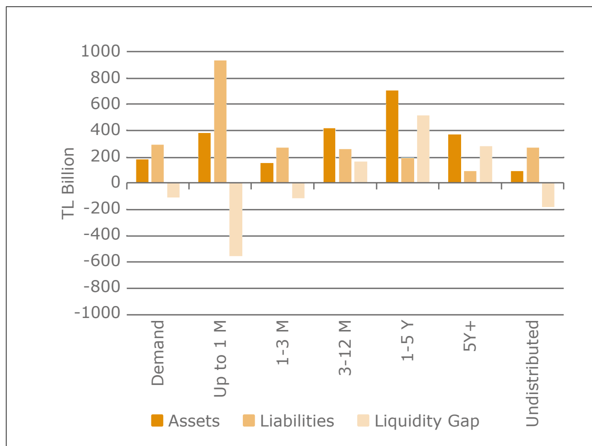
investors target in the senior unsecured market; this is primarily because covered bonds tend to have a lower beta than senior unsecured.

Furthermore, covered bonds can lead to profitability enhancements which can contribute to bank earnings given their lower funding cost versus senior unsecured. This differential increases notably where jurisdictions have passed bank resolution legislation in order to 'bail-in' senior unsecured as per the European case.

The appeal of the Turkish product for European covered bond investors is underpinned as the legislation and regulation are aligned with European standards and in some cases, are stricter such as the 75%/50% LTV limit for residential/commercial mortgages. Interestingly, all mortgage covered bond programmes, that to our knowledge are in existence contractually, preclude commercial mortgages from inclusion in the cover pool.

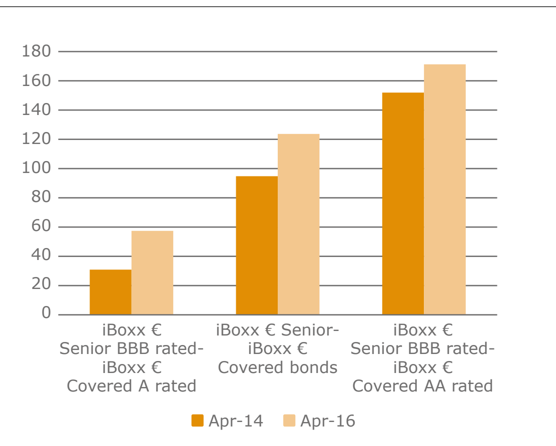
Vakifbank's covered bond issuance and demand was a case in point for this pricing/investor demand advantage which not only priced 30bp tighter than IPTs at issue at m/s+250bps but according to syndicate commentary, priced +c.15-20bp vs. a hypothetical similar maturity Turkish sovereign and c.80bp inside where a Vakifbank senior unsecured deal might have traded in Euros. There is some margin of error in these estimates given the limited liquidity in the Vakifbank EUR senior unsecured curve in addition to the longer duration outstanding bond maturing two years prior to the covered bond (2019 vs. 2021).

> Figure 15: Maturity structure of Turkish banks' assets and liabilities (Sept 2015)



Source: The Banks Association of Turkey

> Figure 16: European covered bond & senior unsecured spreads have widened since 2014



Source: Markit via FactSet

BRINGING IT ALL TOGETHER: OUR EXPECTATIONS FOR EMERGING MARKET COVERED BONDS

Referencing our two case studies of Turkey and Brazil, it is important to note that there are a multitude of emerging market jurisdictions which have the mechanics in place to issue covered bonds, Brazil being the glaring exception owing to the current lack of secondary legislation. There are also a multitude of reasons why it has taken so long for the capital markets fraternity to fully welcome cross-border distributed emerging market covered bonds. We remain of the opinion that emerging market covered bonds will remain a higher yielding niche alternative whose interest has been directly supported by the outsized impact of ECB actions on the European covered bond product.

We expect Turkish covered bonds to continue to proliferate, especially given the robust demand and completion of the all-important 'price discovery' process for the first Turkish mortgage covered bond. Furthermore, the Turkish banking system's need for viable, economical alternatives to fund credit demand gives covered bonds a natural advantage given the viability of Vakifbank in demonstrating investor demand and reduced execution

risk. We continue to see 'spill-over' investor demand into emerging jurisdictions which are close to the Western European investor base, including Romania and Poland.

This was confirmed up by recent comments affirming the European Bank of Reconstruction & Development's (EBRD) commitment to investing in covered bonds from this region, which we believe could lead to it becoming an anchor investor to enable a deeper penetration rate by European covered bond investors. We have already seen evidence of this support in the EBRD's investment in the first local currency Polish covered bond under their revised and updated covered bond legislation. Furthermore, there is a notable increase in interest in the product among Eastern European regulators, with the starkest example being a recent regulatory rule in Hungary stipulating that 15% of mortgages have to be financed through covered bonds.

Outside of emerging jurisdictions that are bordering Europe, we continue to see the biggest market potential in Brazil; aside from the legislation however there are a multitude of tax, investor education and macro-economic stability hurdles that this jurisdiction will need to overcome, probably in the medium term, before we can welcome it to the global covered bond fraternity.

APPENDIX 1.1: KEY CHECKLIST FOR ESTABLISHMENT OF A SUCCESSFUL COVERED BOND MARKET

> Figure 17: Checklist for establishment of a successful covered bond market

Key Point	Sub-point	Explanation
Macro-conditions	GDP	GDP growth tends to be positively correlated with demand for credit and thus the need to fund such credit. Where there is growth, especially in emerging markets, deposit-based financing systems eventually become exhausted necessitating external financing, of which covered bonds, when well designed, provide a stable entry point for investors.
	Unemployment	Lower unemployment tends to have a positive effect on consumer sentiment which drives demand for longer-dated credit i.e. mortgages.
	Demographics	Increases in population, and positive increases in 'striving' socio-economic groups (young & upwardly striving) set the stage not only for increased housing demand, but also for housing purchases. Furthermore, demographics is a key factor in household formation, which has an important role to play in demand for new housing stock.
	Inflation	Stable and predictable inflation is important for the accurate pricing of long-term debt. Chile is an interesting case as its covered bonds are issued in inflation protected units (Unidad de Fomento) even though the cost of the inflation-hedge is absorbed by the issuer. We do not see high inflation, should it be structural, as a substantial issue as long as the inflation level is stable and/or predictable in order to aid proper pricing.
Market infrastructure	Housing Title system	The certainty of property rights needs them to be defined which in turn is reliant on some form of housing registry system. Coverage of rural areas in such a system can be an issue in emerging markets, and ideally these records are computerised in order to ensure the robustness of the recording system.
	Mortgage transfers	Transfer of ownership between individuals/companies, and where relevant, across states, are important considerations should such mortgages be considered to be monetisable through refinancing/repo-ing.
	Foreclosure process	Efficient, and cost effective foreclosure process is ideal in order to improve cash flows on defaulted mortgage assets should payment reliance switch to the cover pool. However long foreclosure periods such as an average of c.5 years in Italy, are not necessarily a hard barrier to covered bond adoption.
	Real estate information	Information related to real estate markets including valuation proxies and appraisal standards with a data history are necessary in order for investors to derive comfort from the value of the collateral backing the covered bond.

Key Point	Sub-point	Explanation
Financial markets	Critical mass of investors	**Domestic investors**: the presence of a strong domestic investor base tends to be predicated on governmental policies to encourage savings to create institutional investment capacity. **International investors** tend to rely on at least the partial 'buy-in' of domestic investors in order to 'market-test' the product as well as covered bond legislation which is comparable to European standards. Co-investment with development banks tends to be important for first-mover investors in new covered bond jurisdictions. Covered bond investors tend narrow their investment geographies to those they consider 'developed markets' (hence the Canadian, Australian, South Korea, Singapore focus outside of European covered bonds). **Economic levels**: the relative value versus sovereigns as well as the local currency equivalents of any EUR/USD (the predominant currencies for covered bond issuances) covered bonds marketed internationally is important, as well as a saving vs. other debt instruments which compete with covered bonds as a funding channel from the issuers' perspective. Local currency stability to the EUR/USD is important for any either issuer or investor led swaps to be cost effective.
	Issuer needs	**Funding requirement**: covered bonds, being a wholesale debt market instrument are only required to the extent that, most typically, the deposit base is not sufficient to meet credit demand for mortgages. **Maturity requirement**: covered bonds have been praised by various sections of the market and regulatory community for their ability to 'term-out' funding for longer-term lending like mortgages, reducing the mismatch between short-duration deposits/commercial paper and longer duration mortgage lending. **Beneficial pricing**: covered bonds, while useful in many issuers funding toolkit are only considered, given the work involved to set up a programme and commit to investor education, where they offer a pricing alternative to other funding alternatives including securitisation, syndicated loans and senior unsecured bond issuances. **Type of issuer**: We distinguish between government, specialised and general private banks. The latter two, through the virtue of their non-sovereign like risk profile tend to benefit most from covered bond programmes which can offer savings vs. other capital market term instruments like senior unsecured. Government issuers tend to issue at near sovereign-bond levels and at least outside of peripheral Europe, covered bonds do not offer savings to government bond curves, reducing their attractiveness. There are particular cases however such as the Korea Housing Finance Corporation where even government related enterprises can benefit through capital market leverage.
	Investor needs	**Diversification**: investors looking to gain lower beta forms of bank credit can benefit from going into covered bonds. Developed market investors can gain international diversification outside of Europe for example in order to generate incremental yield. **Duration requirement**: in general, covered bonds tend to have longer duration than their senior unsecured brethren, and outside of sovereign bonds, covered bonds, where established, can be a good option to get long duration exposure with lower-beta credit risk. **Regulatory benefits**: clearly the most favourable regulatory regimes for both risk weight and repo criteria are in Europe. To the extent that investors, domestic or otherwise gain such benefits, they can lead to a structural demand for covered bonds; this is shown by the demand from European investors for Canadian covered bonds given their eligibility for ECB repo.
	Bond market	Covered bond market development is predicated on there being an existing, active bond market with liquid sovereign and corporate curves in order to provide pricing guidance. To the extent that the bond market is dominated by just government issuances, then it becomes more difficult to price financial credit, and by extension covered bonds, hindering their development.

Key Point	Sub-point	Explanation
Legal and regulatory provisions	Covered bond law	This is mandatory in order to differentiate the dual-recourse nature of the covered bond product, without which, the market would simply discount the bond as a senior unsecured which would not be economically desirable from an issuers' perspective. Comparability with European jurisdictions best practice is considered mandatory for international investor buy-in. Furthermore, carve-out from 'super-priority' exposures such as depositor preference and wage/tax claims are important for international standard covered bonds whereby cover pools are explicitly to be used to guarantee covered bondholders (alongside any derivative claims attached to the cover pool for purpose of cover pool specific hedging).
	Supervision	Independent and credible supervision of the covered bond programmes in a particular jurisdiction is arguably more important than the covered bond law given that close supervision has helped keep the covered bond as a 'default-free' asset class to date. Furthermore, reliance on data, structural tests and asset-liability mismatch mitigants are all largely reliant upon the close auditing of the respective supervisor.
	Credible sovereign support	Credible sovereign support is important in order for investors to be comfortable that the law, which backs the covered bond legislation, will not be unfavourably changed for example, in order to bail-in creditors during a bank resolution/insolvency. In our view, the primary reason why peripheral European covered bonds can trade significantly below the sovereign curve is that the sovereign is backstopped by an EU oversight mechanism which strongly supports covered bonds across member states.
	Withholding tax	Ensuring withholding tax provisions do not apply to international investors is a key criterion for ensuring their involvement in internationally placed bond transactions, covered bonds are no exception.

Source: BBVA GMR

1.8 ENERGY EFFICIENT MORTGAGES AND GREEN COVERED BONDS

By Luca Bertalot, EMF-ECBC Secretary General, Wolfgang Kälberer, Association of German Pfandbrief Banks & Chairman of the ECBC Fact Book Working Group and Frank Will, HSBC & Chairman of the ECBC EU Legislation Working Group

I. INTRODUCTION

International, institutional and investor interest in energy efficiency finance has increased in magnitude in recent years, supported by the successful conclusion of the COP21, a universal legally binding global climate action plan to limit global warming to well below 2°C[1]. This has worked as a catalyst for energy efficiency finance across financial markets and imposed a new trajectory for European Union (EU) Member States' engagement in energy consumption. In the EU, buildings are responsible for 40% of the total energy consumption and 36% of CO2 emissions, and around 75-90% of the existing building stock is predicted to remain standing in 2050[2]. By improving the energy efficiency of buildings alone, the EU's total energy consumption could be reduced by 5-6% and CO2 emissions by 5%[3].

The EU has set itself an overall 20% energy efficiency savings target by 2020 and is now considering increasing this to a 30% target by 2030. The scale of investment needed to meet the 2020 target is estimated at around €100 billion per year, with it considered necessary to invest around €100 billion a year up to 2050 in the EU building stock in order to deliver Europe's commitments on climate change. With about 35% of the EU's buildings being over 50 years old, massive thermal renovation of the building stock is a necessity to reach the these climate goals. The International Energy Agency has called investments in energy efficiency and particularly in buildings a priority for all countries.

This is why the European Mortgage Federation and the European Covered Bond Council (EMF-ECBC), in cooperation with their membership and key stakeholders, have launched a European market initiative for energy efficient mortgages. The idea is to mobilise mortgage financing to incentivise borrowers to move their property out of the "brown zone", and into the "green zone" in return for a preferential interest rate on the mortgage and the retrofitting funds. Clearly segregated "green" assets, via labelling, would act as collateral for green covered bonds likewise and support the integration of energy efficiency in portfolio management strategies and increase investor confidences in sustainable funding.

Considering that the European building stock constitutes the largest single energy consumer in the EU, and that the value of the European mortgage market is equal to 53 % of EU's GDP[4], there is huge potential to unlock the benefits of mortgage financing to support energy efficiency to the benefit of all.

EMF-ECBC HOST HIGH LEVEL PANEL DEBATE IN VENICE

On the 3rd of June 2016, the EMF-ECBC hosted a high level panel debate on "The Future Development of EU Mortgage and Covered Bond Markets, and Implications of the Energy Efficiency Debate" at Ca' Foscari University[5] in Venice, Italy. Panellists and participants, representing the interests of European investors, issuers, valuers, academics, the European Commission and the Basel Committee on Banking Supervision (BCBS), were brought together to discuss the future role of banks in financing energy efficiency and in addressing Europe's commitment to climate change.

1 The Paris Climate Change Agreement adopted during COP21 in December 2015 sets out a global action plan that helps avoid dangerous climate change by limiting global warming to well below 2°C. It was adopted by 195 countries as the first-ever universal, legally binding global climate deal. The Agreement is due to enter into force in 2020.

2 Energy Efficiency Financial Institution Group (EEFIG). 2015. Energy Efficiency – the first fuel for the EU Economy How to drive new finance for energy efficiency investments. Available at: https://ec.europa.eu/energy/sites/ener/files/documents/Final%20Report%20EEFIG%20v%209.1%2024022015%20clean%20FINAL%20sent.pdf.

3 European Commission. Available at: https://ec.europa.eu/energy/en/topics/energy-efficiency/buildings.

4 Source: EMF-ECBC.

5 The Ca' Foscari University is well-known for its research on energy and renowned for holding the world's oldest green building certificate.

This unique exchange of ideas on financing energy efficiency gave way to a common agreement amongst panellists and participants that banks have an important role to play in providing long-term financing for energy improvements to the existing European housing stock, in particular, mortgage banks and covered bond issuers, given their position in the market and their intervention at a critical moment in the process of purchasing and financing a property. You will find several key points from the Venice panel debate implemented throughout this article, demonstrating the extent of this market consensus.

EMF-ECBC Panel Debate in Venice – European Commission

A European Commission representative attended the EMF-ECBC panel debate in Venice and expressed support for the EMF-ECBC proposal, emphasising the importance of the outlined incentive chain, the additional funds available to undertake retrofitting and the added value of the de-risking features of the underlying business case. In general, the Commission expressed support for the proposal's ability to address the current challenges on energy efficiency financing. The EMF-ECBC market initiative corresponds with the Commission's own framework for climate and energy policies, which aims to encourage investments and overcome market barriers, and boost private finance for energy efficiency investments/buildings, with the European building stock constituting the largest single energy consumer in the EU[6].

II. EMF-ECBC PROPOSAL – ENERGY EFFICIENT MORTGAGE

The structure underpinning the EMF-ECBC initiative provides a clear three-dimensional aspect which interrelates with a broader set of political priorities:

> **Financial Stability**:
Banks have a key role to play in improving the quality and energy performance of housing so as to free-up disposable income and, in parallel, reduce credit risk for borrowers, lenders and investors. The EMF-ECBC initiative will trigger market due diligence for consumers, issuers and investors, reduce probability of borrowers' default, facilitate de-risking of banks' balance sheets and management of non-performing loans, and enhance transparency and pricing in the market by adding a green factor to real estate.

> **SMEs & Growth**:
The initiative will boost the development of market & technological innovations and provide dedicated resources for specialised SMEs active in retrofitting.

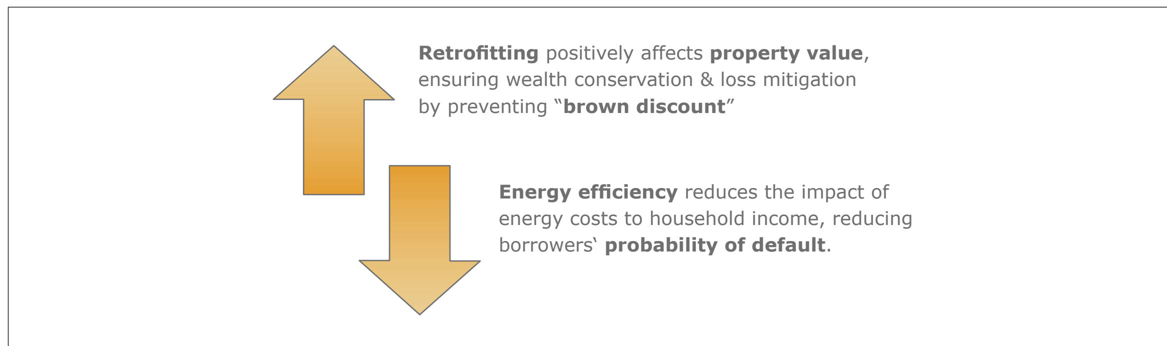
> **Energy Efficiency**:
The initiative will motivate borrowers, by way of preferential financial conditions linked to their mortgage, to make energy efficiency investments and in this way reduce the energy consumption of their dwelling and improve their financial resilience. This will enhance the long-term affordability of energy efficiency investment for borrowers.

With a clear business case and certain energy performance indicators in mind, the EMF-ECBC is designing a pan-European "energy efficiency label" for mortgages which will mobilise finance to support energy efficiency of residential buildings. By means of a lower interest rate and additional retrofitting funds to improve the energy performance of the property, thus freeing-up disposable income and, in parallel, reducing credit risk for borrowers, European lenders and investors will follow in the footstep of their American, Canadian and Asian partners and thereby help to respond to Europe's commitment to climate change.

6 Buildings are responsible for 40% of energy consumption in the EU. For more information, please refer to https://ec.europa.eu/energy/en/topics/energy-efficiency/buildings.

This initiative is built on a clear incentive chain which rests in particular (but not exclusively) on two key tenets:

> FIGURE 1: ENERGY EFFICIENCY DRIVERS IMPACTING MARKET CHARACTERISTICS



Source: EMF-ECBC

Preliminary results from a comprehensive study conducted by CRIF analysing the added value of energy efficiency in properties by isolating the "green value" in house prices, shows a positive correlation between energy efficiency and "green value". The study also investigates the impact of this correlation on the borrowers' payment behaviour, with the preliminary results indicating that borrowers of the worst energy classes have twice the observed 'delinquency' rates than the registered behaviour of best energy classes. Consequently, this reduces credit risk as a result of the lower probability of default and lower loss given default (LGD) associated with energy efficient mortgages. Similar French, British, American, Canadian and Japanese studies confirm the positive correlation between energy efficiency and "green value".

EMF-ECBC Panel Debate in Venice - "green value" presentation by CRIF:

Preliminary results from a comprehensive study by CRIF shows a positive correlation between energy efficiency and "green value" of up to 12.5 %.

Underpinning Incentive Chain

As indicated above, the initiative is built on a clear incentive chain, with each of the stakeholders in the chain obtaining a micro-economic advantage:

Borrowers:

> Borrowers are incentivised to improve the energy efficiency of their homes in return for a preferential interest rate after a certain period of time and/or additional funds at the time of the origination of the mortgage on the same terms as the mortgage on the property (as opposed to at the higher rate of a consumer loan).

> In addition to the better mortgage conditions, by making energy efficiency improvements, borrowers increase the value of their property, thereby protecting their homes against a "brown discount," ensuring wealth conservation. This "green value" in residential buildings is increasingly identifiable and quantifiable in terms of price, according to several pieces of recent research. See Annex III for an example of such research.

> Borrowers also benefit from the lower running costs for the building, reducing the overall costs of owning a property which should compensate the upfront investment.

Lenders:

> Research[7] in the US shows that borrowers financing energy efficiency properties have a 32% lower probability of default on their loan. This is because the energy costs, which represent a large share of the monthly payments by the borrowers, are lower. This reduces not only the overall costs for the borrower but also the volatility of the monthly payments as the share of the energy costs sinks. The lower risk of the household is also recognised in Canada, where households receive a 10% Canada Mortgage & Housing Corporation (CMHC) mortgage loan insurance refund/rebate[8] on mortgage loan insurance premiums if CMHC-insured financing is used to purchase an energy-efficient home or make energy-saving renovations. If the same correlation between energy efficient investment and default risk can be evidenced in the EU, banks will be able to demonstrate that energy efficiency mortgages are less risky due to a net cash flow saving. Banks can therefore request a better capital treatment for those loans on their balance sheet.

> This initiative also provides banks with the opportunity to protect their portfolios against the "brown discount" mentioned above. In this way the energy efficiency financing can mitigate risk and reduce loss given default (LGD).

Investors:

> Particularly in the current low yield environment, but also – we expect – in "normal" market conditions, investors are increasingly looking for investments which have a "sustainable" aspect. There is strong investor demand for "green" covered bonds. Indeed, the market is already seeing increased investor demand for green debt assets as seen in senior unsecured and SSA issuance. Moreover, several important investors have earmarked funds for investment into green assets and the carbon footprint.

> The initiative would also create an incentive to make existing green assets visible, i.e. segregate energy efficiency assets which are currently included in the cover pool without earmarking. Energy efficiency business where it currently exists is not systematically separated from other banking operations, but doing so could help to create critical mass and speed up the transition.

> The "green added value" vs. the "brown discount" is also relevant here for investors from a risk management point of view.

Moreover, price differentiation typically occurs in economic downturns. This initiative would therefore also protect borrowers/lenders/investors against brown discount once the market distortions of the quantitative easing come to an end or the economic climate worsens.

III. CONCEPT & METHODOLOGY OF ENERGY EFFICIENT MORTGAGE

Based on a predetermined set of energy efficiency indicators to measure the energy efficient improvement of the property (explained below), lenders would offer:

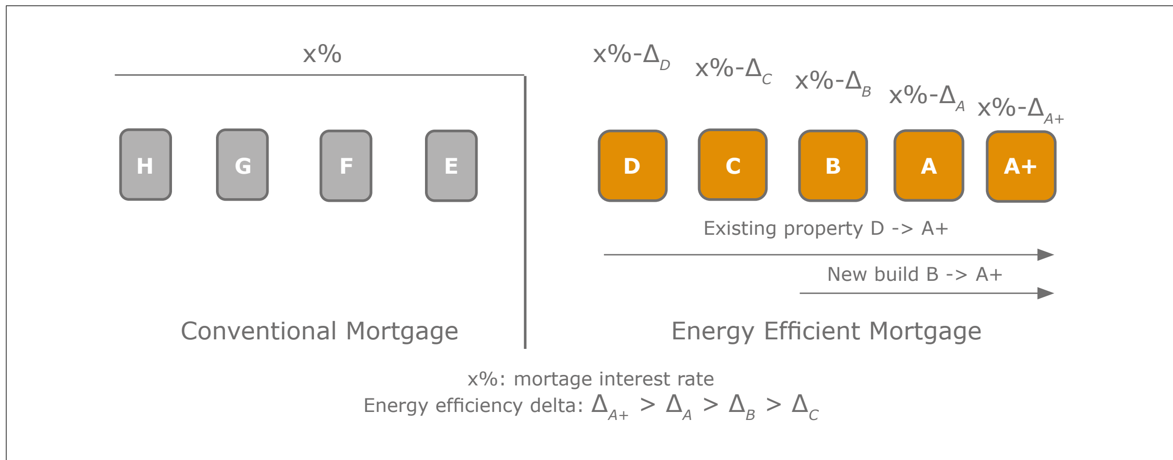
> New Build/Nearly Zero Energy Buildings (NZEB): A discount in the interest rate for a new build property with an energy rating of A or B.

> Existing property to be renovated: A discount in the interest rate after a certain period of time according to the improvement in the energy rating of the mortgaged residential property. This would be known as the energy efficiency delta. In this way, borrowers are incentivised to move their property out of the "brown zone" – energy rating H-E, and into the "green zone" – energy rating D-A.

7 Institute for Market Transformation (IMT). (2013). Home Energy Efficiency and Mortgage Risks. Available here: http://www.imt.org/uploads/resources/files/IMT_UNC_HomeEEMortgageRisksfinal.pdf.

8 http://www.cmhc-schl.gc.ca/en/co/moloin/moloin_008.cfm.

> FIGURE 2: ILLUSTRATING THE CORRELATION BETWEEN A PROPERTY'S ENERGY RATING AND A POTENTIAL PREFERENTIAL MORTGAGE INTEREST RATE



Source: EMF-ECBC

The preferential interest rate would be determined on the basis of a progressive scale, which would incentivise more significant improvements in properties at the lower end of the energy rating A-D i.e. the consumer would receive a larger percentage of the discount (Energy Rating A = 100% of discount), the further they move their property up in terms of energy rating. The discount itself would be calculated as a function of the reduced risk weighting of the mortgage in the calculation of the bank's capital requirements.

EMF-ECBC Panel Debate in Venice – Banking Supervision

Frank Pierschel, a representative of BaFin and Co-Chair of the Basel Committee's Task Force on Standardised Approaches, was a panellist on the EMF-ECBC's high level panel debate on "The Future Development of EU Mortgage and Covered Bond Markets, and Implications of the Energy Efficiency Debate" which took place the 3rd of June 2016 at Ca' Foscari University in Venice, Italy.

During the panel debate, Mr Pierschel indicated that the preferential treatment of energy efficiency mortgages could be a possibility in the future, implementable via the introduction of a sub-class in the Standardised Approach for Credit Risk, conditioned on data showing a reduction in PD and LGD and increased asset value due to energy efficiency retrofitting.

Mr Pierschel also noted that environmental issues are currently under discussion in Basel from a financial stability perspective, with climate developments impacting on the insurance industry, which, in turn, impacts on property prices and the assets within banks' balance sheets. In this context, Mr Pierschel underlined the likelihood of the impact of "brown discount" on property prices in the future.

Additional Funds – Supporting the EU's growth agenda

For an existing property to be renovated, at the time of origination, the lender will factor in both the additional funds and the increased value of the property due to the retrofitting, meaning that the risk along with the LTV for the bank remains the same. The possibility to take account of an energy efficiency mortgage label which, as shown above, impacts upon the value of the property is suggested in the Second BCBS Consultation on Revisions to the Standardised Approach for Credit Risk from December 2015[9], which, at point 52 on page 35, states that:

9 http://www.bis.org/bcbs/publ/d347.pdf.

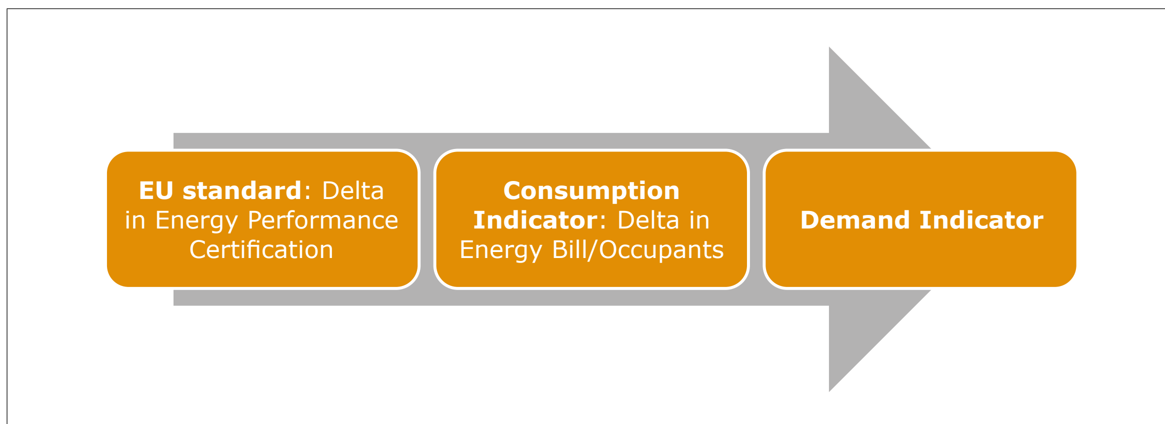
"modifications made to the property that unequivocally increase its value could also be considered in the LTV"

This mechanism: i) allows the increase in value due to retrofitting to be factored in at origination, ii) enables the borrower to carry out retrofitting on the purchase of the property and iii) provides a flow of capital into the real economy trigger jobs and supporting SMEs active in the retrofitting sector, thereby supporting the EU's growth agenda. Improving the energy efficiency of the European building stock would also help reduce the EU's reliance on energy imports, with 61 % of gas imports destined for buildings, of which 75 % for residential buildings, and be in keeping with the Commission's Energy Efficiency Directive[10] (Article 7) which requires Member States to establish an "energy efficiency obligation" scheme, which obliges EU energy companies to achieve yearly energy savings of 1.5% of annual energy sales to final consumers[11].

Energy Efficiency Indicators – Three Pillar Approach

The Energy Performance Certificate (EPC), introduced by the EU by way of the Energy Performance of Buildings Directive (EPBD), provides information, as the name suggests, on the energy efficiency of buildings (consumption and demand) and recommended improvements. Given that this is an EU standard, the EPC will be a key energy indicator on which the EMF-ECBC initiative will be based. However, as a result of concerns about data availability and reliability as well as qualification, control and monitoring of energy inspectors, the EPC is not (in its current form) a robust enough tool on its own to measure a property's energy performance. The EPC will therefore be accompanied by a consumption and demand indicator, constituting a three pillar approach:

> Figure 3: EMF-ECBC's three pillar approach to certification of energy performance



Source: EMF-ECBC

Given the current issues with the EPC, as described above, it would be preferable to move towards a demand indicator. Recent developments in the IOT (internet of things) suggest that it is realistic to provide a real time view on the performance of the property before and after retrofit in the near future, using a mix of sensor technology and machine learning algorithms. This would allow the possibility to provide a real time delta between the energy used by the property after retrofit versus what the property would have used pre-retrofit under the same conditions; in form of a 'Negawatt' metre which measures the energy savings. Such an approach would be preferable, particularly from a lenders perspective, as it would give an accurate and on-going view of the performance of the property itself.

10 Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC available (http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1399375464230&uri=CELEX:32012L0027).

11 http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013SC0451&from=EN.

To ensure the correct expertise, the evaluation of the improvement of the energy efficiency of the property based on the three indicators would be delivered by external/third party providers.

Consumer behaviour

It is also worth highlighting that by combining a demand indicator with a consumption indicator, the methodology can also influence consumer behaviour and practices by encouraging good energy behaviour, thus ensuring a reduction in energy consumption (energy bills). A growing body of evidence in academic literature demonstrates that there is potential for energy savings up to 20% via measuring targeted behaviour[12].

Addressing Risks Management

The underlying structure of the EMF-ECBC energy efficiency label is designed in such a way that, in addition to an increased property value and a reduction in LGD, three essential areas of (potential) risks in dealing with debt instruments would likewise be addressed, in turn contributing to financial stability:

> Credit Risk: is potentially reduced for the lender as a result of the lower probability of default and lower LGD associated with EE mortgages;

> Asset Risk: as a result of the EE improvements, the property is protected against the "brown discount," and will actually increase in value; and,

> Performance Risk: a robust assessment of the energy performance of the property both before and after the retro-fitting of the property ensures that the EE measures taken actually result in an improvement to the energy efficiency of the property, to the households' energy spending, and to the value of the property.

While the EMF-ECBC proposal is entirely independent from public funds, tax incentives or utility rebates, national governments aiming to further drive thermal renovation could consider complementary interventions, such as a variable tax rates for the purchase of properties based on the energy efficiency of the property.

Data Warehouse & Energy Passport

Two key elements of the proposed EMF-ECBC initiative will be to create: i) a "data warehouse" intended to (a) establish the correlation between energy efficiency and borrowers' probability of default and LGD, and (b) clearly register and record the link between property, energy rating and loan performance, so that these assets can be identified for "green" funding purposes; and ii) an energy passport recording the energy efficiency history of a property from energy rating to energy rating by recognising improvements made (or the reverse) over time.

To obtain a preferential regulatory treatment, institutional representatives have stressed the importance of gathering market data, which can verify the underlying business case and support the preliminary results already gathered across several countries, such as UK, France, Italy, the US, Canada and Japan. Moreover, gathering and processing data on the actual financial performance of energy efficiency investments would create a new flow in data which, in addition to aiding the rating of the "green value" of buildings in property valuation, would generate data evidence/track records of banks' utilised collateral and asset pricing. In parallel, this would protect portfolios against the "brown discount", thus mitigating risks.

Moreover, available market evidence suggests that saleability and letability of green buildings improve compared to traditional real estate. Similarly, total operating costs seem to be 5-10% lower for green buildings than those for non-sustainable properties. Thus, during a building's lifetime, the savings on so-called "life-cycle costs" could be substantial.

12 O. Ozcevik; C.A. Brebbia; S.M. Sener. (2015). Sustainable Development and Planning VII. Ashurst: WIT Press, Page 786.

EMF-ECBC Panel Debate in Venice – Clear Business Opportunity

Among panellists and participants in Venice, representing the interests of European investors, issuers, valuers, academics, the European Commission and the Basel Committee on Banking Supervision (BCBS), there was a strong common agreement that the EMF-ECBC energy efficiency mortgage initiative could provide a clear business opportunity for the industry.

The combination of the regulatory challenges in terms of capital costs observed in the market today and the business case underpinning the EMF-ECBC initiative has the potential to provide banks with a welcome business opportunity, by introducing a reduction in asset risk, credit risks and performance risks and, potentially, a preferential treatment (if market data can be gathered to support the preliminary result already showing a positive correlation between energy efficiency and "green value" and reduction in LGD).

Furthermore, it was also highlighted that the business opportunity embedded within the EMF-ECBC initiative would assist banks in their competition with institutions from the insurance and pension funds sectors, which provide many of the same services, but are not subject to the same regulatory requirements as the banking sector.

IV. GREEN COVERED BONDS – SUSTAINABLE FUNDING

From a funding perspective, the EMF-ECBC initiative has the potential to segregate "green" collateral benefitting many investment banks which have already established purely "green" trading desks to deal with the increased demand for sustainable investments. A clearly defined energy efficiency label for mortgages would, on its own as well as through collateral for green and sustainable covered bonds, help reduce uncertainty regarding investments in energy efficiency and increase investor confidence, as well as support the integration of sustainable funding in portfolio management strategies for institutional investors and/or fund managers. This would also have an impact from a risk management point of view by segregating the "green" from the "brown discount", thus creating an incentive to make existing "green" assets visible, i.e. segregate energy efficient assets which are currently included in the cover pool without earmarking.

Market Perspective

Over the last few years, green and sustainable covered bonds have been a fast growing capital market segment. The first issuers of green bonds were supranational issuers such as European Investment Bank and International Finance Corporation (part of the World Bank Group). Since then a wide variety of corporate and agency issuers as well as local and regional authorities have entered the market. Also banks have entered the market and we have seen green senior unsecured bonds from issuers such as ABN AMRO, Credit Agricole CIB, HSBC and ING. In 2015, almost USD 50 bn of green bonds were issued by about 70 issuers and 2016 should become another strong year in terms of green bond supply. In line with the growing issue volumes, investors have become more comfortable with green bonds and their underlying definitions. We see two major trends in the investor community: First, the number of dedicated green institutional investors and/or funds continues to increase in terms of volumes and numbers. Second, even some of the traditional investors have started to disclose the share of green and sustainable. However, there is still a need for further standardisation of the product and for improving transparency to ensure the integrity of the asset class. The Green Bond Principles – which have been developed by issuers, investors and intermediaries in close cooperation with the International Capital Market Association (ICMA) – are an important step into the right direction as they provide guidance for both issuers and investors and should help to further promote the mainstream acceptance of the green bond market.

First Issuance – Münchener Hypothekenbank e.G. and Berlin Hyp AG

The development of a sustainable and green covered bond market provides a wider range of approaches and most institutional investors have begun introducing sustainability criteria into their investment strategies. Against this background, an increasing investor demand for diversification in different green bond structures can be expected.

One approach could be to put more emphasis on social, environmental and governance criteria (ESG Principles). Another option consists of focusing more on the funding of green buildings in a stricter sense. However, covered bond funding of green buildings is not a plain vanilla exercise as it triggers further questions: Would it be sufficient to build a green covered bond concept only on certified or green labelled properties? How to identify green buildings within a cover pool which is by definition a dynamic structure and does not allow for the creation of green buildings' subclasses?

The first 'Sustainable or Green Pfandbriefe' issued by Münchener Hypothekenbank e.G. and Berlin Hyp AG provide some evidence at that respect. Both institutions shared a similar approach by choosing an independent second party opinion (sustainability rating agency oekom research) for the labelling of the respective issues in order to provide transparency and credibility to the market[13].

Munich Hyp: Munich Hyp was the first issuer of an Environmental, Social and Governance (ESG) covered bond along the lines of the Green Bond Principles. The EUR300m 5-year mortgage Pfandbrief was launched in September 2014. The ESG-Pfandbrief complied with strict requirements regarding the use of the proceeds from the issue, the process of project evaluation and selection as well as the management of the proceeds and reporting. The Pfandbrief was then labelled by the oekom research as compliant with the ESG principles.

Munich Hyp uses the proceeds of its ESG Pfandbriefe to refinance loans to housing cooperatives in Germany. The funds are employed to purchase, build and improve the energy efficiency of housing and maintain housing for socially disadvantaged sections of the society. The focus of this approach was definitely more on social rather than environmental criteria. However, it is important to note that ESG covered bond investors rank pari passu with other mortgage Pfandbrief investors and do not have a preferential claim on the ESG assets in the cover pool of the issuer. According to Munich Hyp, its inaugural ESG Pfandbrief back in September attracted many new investors. About one third of the deal was allocated to new investors that buy only ESG bonds and have never bought covered bonds from Munich Hyp in the primary market before.

Berlin Hyp: In April 2015, Berlin Hyp followed with its inaugural green mortgage Pfandbrief which had a benchmark size of EUR500m and a maturity of seven years. In contrast to Munich Hyp's ESG Pfandbrief, the deal was a genuine green covered bond and reached benchmark size (EUR500m). The issuer stated in its press release that the deal attracted many new investors and that 48% of the issue was placed with sustainable investors.

Berlin Hyp committed to use the proceeds of its green Pfandbrief for the financing of 'green buildings' in Germany, France, the UK, the Netherlands and Poland. These assets are included in Berlin Hyp's 'normal' mortgage Pfandbrief cover pool and the Green Pfandbrief – in line with the treatment of Munich Hyp's ESG Pfandbrief – will rank pari passu with the other mortgage Pfandbriefe of the issuers. In case of issuer insolvency, investors will have a claim against the entire cover pool without having a preferential claim on the green cover assets over and above other 'normal' mortgage Pfandbrief investors.

13 oekom research second party opinion, see http://www.gruener-pfandbrief.de/startseite.

Berlin Hyp used the below bespoke green building certificates for commercial properties as the primary eligibility criterion. Additional sustainability criteria were to be met in order to deliver a green label to the respective covered bonds. They were delivered by the Green Bond Framework as defined by the oekom rating agency[14] and most notably address environmental and social components which are not taken into consideration in a satisfactory way by green building certificates, if at all.

Oekom's Framework

According to this framework, environmental components cover environmentally harmful building materials, resource consumption, emissions and waste. Social criteria address healthy and safety of tenants and other building users, working conditions on renovation worksite and supply chain standards for renovation materials. Finally, controversial business activities in the buildings are excluded.

In order to secure the allocation of the proceeds coming from the issuance of covered bonds to the green buildings, the issuer is supposed to sign up to the following two commitments: The first commitment ensures that the existing cover pool will always include green assets for an amount at least equivalent to the net proceeds. Second, the issuer commits to reallocate funding to eligible green assets for an amount equivalent to the net proceeds of the green pfandbriefe until their maturity date.

The final layer of requirements for a green covered bond consists of transparency, documentation and reporting. Issuers of sustainable and green covered bonds have to provide investors as well as bond labelling agencies with regular information about the loan structures of mortgage cover pools, the amounts and maturity structures of loans dedicated to the funding of green assets in the pool, property types, their certification level etc.

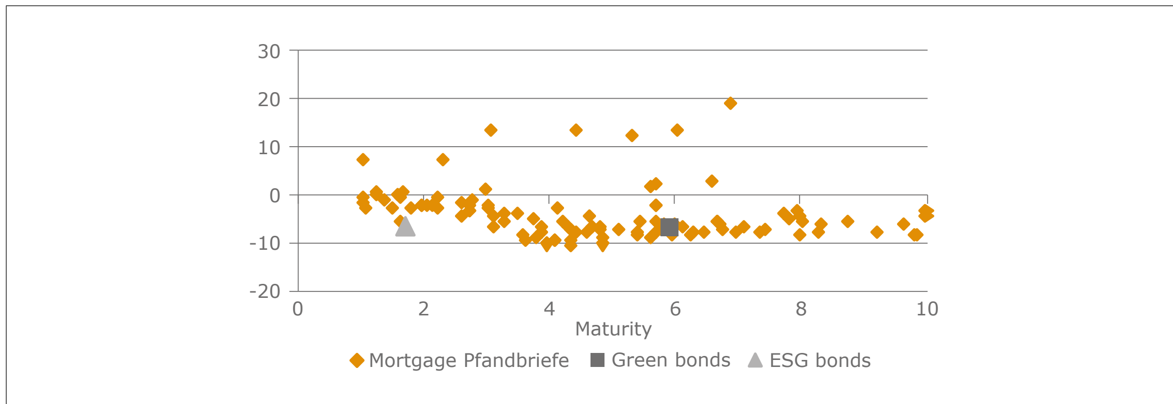
Market Volume and Spreads Differences

In terms of volumes the market for green and sustainable covered bonds has so far not taken off and is still relative small compared to the green senior unsecured volumes issued by banks or even more so compared to the green issuance by the supranational and agencies sector.

In terms of spreads, the market does not distinguish between green and sustainable bonds on the one hand and 'normal' covered bonds on the other hand despite the larger investor base of the former. The new issue levels of Munich Hyp's ESG Pfandbrief as well as Berlin Hyp's green covered bond were not substantially tighter than those of a 'normal' Pfandbrief transaction and both deals also trade more or less in line with the other German mortgage Pfandbriefe (see Figure 4). This likely reflects the fact (i) that the green and sustainable (covered) bond market is still in its infancy and (ii) that the generally spread environment is very compressed. Moreover, the fact that from a risk perspective the cover pool assets backing the Pfandbriefe are identical for ESG/green covered bonds and 'normal' mortgage covered bonds in case of issuer insolvency plays probably also an important role.

14 oekom research, annex 1 to the second party opinion referenced under FN1.

> Figure 4: Swap spread levels of green & ESG bonds vs other mortgage pfandbriefe



Source: HSBC, Bloomberg (as of 7 June 2016)

Commercial Real Estate

While the EMF-ECBC energy efficient mortgage initiative does not include commercial real estate at present, it is worth shedding some explanatory light on this market. There are around 30 voluntary rating systems worldwide that try to meet the conceptual complexity of the term 'sustainability' of the commercial real estate sector. As a sample, green building certificates are delivered by BREEAM (Building Research Establishment Environmental Assessment Method), LEED (Leadership in Energy and Environmental Design) or DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen). While these labels are not fully comparable, the strength of certification systems is based on a horizontal approach which not only measure lower energy consumption but take also environmental, economic and socio-cultural criteria into account. To improve the comparability and transparency of this industry, the Energy Performance of Buildings Directive (EPBD) requires the European Commission to adopt, in consultation with the relevant sectors, a voluntary common European Union certification scheme (VCS) for the energy performance of non-residential buildings in order to improve international standardisation and uniform conditions in energy performance certification of non-residential buildings.

The emergence of a true green buildings market in commercial real estate is still hampered by the relatively low market penetration of certification systems, with green commercial real estate being concentrated in metropolitan markets and consisting to a large extent of new or heavily renovated buildings. However, it is likely that this situation will quickly evolve with investors, users as well as regulators focusing more and more on the need to build green buildings and to retrofit existing buildings into sustainable properties. Therefore, it is likely that sustainable real estate will become the market standard in the medium to long term.

V. CONCLUSION

The increased interest in and commitment to tacking climate change across governments, financial markets, industries, non-governmental organisations, valuers, academia and the media is a testament to the global focus on ensuring a greener future. This year, the European Commission is revising both the EPBD and the Energy Efficiency Directive, and other related initiatives are in the political pipeline. Creating an ambitious legal framework is an important prerequisite, but the implementation of these targets set by legislators requires mobilising both public and private stakeholders and financing.

To ensure the successful implementation of the EMF-ECBC market initiative, the preliminary results illustrating the underlying business case must be supported by further market data. The initiative has the potential to not only foster financial stability and economic growth and support SMEs but also provide a clear business opportunity to the European banking sector which is facing many challenges in the form of increased capital

requirements impacting the cost of capital. The preconditioned international, institutional and investor support for any such initiative to be implement is, as emphasised throughout this article, already present in the EU. The upcoming COP22, which will take place in Marrakech in November 2016, will not only cement the actions required to implement the Paris Agreement but, significantly, give emphasis to "green finance" as a key theme, underlining the relevance and timeliness of the EMF-ECBC Initiative.

The investor base for green covered bonds is growing fast and several large institutional investors have already switched parts of their investments portfolios into green and sustainable assets. While both investors and banks have yet to be fully disposed to the new reality of green investments on their balances sheet, a clear incentive chain, as the one underlining the ECBC-EMF energy efficiency mortgage initiative, will help the transformation of greener investment.

In light of this, it is worth highlighting once again that considering the European building stock constitutes the largest single energy consumer in the EU, and that the value of the European mortgage market is equal to 53 % of EU's GDP, there is huge potential to unlock the benefits of mortgage financing to support energy efficiency for the benefit of all.

Energy Efficient Mortgages – Next Steps

The EMF Executive Committee has formally agreed to take forward the EMF-ECBC energy efficient mortgage initiative. As a next step, a first pilot phase will be launched with the aim of identifying challenges and technical solutions in order to structure the governance of the initiative and provide the dataset necessary to support it.

1.9 REFINANCING LOCAL PUBLIC SECTOR INVESTMENTS AND EXPORT LOANS – A KEY ROLE FOR COVERED BONDS

By Ralf Berninger, Caisse Française de Financement Local

INTRODUCTION

The public sector covered bond market has witnessed a profound transformation over the past ten years. Overall outstanding volumes have steadily declined and at the same time, business has become more focussed on the core business of financing local government investments.

In another important development over recent years, covered bonds have started playing a more and more important role as funding tool for large export contracts. The refinancing of export loans benefitting from state guarantee or a guarantee provided by an export credit agency is more and more complementing the traditional local government lending business.

I. FINANINCING LOCAL GOVERNMENT INVESTMENTS

Eligibility under European covered bond regulation

Loans to local authorities or guaranteed by local authorities within the European Union are eligible as cover pool assets compliant with the definition provided by Article 129 CRR. A number of additional conditions apply for loans to local authorities outside the European Union:

1. *To be eligible for the preferential treatment …, bonds …shall be collateralized by any of the following eligible assets:*

   (a) *exposures to or guaranteed by central governments, ESCB central banks, public sector entities, **regional governments or local authorities in the Union**;*

   (b) *… exposures to or guaranteed by …**third- country regional governments or third-country local authorities** that are risk weighted as exposures to institutions or central governments and central banks … and that qualify for the credit quality step 1 …, and exposures within the meaning of this point that qualify as a minimum for the credit quality step 2 …, provided that they do not exceed 20 % of the nominal amount of outstanding covered bonds of the issuing institutions.*

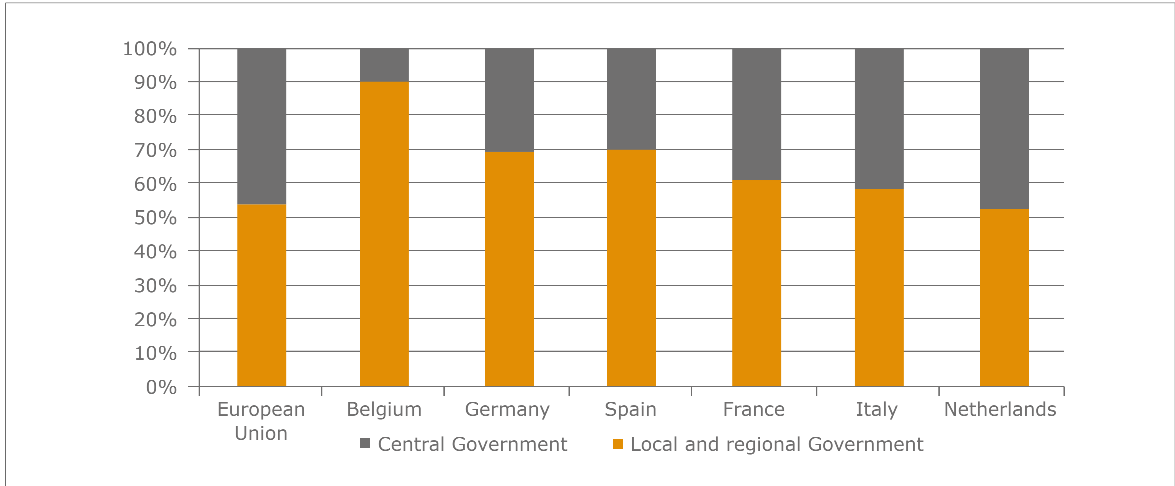
Importance of local government for public infrastructure investments

Local and regional governments (LRGs) exercise a wide range of responsibilities across Europe. Important differences exist from one country to the other. However, the following areas are to a large extent under the responsibility of the local public sector in most of Europe:

- Local and regional infrastructure, including large parts of the local and regional rail and road network;
- Large parts of the primary and secondary education system;
- Basic services such as drinking water supply, sewerage, waste collection and treatment;
- Urban planning and development;
- Parts of the public health care system in some countries;
- Public order and safety, for example municipal police forces or fire-fighting services;
- Social housing in some European countries.

These responsibilities include key areas for public investments. As a consequence, local public sector investment expenditures exceed central government investments. On average local and state government contribute over 50% of total public sector investments across Europe.

> Figure 1: Local and state government investments vs. central government investments 2015

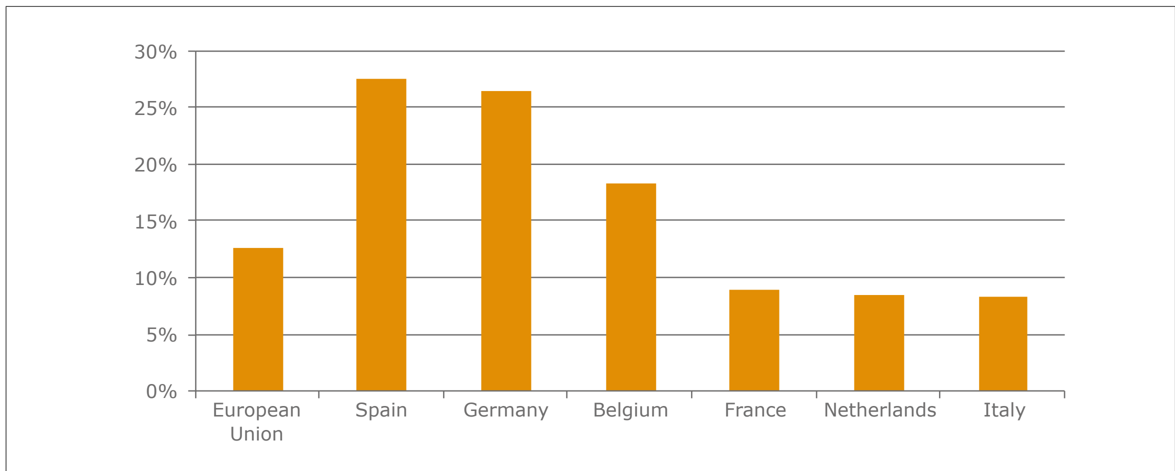


Source: Eurostat

Important differences exist with respect to budget rules for the local public sector from one country to the other. However, the principle of the golden fiscal rule applies in one form or the other across most of Europe: local authorities are prohibited from running deficits to finance the operating section of the budget; new borrowing is only authorised to finance investments.

As a consequence of these strict budget rules, local and regional authorities only contribute a relatively small share to total public sector debt and deficits in Europe. Total European Union local public sector debt represents only 12.6% of GDP. Again, significant differences exist from one country to the other. At one end of the spectrum, local and regional governments (LRG) in countries such as Germany, Spain and Belgium with a high degree of decentralisation have also relatively high levels of debt compared to countries with a stronger centralisation of responsibilities. At the other end of the spectrum, local authority debt represents less than 10% of GDP for countries such as France and the Netherlands.

> Figure 2: Local government debt as a percentage of GDP



Source: Eurostat

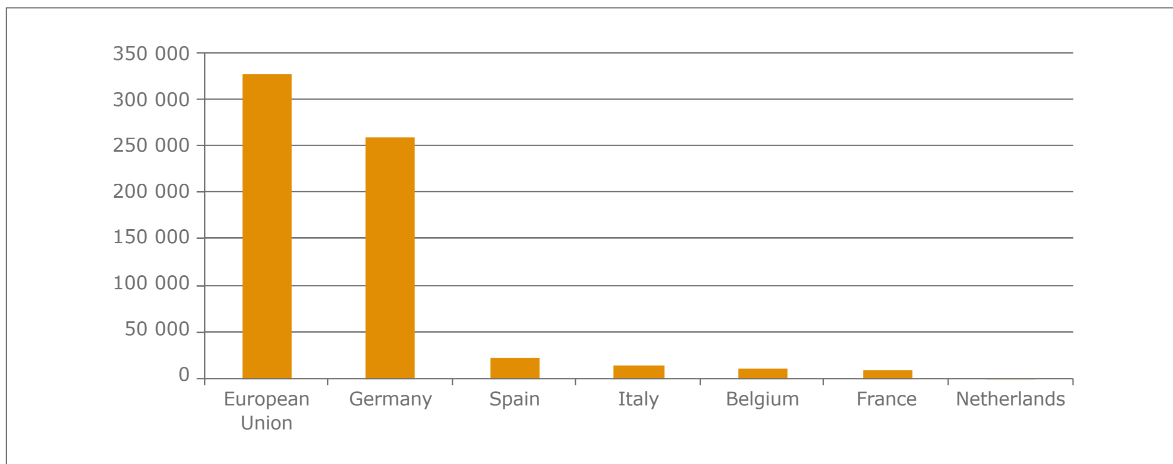
II. FUNDING SOURCES FOR LOCAL PUBLIC SECTOR INVESTMENTS

Direct bond issuance as source of funding for local authorities – only an option for large local authorities

Overall, local and regional authorities are able to raise significant amounts of funding via direct bond issuance with over EUR 300 billion outstanding bonds issued by European Union LRG issuers. Overall outstanding bonds represent close to a third of local authority debt in the European Union.

However, access to the bond market is limited to large entities with sufficient funding needs for regular bond issuance. As a consequence, German Länder represent close 80% of the European local and regional government bond market.

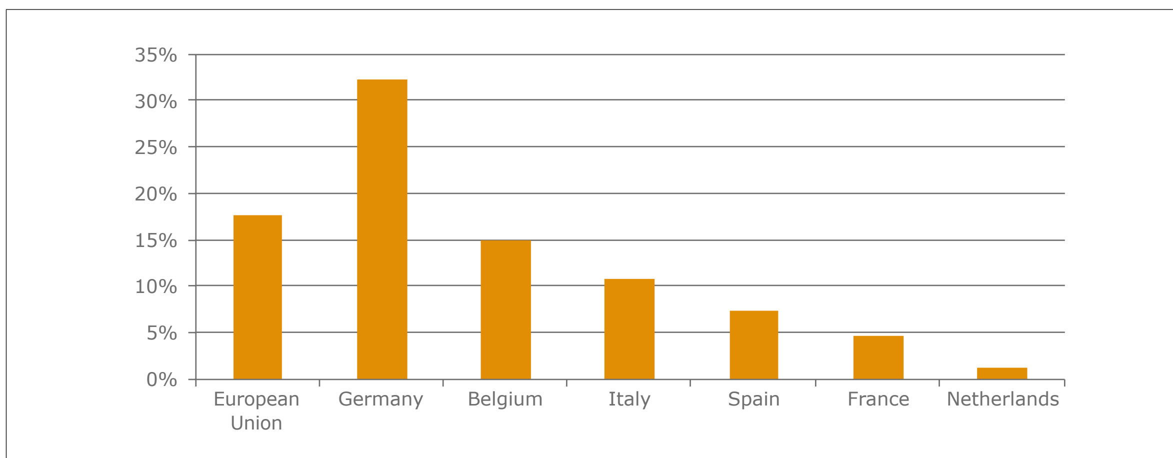
> FIGURE 3: OUTSTANDING LOCAL AND REGIONAL GOVERNMENT BONDS (EUR M EQUIVALENT)



Source: Bloomberg and Eurostat

For large entities with regular funding needs, bond issuance represents an important source of funding. However, most local authorities are too small for regular bond issuance. For countries like France or the Netherlands, outstanding bonds represent less than 5% of local authority debt.

> FIGURE 4: OUTSTANDING BONDS AS PERCENTAGE OF TOTAL LOCAL AND REGIONAL GOVERNMENT DEBT 2015



Source: Bloomberg

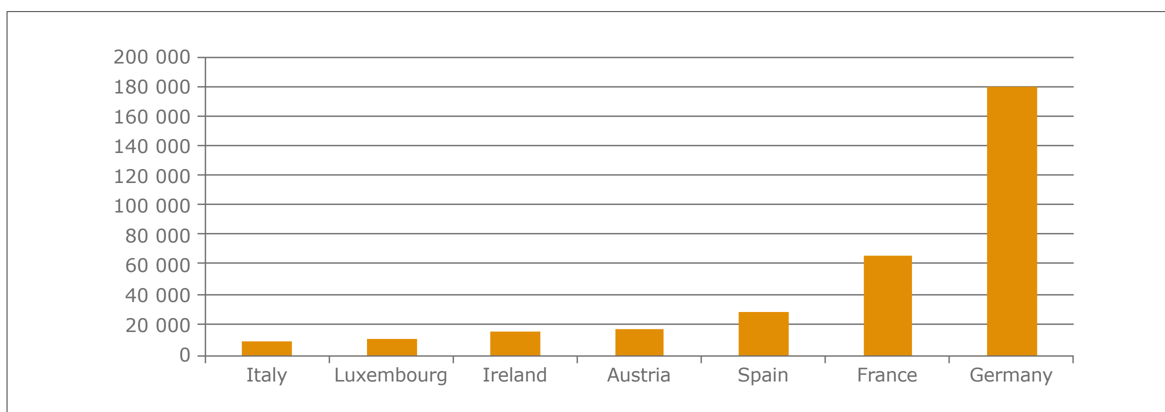
The loan market as key source of funding for local government investments

With access to the bond market only an option for regular issuers, most local authorities rely exclusively on the loan market as source of funding for public investments.

Funding provided by covered bond issuers

Banks in Germany, France, Austria, Spain, Belgium and Italy use covered bonds as refinancing tool for local authority loans. Germany and France are by far the largest markets in terms of issuance volumes. In addition, public sector covered bond markets exist in Ireland and Luxemburg although local public sector funding needs in these two countries are small.

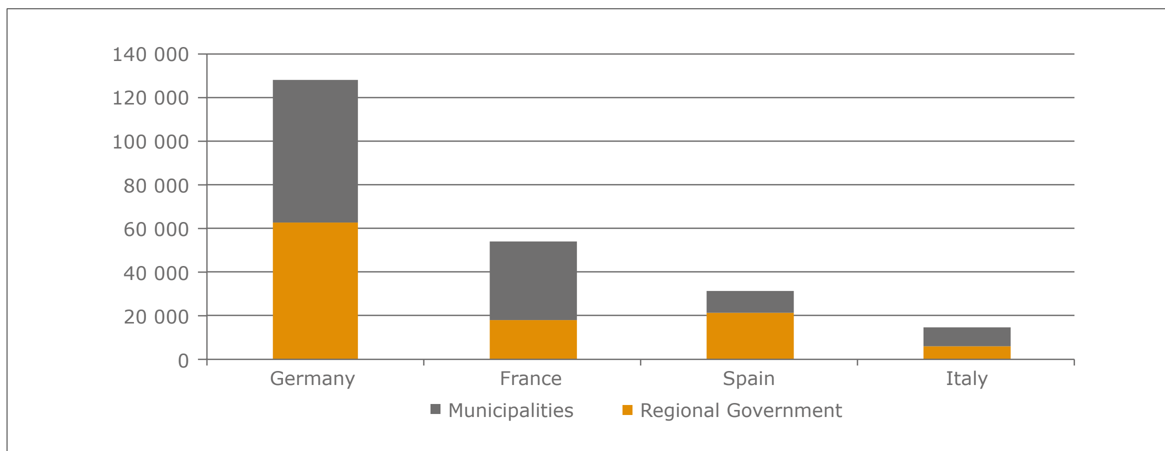
> Figure 5: Outstanding public sector covered bonds in EUR million as of 31 December 2015



Source: ECBC

Covered bond issuers provide a significant source of funding for local and regional governments in Europe. Exposures by covered bond issuers to local and regional authorities in Germany amount to well over EUR 120 billion, based on the cover pool data provided by covered bond issuers. For France, with much less outstanding local authority debt, covered bond issuers provide above EUR 50 billion in loans and for Spain, the figure is still above EUR 30 billion.

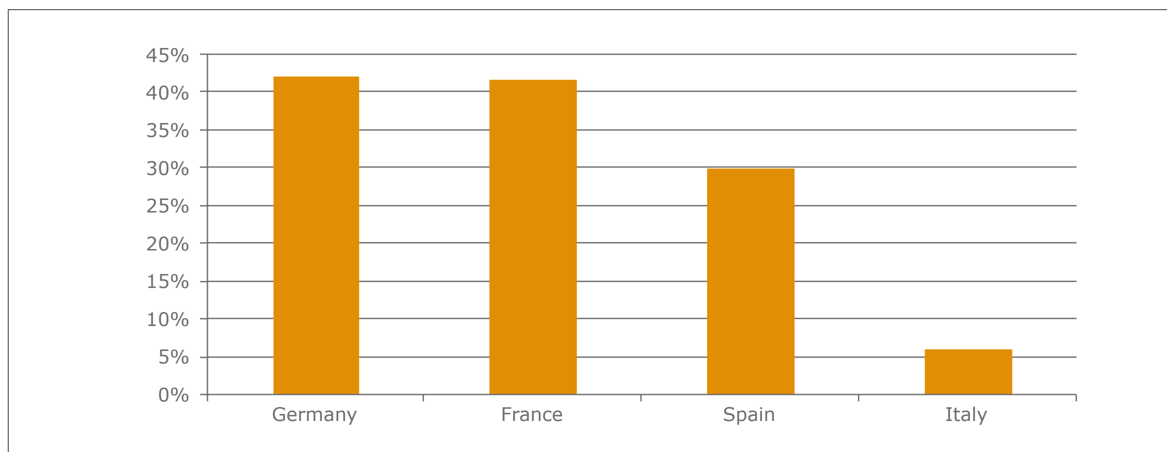
> Figure 6: Outstanding loans to local and regional government provided by covered bond issuers as of 31 December 2015 (EUR m)



Source: ECBC Covered Bond Label National Templates (BIIS, Caixabank, BBVA, CFF, CAFFIL, SG SCF, Arkéa SCF, BNPP SCF) and VdP

Regional governments, often with important funding needs, have the capacity to access a wide range of funding sources, including direct bond issuance. Local governments on the other hand with smaller average funding needs depend to a large extent on bank loans to finance investments. As a consequence, a significant share of outstanding local government loans is provided by covered bond issuers. Looking at the cover pool data provided by issuers, loans by covered bond issuers represent over 40% of local government debt for France and Germany. For Spanish local authorities, loans by covered bond issuers still represent close to a third of local government debt.

> FIGURE 7: ESTIMATED SHARE OF LOCAL GOVERNMENT DEBT REFINANCED BY COVERED BOND ISSUERS AS OF 31 DECEMBER 2015



Source: ECBC Covered Bond Label Templates (BIIS, Caixabank, BBVA, CFF, CAFFIL, SG SCF, Arkéa SCF, BNPP SCF), VdP, Eurostat

Declining volumes in outstanding public sector covered

The outstanding volume of public sector covered bonds has witnessed a steep decline over the past 10 years. The volume of outstanding bonds has declined by over 50% to EUR 408 billion in 2014 compared to EUR 894 billion in 2005. However, public sector covered bonds can be used to refinance a wide range of public sector exposures and not exclusively local government loans.

Special factors like the cost of German re-unification and the end of guarantees for the German Landesbank sector contributed to an initial steep increase and to the subsequent decline in public sector covered bond issuance volumes over the past two decades. Looking at the volumes of outstanding public sector covered bonds the volume of outstanding public sector covered bonds actually increased for France (from EUR 43 billion in 2005 to EUR 68 billion in 2014) and Spain (from EUR 10 billion in 2005 to EUR 26 billion in 2014). However, growth in these markets only compensated a very small share of the reduction of the public sector Pfandbrief market down from EUR 735 billion in 2005 to EUR 207 billion in 2014.

The traditional lending business to municipalities has been much more stable than the overall issuance volumes suggest. For example, exposures of German Pfandbrief issuers to German municipalities stood at a total level of EUR 65 billion at the end of 2014, compared to a level of EUR 70 billion in 2008, i.e. a reduction by 7%. This compares to a decline by close to 50% in the public covered bond market over the same period and an even larger decline in outstanding German public sector Pfandbrief volumes.

Declining volumes in outstanding public sector covered bonds do not necessarily indicate a decline in importance of covered bonds as refinancing instrument of local public sector loans. The refocusing of the public sector business has been a key factor leading to reduced volumes in public sector covered bond market.

III. PUBLIC SECTOR COVERED BONDS AS REFINANCING INSTRUMENT FOR EXPORT LOANS

Eligibility under European covered bond regulation

Export loans benefiting from a state guarantee or a guarantee provided by an export credit agency (ECA) are eligible for covered bond refinancing if the loans meet the criteria of 129.1 of the CRR:

1. *To be eligible for the preferential treatment …, bonds …shall be collateralized by any of the following eligible assets:*

   (a) *exposures to or guaranteed by **central governments**, ESCB central banks, **public sector entities**, regional governments or local authorities in the Union'*

In addition, CRR requires that effective credit protection is provided for the export loan as defined by article 194.4:

4. *Institutions may recognise funded credit protection in the calculation of the effect of credit risk mitigation only where the lending institution has the right to liquidate or retain, in a timely manner, the assets from which the protection derives in the event of the default, insolvency or bankruptcy — or other credit event set out in the transaction documentation — of the obligor and, where applicable, of the custodian holding the collateral*

Market still relatively small compared to covered bonds backed by local government loans

Issuers in France and Germany make use of public sector covered bonds to refinance export loans with a state or ECA guarantee. Legal frameworks in France and Germany do not distinguish between covered bonds backed by local authority loans end ECA loans. In addition, Spain is implementing a legal framework for the issuance of covered bonds backed by ECA loans ('Cédulas de internacionalización') that will be separate from the framework for covered bond backed by LRG loans.

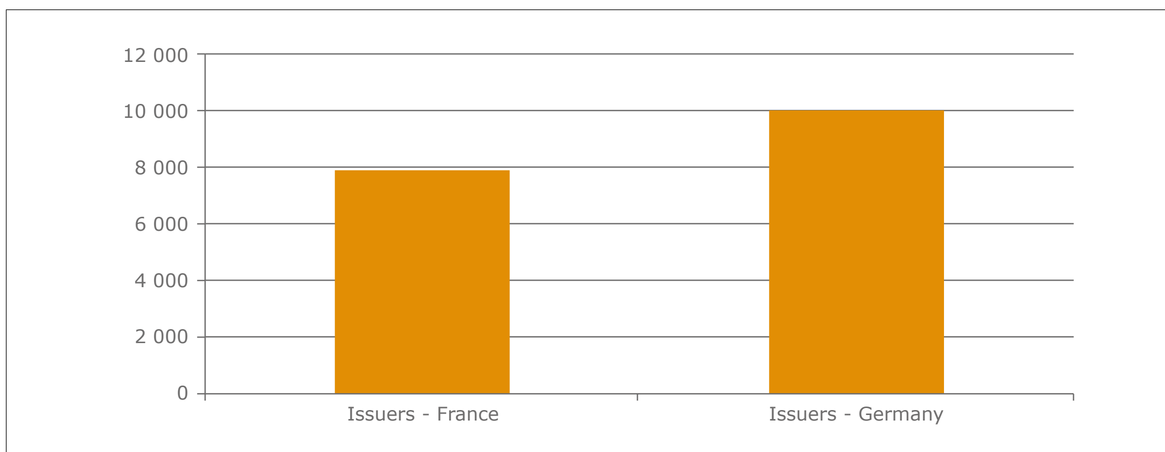
Overall, issuance linked to export loans is still relatively small compared to covered bonds backed by local authority loans. This can mainly be attributed to two reasons:

(1) The guaranteed export credit market is much smaller than the local authority loan market. For France, local government debt with a volume of EUR 196 billion at the end of 2015 represents roughly three times the volume of loans covered by French export credit insurance at EUR 66 billion.

(2) Use of covered bonds to refinance ECA loans has been a more recent development compared to the traditional local government financing business.

Overall, close to EUR 8 billion in export loans are currently refinanced via public sector covered bonds by French issuers. For Germany, the figure is just below EUR 10 billion.

> FIGURE 8: REPORTED EXPOSURES LINKED TO EXPORT CREDIT BUSINESS AS OF 31 DECEMBER 2015



Source: ECBC Covered Bond Label Templates (CA SCF, BNPP SCF, SG SCF) VDP

New developments should lead to increased issuance

The share of ECA loans currently refinanced via covered bonds is still relatively low, compared to the share of local government loans refinanced via covered issuance. However, a number of factors should lead to increased issuance in the coming years.

Over recent years legal frameworks in France ('garantie rehaussée') and Germany ('Verbriefungsgarantie') have been adapted to the needs of covered bond issuers. In both cases, covered bond issuer can benefit from an unconditional and irrevocable state guarantee for exposures linked to the export credit activity.

Only a small share of export loans is currently refinanced via issuance of covered bonds. As a consequence, banks still have large volumes guaranteed export loans available for covered bond refinancing.

In addition, the implementation of a covered bond framework for the refinancing of export loans in Spain should be another factor leading to increased issuance.

CONCLUSION

The volume of outstanding public sector covered bonds has seen a significant decline over the past 10 years. However, the reduction in volumes has been linked to a reduction in the scope of business. The underlying local authority lending business has been much more stable. Public sector covered bonds remain a key pillar for public investments: local authorities in many countries rely to a large extent on loans provided by covered bond issuers.

Public sector covered bond issuance backed by export loans with a state or an ECA guarantee has been limited up to now. Nevertheless, new guarantee mechanisms, new legislation and a large pool of available eligible loans are likely to lead to increased issuance in the future.

1.10 INVESTOR PERSPECTIVE[1]

By Jozef Prokes, Giulia Artolli, Blackrock and Henrik Stille, Nordea Asset Management

A year in which the covered bond market was strongly influenced by central bank policy is now behind us. The European Central Bank (ECB), through its monetary policy tool – the Covered Bond Purchase Programme 3 (CBPP3) – remains by far the largest investor in euro covered bonds. As such, one could have expected 2015 to be an uneventful year given that yields are at the lows and the ECB's dominating presence in the markets persists. Fortunately, this was not the case and 2015 was much more interesting and challenging than had been anticipated. In our view, this is not only true for investors but also for market makers who seek to provide liquidity to a secondary market that is becoming increasingly difficult to trade in.

For spreads, 2015 proved to be a roller coaster ride. After initial aggressive tightening on a euphoric move over the CBPP3 announcement, spreads reversed their gains during the May-June 2015 selloff in rates. September 2015 saw them move one leg wider, this time driven by heavy issuance. It was clear that the CBPP3 during the beginning of the year had tightened spreads to levels where no real buying interest could be found, which meant levels indicated by secondary markets were too tight for primary market issuance. During this period it also became evident that secondary market liquidity in covered bonds was lower than previously thought. Nonetheless, it is important to note that despite the effects of monetary policy, the market depth of covered bonds has remained superior to that of the corporate bond markets. During the latter part of 2015, spreads stabilised, and following the ECB announcement of further monetary policy stimulus in March 2016, tightened yet again. At the time of writing spreads are at similar levels seen in the beginning of 2015. For issuers of more volatile covered bonds, the range between the tightest and widest spreads is close to 70bps over the last 12 months. In our view, this has been driven by technical factors as well as the CBPP3´s presence in the market, which has contributed to higher volatility instead of reducing it. We see this as a general regime shift in the broader fixed income markets caused by increased banking regulation that prevents banks from holding large covered bond positions on their balance sheets. Investors should therefore become accustomed to higher volatility, not just in the covered bond market, but the fixed income markets in general.

A proposition often debated is whether covered bonds still offer opportunities to cross-market investors. This is particularly relevant for the asset class given the diminishing dedicated investor base that we have witnessed after multiple rounds of the CBPPs. While we all probably agree that covered bonds offer structural benefits to investors (dual recourse, bail-in exclusion, etc.), once all of this is priced in we are left with a simple old dilemma – do we get compensated for the perceived risks inherent in this asset class? Looking at spread evolution over the last couple of years, the tempting answer would be a simple "no''. However, a very similar view could be taken on other asset classes under this mean reverting measure and we note that covered bonds are probably the only asset for which investor protection increased post-crisis. Therefore, contrary to spread development charts, we do feel that we get compensated for the risks we take when investing, at least most of the time.

Ever since the mid-2012, the European Banking Authority (EBA) consultation on bail-in we have meaningfully notched down most of the credit risk perception in covered bonds and believe this view has been vindicated by spread behaviour even in some the more distressed names. Therefore, we must ask ourselves the following question: what risks actually remain? In our opinion, the greatest risk investors face is the correlation to other asset classes or, to phrase it differently, whether covered bonds offer any diversification to non-covered bond funds. Without throwing around a lot of fancy numbers we find that short-term correlations to sovereigns and credit have meaningfully decreased over the past five years, resulting in covered bonds becoming more interesting to cross-market investors. These technical changes will benefit this market going forward as its

1 For professional clients/qualified investors only (please refer to the last page of this article).

popularity as a building block in active allocation products increases. Looking back in time we also find that, at least for short-term horizons, covered bonds tend to live in a world of their own irrespective of the pressure or euphoria experienced by other instruments. Additionally, covered bonds are often viewed as the number one fixed income product that offers general "European" exposure without as much of the underlying country risk which is present in government bonds. In short, we continue to find value in the low or even negative correlations to sovereign and credit markets.

Another challenge many of us are faced with is liquidity. On this topic we feel obliged to state the painfully obvious – the lower liquidity environment is a new paradigm that is here to stay and a mean reversion rebound is unlikely. Covered bonds are no exception to this and while much of the blame is hurled at monetary policy and its impact on free float, we do not believe this to be the main driver. This is exemplified by the ability of the covered bond market, which has been subject to the ECB actions for much longer, to shake off the impact of low secondary market liquidity and to exhibit risk-on/risk-off patterns that are hardly dissimilar to those of credit markets, albeit with different drivers. Therefore, contrary to many views we perceive the recent liquidity draught to be a structural regime shift which requires market participants to review their investment style.

The first months of 2016 saw a large number of investors return to the covered bond market. This was partially driven by the increase in spread divergence across a number of countries on the back of higher issuance and a series of idiosyncratic stories. Additionally, a number of new or infrequent issuers entered or returned to this market in the hope of finding cheaper funding and broadening their investor base. This trend was reflected by the Q1 2016 euro covered bond issuance volumes being 56% higher than those of Q1 2015. The recent increase in supply has been well received by the market and this is reflected by higher quality and largely oversubscribed order books. Going forward, as Central Bank policy continues to play an important role for this asset class, we believe that non-Eurozone issuers are increasingly likely to benefit as investors seek higher yielding covered bonds that are non-QE eligible.

One of the most exciting developments in the covered bond market at the moment is that the number of covered bond jurisdictions is growing. More jurisdictions mean that there are more legislations to analyse, more issuers to follow and increases the number of relative value opportunities available to investors. As we welcome new jurisdictions into the covered bond universe, it is important that the quality of the covered bond product remains unaffected. Some of the important factors we look for in new jurisdictions are:

> *The quality of the legislation* – New legislations do not have a track record when it comes to issuing new products so it is particularly important that the covered bond law is safeguarded from government involvement.

> *Transparency* – For new legislations, transparency is even more critical than for their established peers. As such, we encourage new issuers to participate in the ECBC label initiative.

> *Liquidity in the secondary markets* – Covered bonds issued by banks within new legislations tend to be less liquid and although we recognise that there are some regulatory features that play a role in this, we stress that the issuer takes liquidity into account when planning frequency, volume and spread level of their new issues.

Another scrutinised topic of discussion over the past year has been the harmonisation of covered bond legislations. On this, we believe it is important to distinguish between transparency and harmonisation. While transparency is vital, we do not think there is a strong need for a complete harmonisation of covered bond jurisdictions. Indeed, removing individual countries' idiosyncrasies may in fact be counterproductive to investors who seek relative value opportunities and may also prevent new issuers from entering the market. It is also interesting to note that the transition from hard bullet structures to cheaper soft bullet structures continues across a number of issuers. This development has been driven primarily by the preferential treatment rating agencies grant to soft bullet structures as they class the extension as credit positive. Furthermore, an increas-

ing number of issuers are beginning to venture into more exotic structures such as conditional pass-through which, despite not yet being the market standard, has gained popularity recently. The main reason for this is probably related to the rating up-lift this structure offers to issuers. While we do not necessarily agree with this treatment and fail to recognise higher investor protection, we expect this transition to continue going forward.

Looking ahead, we maintain a positive outlook on the covered bond market and believe that it will continue to provide its investors with a range of relative value investment opportunities across new and traditional jurisdictions.

Source for all data: BlackRock / Nordea Asset Management, as at April 2016

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1.11 INVESTOR PERSPECTIVE OF THE COVERED BOND INVESTOR COUNCIL (CBIC)

By Nathalie Aubry-Stacey, International Capital Market Association

The ICMA Covered Bond Investor Council, 'CBIC', has been in existence for more than 7 years now. The covered bond market and regulatory landscape has changed significantly since the inception of the Council. Yet the main themes discussed by ECBC and CBIC members remain similar – how to achieve greater harmonisation – primarily through transparency templates, the review of new structures, and managing liquidity issues.

The Council is an investor driven organisation, independent of issuers and the sell side. It remains committed to promoting the quality of the covered bond product and representing the interests of active European covered bond investors. The CBIC is a permanent working group of the ICMA Asset Management and Investors Council, the independent voice of the buy-side within ICMA. The CBIC approaches investors active in the covered bond market as part of the process of drawing up responses and statements, including asset managers, insurers, pension funds and bank treasuries, interested in the European covered bond market.

In the ECBC Covered Bond Fact Book 2016, the CBIC would like to focus on a theme at the heart of its mission – transparency. The European covered bond market as a financing tool for mortgages has survived the crisis without massive public intervention and the CBIC believes that only a continued focus on upholding the high quality of the product will safeguard the market against any future crisis. Dilution in quality or confusion with other fixed income products should be avoided. In this regard, it is hoped that the conclusions of the European Commission consultation process (not yet known at this stage) will recognise the value of the market efforts over many years to create covered bond standards in EU and non-EU countries. Whichever option the European Commission chooses to pursue to harmonise markets, the CBIC has been clear that it should not needlessly disrupt a well-functioning market given the history of the asset class.

In the absence thus far of enhanced rules on mandatory pool disclosure on a Europe wide basis from the European Commission, industry-led initiatives are essential to the continued good operation and standing of the covered bond market. Members welcome the enormous progress made to date by the Covered Bond Label Committee on the Harmonised Transparency Template (HTT), viewing this as a very positive development and a strong response to the call by the CBIC in 2012 for enhancements to covered bond pool transparency. The CBIC intends to review the templates regularly according to the 7-C principles, as announced by our Chairman in May 2012.

- *Comparable*: The data is reported according to a standardised template.
- *Comprehensive*: The template aims to provide European comparability and not only national.
- *Continued*: The data must be reported and updated on a regular basis.
- *Coordinated*: The template is the result of compromise between investor needs, discussions with issuers' representatives to ensure the data is easily available.
- *Circumstantial*: The template recognises differences between jurisdictions and holds a key concept list for each jurisdiction to explain their own specificities.
- *Concept*: Investors are able to understand and readily use the reported data presented on a stratified basis.
- *Cost-free/easily available*: Free data access via a dedicated platform (links to data).

Moreover, the fact that the HTT is to be reviewed and enhanced on a yearly basis will allow investors to evaluate its effectiveness and to provide comments from members on possible features to add and refine in the template in future. We will specifically ask for more transparency regarding certain structures, such as conditional pass-through that seem to be more and more prevalent in the market.

The CBIC believes that that Covered Bond Label is indeed a key market qualitative and quantitative database, as described in the Covered Bond Label Convention – as long as all Covered Bond Label holders have a compliant HTT on their website by the end of 2016. In the 2015 Press Release 'Covered Bond Label Issuers Agree Common Harmonised Transparency Template', it is noted that '*the Label […] is based on […] investors' due diligence, thus significantly enhancing comparability and convergence across covered bond jurisdictions*'. The regular review by investors is part of the CBIC's commitment to enhance transparency in the covered bond market and also to its support and constructive critical assessment of market-led initiatives, ensuring their success.

CHAPTER 2 - GENERIC SECTION

2.1 OVERVIEW OF COVERED BONDS

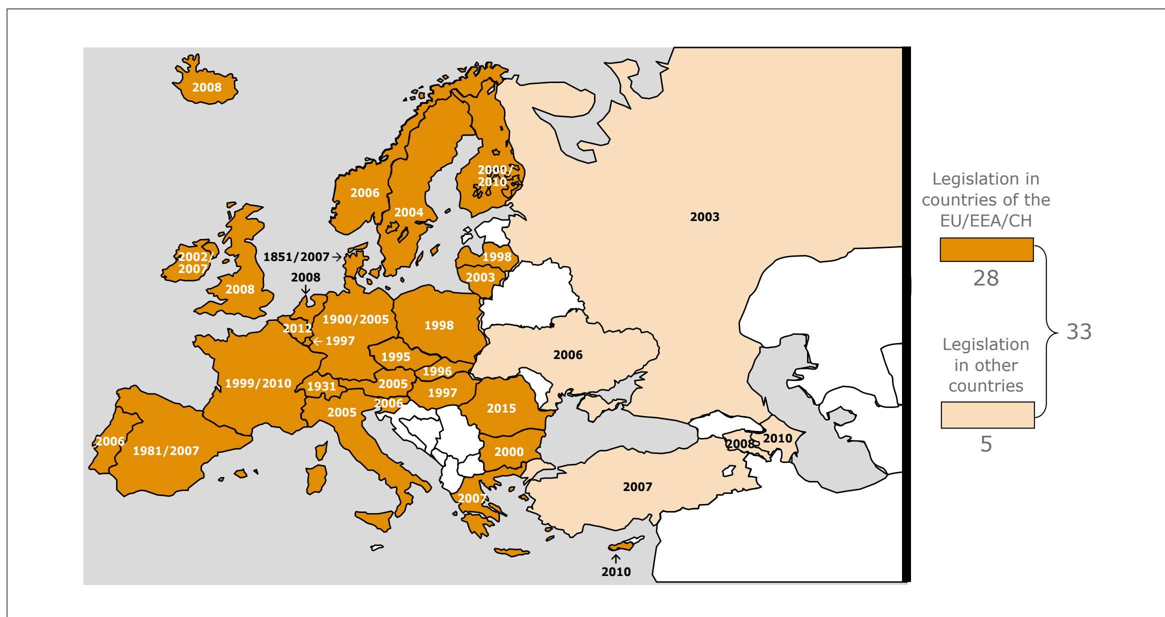
By Ralf Grossmann, Société Générale and Otmar Stöcker, Association of German Pfandbrief Banks

2.1.1 INTRODUCTION

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 at the end of 2015 amounting to EUR 2.5 trillion[1]. Today, there are active covered bond markets (i.e. with issuance activity on a regular basis) in 23 different European countries (for more information, please refer to the covered bond statistics section in chapter 5)[2]. In addition, there are several European countries which are in the process of updating or adopting covered bond legislation (Estonia, Croatia, Romania).

Outside the European Economic Area (EEA), several countries (Australia, Canada, New Zealand, Singapore, and South Korea) have already noteworthy active covered bond markets and numerous countries have enacted covered bond legislation (eg. Turkey, Russia). Further countries where the creation of covered bond markets would make sense are OECD countries such as the US, Japan, Mexico, Chile, further countries such as Brazil, India or Thailand and countries with close ties to Europe such as Morocco or UAE, if they achieve high quality legislation for their covered bonds.

> FIGURE 1: COVERED BOND LEGISLATION IN EUROPE (AS OF APRIL 2016)



Source: EMF-ECBC

Covered bonds play a pivotal 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 the best possible quality of credit exposure on credit institutions. Moreover, the instrument proved its resilience as funding instrument at various occasions during the financial and sovereign crisis. The high importance of covered bonds for the

1 Source: EMF-ECBC, http://ecbc.hypo.org/Content/default.asp?PageID=519.

2 For more information, please refer to the covered bond statistics section in Chapter 5 and the ECBC Covered Bond Comparative Database available at http://www.ecbc.eu/.

financial system is also demonstrated by the privileges these instruments enjoy in various areas of EU financial market regulation. As well as the introduction of new covered bond legislations, there has been a continuous evolution of existing legislation, underlining the commitment of issuers, investors and regulators to further reinforce the quality of the asset class and take on board best practice.

2.1.2 HISTORY

The covered bond is a pan-European product par excellence. Its roots lay in ancient Greek mortgages and Italian and Dutch bonds. Decisive milestones in its development were laid in Prussia (1770), Denmark (1797), Poland (1825) and France (1852). The issuers ranged from public law "Landschaften" to private mortgage banks. The aim was first to finance agriculture and later concentrated more on housing and commercial real estate.

The creation and the expansion of covered bond systems in their different structures and features are a perfect example of a fruitful and effective exchange of ideas across all European borders. It is very impressive to see how the huge benefit of experience and exchange of international know-how contributed to the creation of covered bonds in Europe in the course of more than 240 years. In the 19th century, nearly every European country had a covered bond system. Their success influenced each other. Covered bonds also played an important role in stabilising financial systems at the end of the 19th century, a time of high bankruptcies of companies and banks.

Since the mid-20th century, the inter-bank market developed and, with it, a growing retail deposit base provided funding for mortgage loans. As a result, covered bonds in many European countries lost their outstanding importance. Some countries did not use their covered bond systems any more or even abolished them. This was the case in Western Europe and especially in Central and Eastern Europe, where private banking and capital market instruments did not comply with communist theories.

The situation changed in the last decade of the 20th century with the fall of Communism, the German reunification and the introduction of the Euro. In 1995, the first German Pfandbrief in benchmark format (Jumbo) was issued. The format was created in order to meet liquidity needs of investors and to provide increased funding for public sector lending. In the late 90s, Central and Eastern European countries reintroduced real estate finance techniques. Covered bonds were an important element in the process to fund the growing number of mortgage loans to establish private housing markets.

The introduction of the Euro and the subsequent decrease of interest rates led to a lending boom in Europe. Banks needed to look for new funding sources via high credit-quality liquid bonds to attract international capital investors. At the same time, investors could no longer diversify regarding currencies, but intensified their search for liquid products. Therefore, banks in Western countries revitalised their covered bond systems to create a competitive capital market instrument. Since then, the Jumbo market has expanded strongly. The financial crisis further strengthened the importance of covered bonds as the most resilient wholesale term-funding instrument for credit institutions.

2.1.3 THE BENEFITS OF COVERED BONDS[3]

For over 200 years, covered bonds have proven to be an efficient debt instrument enabling banks to mobilise private sector means and capital towards long-term investment with a wide public benefit and, in particular, real estate loans and public sector debt. The covered bond asset class plays a key role in guaranteeing financial stability. Especially during the recent financial turmoil, covered bonds have been one of the only asset classes able to restore investor confidence and to ensure to European issuers access to debt capital markets.

3 Main reference of that section is: ECBC's Position Paper on Asset Encumbrance and Response to the EBA Consultation Paper on Asset Encumbrance Reporting – 24 June 2013 available at http://ecbc.hypo.org/Content/default.asp?PageID=504.

Benefits from the issuer perspective

From an issuer's perspective, covered bonds provide a significant contribution to the enhancement of a banks' funding profile and the management of liquidity. Benefits provided by covered bonds include:

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

> Providing stability to the funding mix, allowing asset liability management (ALM) teams to increase predictability in the maturity profiles;

> Enabling issuers to increase diversification in the investor base, both in terms of geography and investor type;

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

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

Evidently, funding conditions of the banking sector are a key parameter for credit supply and, therefore, have important macro-economic repercussions. Conditions of mortgage credit supply impact the property market and, therefore, have important long-term effects on consumption and investment behaviour. Likewise, public sector covered bonds have undoubtedly reduced the funding costs of public sector borrowers. Moreover, homogenous funding instruments for banks lead to higher information efficiency increasing transparency as regards the pricing of loans (e.g. refer to the Danish mortgage bond system).

Benefits from the investor perspective

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

> Double recourse to issuer and cover pool and therefore higher recovery in case of liquidation;

> No risk of bailing-in;

> Higher rating and higher rating stability than unsecured debt;

> Lower-risk weighting for EEA Covered Bonds bought by EEA banks;

> Eligible as liquid assets under the EU LCR regulation;

> Privileged treatment of covered bonds under the EU large exposure rules (and upcoming BCBS rules);

> Favourable treatment under Solvency II;

> Generally better liquidity through larger issue size;

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

The covered bond safety features (legal frameworks, high quality assets, special public supervision, etc.) and the favourable regulation around covered bonds (e.g. UCITS, CRD, Solvency II, lower ECB haircuts) reflecting those safety features, allows more institutional investors to buy covered bonds and encourages them to engage themselves on a larger scale than in others products.

Prevention against moral hazard risk

The fact that issuers of covered bonds keep the credit risk of cover bond collateral on their balance sheets ("skin-in-the-game") has been clearly identified, from a macro-prudential perspective, as an efficient and simple alternative to complex originate-to-distribute products and, therefore, as a key driver for a virtuous cycle in managing risks and ensuring financial stability. Generally, the combination of credit risk retention by the issuer and strict cover asset eligibility incentivise the issuer to maintain a high discipline in lending standards and underwriting criteria.

Resilient bank funding instrument

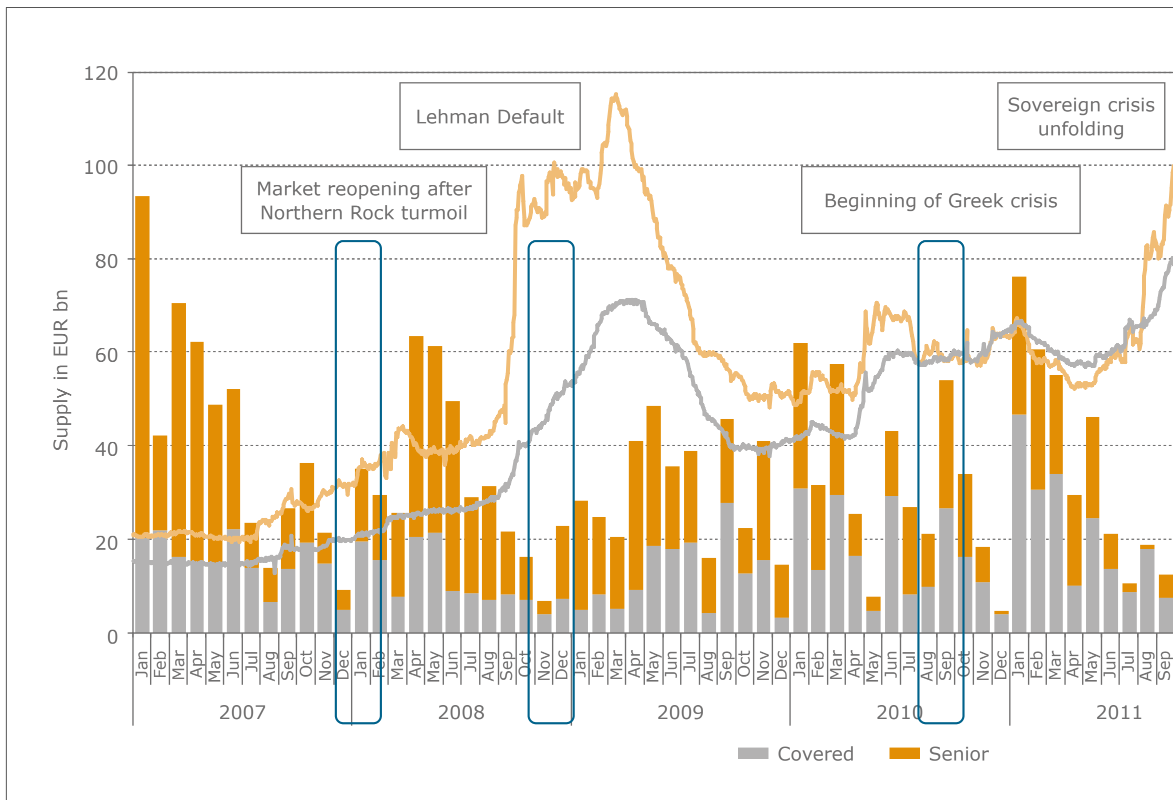
Covered bonds are the most reliable funding source as they make banks less susceptible to adverse market conditions. They often offer issuers better wholesale capital market access, lower transaction execution risk and decrease the reliance on senior unsecured funding and interbank markets. During the European sovereign crisis, it occurred that under certain conditions, over an extended period of time covered bond issuers had cheaper access to wholesale funding markets than their respective distressed sovereigns.

On the back of the severe market turmoil in 2008-2010, the ECB acknowledged the prominent role of covered bonds and stated in January 2011: "A smoothly functioning covered bond market is highly important in the context of financial stability."[4]

The chart below shows the primary market activity in EUR covered bond and senior unsecured markets combined with the spread developments in both markets. We have highlighted some periods of higher market volatility during the past decade:

January/Feb 2008: On the back of the Northern Rock turmoil, starting in August 2007, market reopening in January 2008 was very much driven by covered bond issuance which brought confidence back and allowed senior unsecured markets to properly reopen again.

> Figure 2: Swap-spread and primary market evolution in the EUR covered bond and senior unsecured market



Source: Société Générale

4 See: The impact of the Eurosystem's covered bond purchase programme on the primary and secondary markets; Occasional Paper series, No 122 /January 2011, page 9.

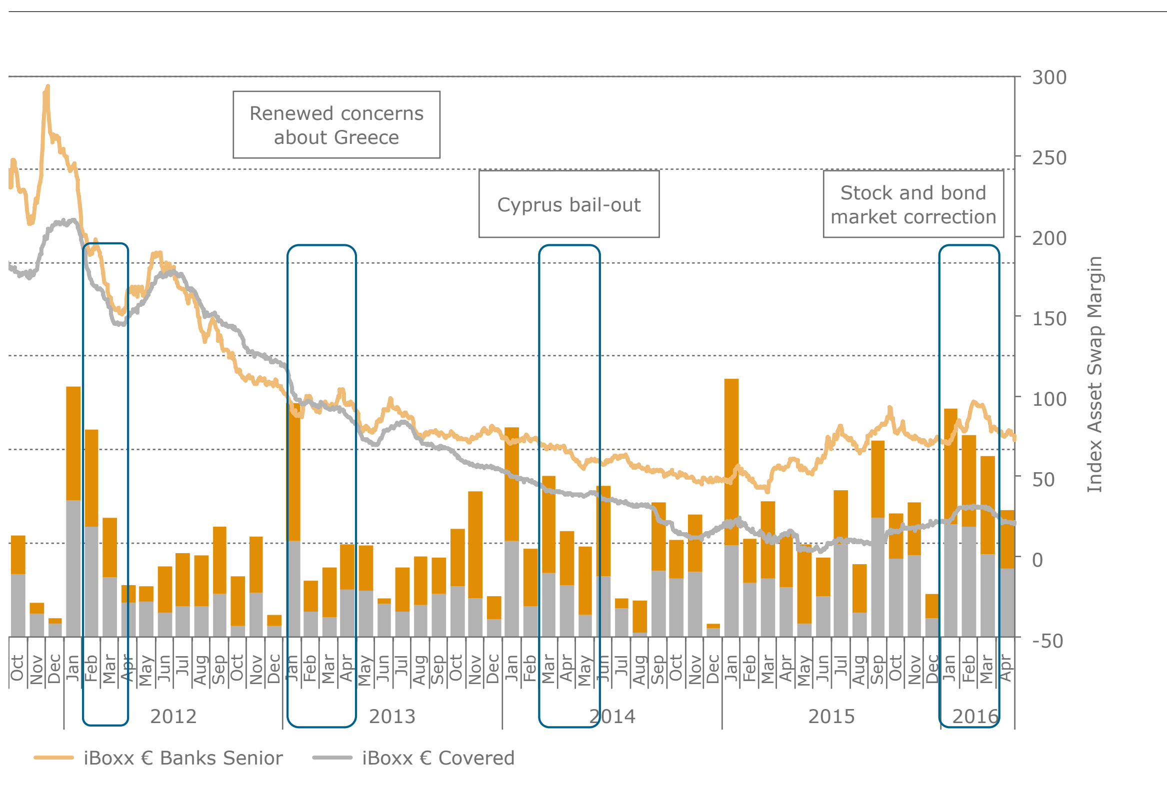
October/November 2008: After the Lehman default on 15 Sept 2008, again covered bonds played a key role in re-opening wholesale funding markets for financials. Only taps of existing benchmarks in relatively small size and private placements were placed in the market.

April/May 2010: With the start of the Greece crisis, fresh volatility was introduced into the Financials primary market, which again put a damper on senior unsecured issuance. Covered bond primary market held much better also thanks to the support from the ECB CBPP1 (Jul/09-Jun/10).

July/August 2011: As the sovereign crisis unfolded, senior unsecured primary market came to an almost complete stand-still, while covered bond primary market continued to see some decent activities over those summer months.

March/April 2012: The Cyprus bail-out marked another spike of volatility which negatively impacted primary market activities and again covered bond issuance took over the lead from senior unsecured which actually had been rather buoyant at the start of the year. The ECB CBPP2 (Nov/11-Nov/12) provided some support throughout that period but already lost some importance with monthly purchase volumes at around EUR 1.5bn instead of the EUR 5bn we had seen during the CBPP1.

January/March 2016: On the back of the adjustment of world economic growth perspectives, investor risk aversion surged and led to a heavy correction at stock markets, commodities and riskier fixed-income assets



(subordinated and senior unsecured bonds). The spread widening and increase in volatility in Financials subordinated and senior unsecured markets induced issuers to reconsider their issuance plans and give priority to covered bond issues. As a consequence, EUR benchmark covered bond markets recorded in 2016 the strongest first quarter issuance volumes since 2011.

Covered bonds and asset encumbrance

As the crisis continued and covered bond issuance exceeded the issuance of senior unsecured bonds in the EUR market for the first time ever in 2010, asset encumbrance became a major topic in the financial stability debate. There are concerns that a high amount of bank assets, which are pledged to special creditors, and therefore would not be available in case of bank insolvency, would make banks more vulnerable in case of market turmoil and lead to further destabilisation of the system. However, when it comes to the importance of covered bonds for asset encumbrance, a more holistic approach needs to be adapted, taking into account the following points:

- The different covered bond models are characterised by the existence of risk cushions foreseen in their specific legal frameworks. Covered bond legislation acts, in practice, as an additional mitigant and issuance safeguard by requiring licenses for covered bond issuance, imposing strict collateral asset eligibility criteria and exerting strict public supervision.
- It is challenging to define what the ideal encumbrance equilibrium should be. Recent studies prove that there does not exist any evidence of correlation between the covered bond encumbrance of a bank and its senior unsecured spread levels.
- In particular, the existence of different business models requires a case by case interpretation of the level of asset encumbrance. For highly specialised issuers, for instance, the level of encumbrance – given a broad definition – is close to 100%. For those financial institutions which do not take any deposits, all senior investors are institutional investors who are well aware of their position in the priority ranking in case of insolvency. For such institutions, the high level of encumbrance is only a consequence of their business model and cannot be interpreted differently.
- Central bank and third party repo and credit support annexes of derivatives transactions are often more important and less transparent sources of asset encumbrance than covered bonds.
- Due to the restrictive cover pool eligibility criteria and the fact that cover pool monitor need to approve asset transfers, covered bond encumbrance tends to remain more stable and less sensitive to market conditions in times of turmoil than other forms of encumbrance arising from repo haircuts or derivative collateral.
- The covered bond market has experienced a smooth development over recent years with an average growth of 7.5% since 2007. Compared with the other forms of encumbrance (central bank repo transactions and derivative collateral), and considering the recent introduction of covered bond laws in a number of countries which did not have legislation on covered bonds in place, this remains a sustainable development. This growth has often been misinterpreted because, in parallel, the senior unsecured and securitisation issuance has been shrinking.

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 banks' ability to borrow and lend at long-term horizons and, hence, represent a stable source of funding for key banking function such as housing loans and public infrastructure. In this regard, we believe that covered bonds represent a key funding tool for the future European banking industry.

For instance, long-term financing is crucial for housing finance. Building or purchasing a home is the biggest investment for the majority of the European citizens, representing typically 4 to 5 times their annual income.

In absence of pre-existing wealth, they would have to wait for 40 or 50 years if they had to rely solely on their individual savings.

Borrowing resources are therefore necessary to acquire a home and more generally to support the European economy. Given the size of the investment, their repayment must be spread out over a long period to be compatible with annual savings capacity and, hence, requires long-term funding tools for banks to avoid asset and liabilities mismatches.

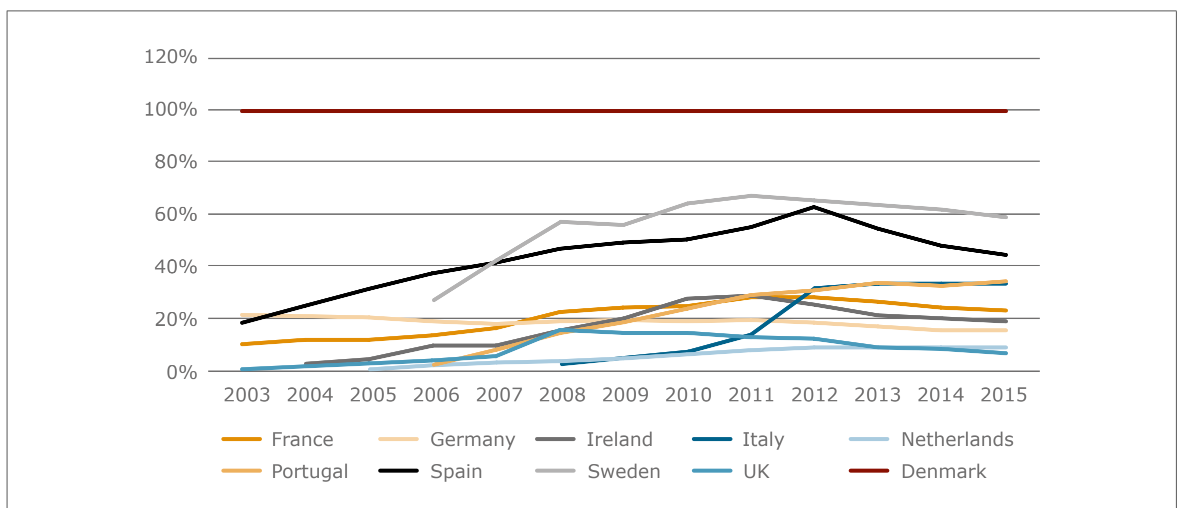
The efficient availability of mortgage finance is also based on the ready availability of financing at the longest tenors possible and the lowest price feasible. Without this, the mortgage market would be a function of market sentiment and the refinancing rates available to borrowers would be subject to much more price volatility, making planning for private households more challenging.

In this context and in particular in times of low risk appetite from investors, covered bonds with their key safety features such as strict legal and supervisory framework, asset segregation, a cover pool actively managed in order to maintain the quality of the collateral, play an essential role in ensuring the flow of capital in financing long-term growth and the real economy.

During the recent turmoil, the existence of a well-functioning covered bond market has allowed governments in Europe to constantly channel private sector funds to housing markets and maintain a relatively efficient lending activity without additional increase of the burden for taxpayers and public debts. This is the case for instance in the US, where 95% of the mortgage markets benefit from a governmental guarantee after the federal takeover of Fannie Mae and Freddie Mac.

The positive effects of covered bonds outlined in this section are clearly dependent on the extent of use of covered bonds within a particular country relative to the size of the domestic mortgage market and the alternative funding tools for banks (and their costs). The figure below shows that in most countries mortgage backed covered bonds account of 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 more moderate growth subsequently.

> Figure 3: Mortgage backed covered bonds as % of residential mortgage loans

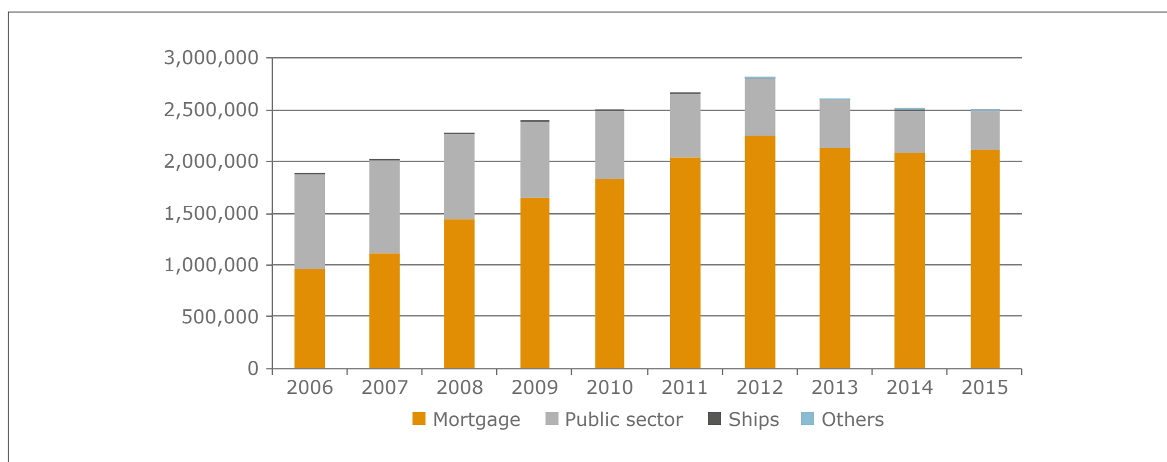


Source: EMF-ECBC

2.1.4 MORTGAGE – PUBLIC SECTOR – SHIP

The major categories of cover assets are mortgage loans, public sector loans and ship loans. The range of eligible cover assets is defined by a country's covered bond system. Covered bonds backed by mortgage loans exist in all countries with covered bond systems. Covered bonds to fund public sector lending (to national, regional and local authorities) are issued on a regular basis only in a limited number of European countries (Austria, France, Germany, Luxembourg, Norway, Spain and UK). Covered bonds backed by ship loans are rarer but can be found in Denmark and Germany. 2012 has seen first issuance of German Pfandbriefe backed by aircraft loans. In 2013, the first structured covered bond backed by SME loans was launched into the market by a German issuer. Italy and Spain have introduced special legislation permitting the issuance of covered bonds backed by other types of cover assets (SME, export finance, corporate bonds, receivables, etc.) but no issuance has occurred yet.

> FIGURE 4: TOTAL OUTSTANDING COVERED BONDS BY UNDERLYING ASSETS, 2006 TO 2015



Source: EMF-ECBC – Covered bonds outstanding at the end of 2016.

2.1.5 ECBC COVERED BOND COMPARATIVE DATABASE

The ECBC website presents in an on-line database at www.ecbc.eu a comparative analysis, based on a questionnaire with the responses of 48 frameworks. The comparative overview is divided into 9 sections covering the essential features of the covered bond systems. In addition, links are provided to the covered bond section of all issuers' websites, as well as covered bond legislation in English. Here, we highlight some of the results of that comparative overview.

Structure of the issuer

In all of the countries that participated in our comparative analysis, the covered bond issuers are regulated institutions. A classification of covered bond systems by type of issuer results in the following four categories:

> Universal credit institutions;

> Universal credit institutions with a special license;

> Specialised credit institutions; and

> Special purpose entities.

Framework

In most European countries, the issuance of covered bonds is regulated by specific covered bond legislation. In some countries contractual arrangements complement existing general insolvency law protecting holders of secured debt. Frameworks set the rules for important features such as eligible assets, specific asset valuation rules, assets-liability-management guidelines and transparency requirements.

Identification of the legal framework for bankruptcy of the issuer of covered bonds is of particular importance. The legal basis in case of bankruptcy of the covered bond issuer is provided either by the general insolvency law or by a specific legal framework superseding the general insolvency law.

Cover assets

The eligible cover assets in existing European covered bond systems range from exposures to public sector entities, mortgage and housing loans, exposures to credit institutions to ship and aircraft loans. Some covered bond systems distinguish between regular cover assets and substitution assets, where the latter is often subject to quantitative restrictions.

The geographical scope for cover assets ranges from the domestic area only, over EEA countries up to OECD countries. A feature that gained importance is the existence of regular covered bond specific disclosure requirements to the public. Existing covered bond systems offer a broad range of different solutions. One can find disclosure requirements regulated by law, by contract or on a voluntary basis. In most covered bond countries, national data disclosure templates exist obliging the issuers (either by law or on a voluntary basis) to disclose standardised cover pool information.

Valuation of mortgage cover pool & LTV criteria

Most countries have legal provisions or at least generally accepted principles for property valuation. Those provisions are an essential element to guarantee a certain minimum credit quality of cover assets. In most cases, the property valuation is based on a mortgage lending or prudent market value. LTV limits for single assets are ranging for residential mortgage loans from 60% to 80%. In some countries, there are additional LTV limits on a portfolio basis.

Asset-liability guidelines

Asset-liability guidelines exist in most of the covered bond systems, but large differences in technical details and the degree of explicit regulation (e.g. by law, by supervisor, issuer's by-laws, contractual provisions or business policy) make a detailed comparison rather difficult. One often applied rule is the 'cover-principle', which requires that the outstanding covered bonds must *at all times* be secured by cover assets of at least equal nominal amount and yielding at least equal interest. Some covered bond systems have implicitly or even explicitly introduced additional net-present value asset/liability matching rules.

Similar, mandatory over-collateralisation (on a nominal or net-present value basis) plays an important role as a risk mitigation tool in some covered bond systems. Derivatives constitute an important class of risk mitigating instruments in covered bond asset-liability management. In numerous covered bond systems, derivatives are explicitly allowed in the cover pool for hedging purposes.

Cover pool monitor & banking supervision

Most covered bond systems have established an external, independent cover pool monitor who must have appropriate qualifications. Moreover, in most countries national banking supervisors (and in some cases, financial market regulators) exercise special supervision of covered bonds.

Segregation of assets & bankruptcy remoteness

European covered bond systems use different techniques to protect covered bondholders against claims from other creditors in case of insolvency of the issuer. Most systems establish by law or by contract the segregation of cover pools from the general insolvency estate. In other covered bond systems, the protection of covered bondholders is achieved through a preferential claim within the general insolvency estate.

Numerous covered bond systems have provisions that allow derivatives to become part of the cover pool with the purpose to hedge interest rate or currency mismatches. Derivative counterparties can rank *pari passu* or subordinated to covered bondholders. In covered bond systems, covered bondholders have recourse to the issuer's insolvency estate upon a covered bond default (*pari passu* with unsecured creditors or even superior to them).

Transposing the EU Bank Recovery and Resolution Directive (BRRD) into national law and adapting national law to the Single Resolution Mechanism (SRM) might trigger amendments of national covered bond legislations in order to keep cover pools and covered bonds ring fenced in resolution procedures.

Risk-weighting & compliance with European legislation

From our sample, most fulfil the criteria of Article 52(4) UCITS. In many countries, the covered bond legislation falls within the criteria of Article 129 of Regulation EU No 575/2013 (CRR). In some countries, the CRR criteria are not fulfilled or not applicable. Moreover, in most of the participating countries in our survey, covered bonds are eligible in repo transactions with the national central bank and special investment regulations for covered bonds are in place.

2.1.6 SUCCESS OF THE INSTRUMENT

The covered bond is one of the key components of European capital markets. The amount of outstanding mortgage covered bonds is equivalent to around 30% of outstanding residential mortgage loans in the EU. The volume outstanding at the end of 2015 amounted to 2.5 trillion EUR (covered bonds covered by mortgage loans, public-sector loans and ship loans), which represents a decrease of 0.25% year on year. The five largest issuing countries in 2015 were Denmark, Sweden, Germany, Italy and France respectively.

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.

> Figure 5: Volume outstanding covered bonds in Europe end of 2015 in EUR million

	Public Sector	Mortgage	Ships	Others	Mixed Assets	TOTAL
Austria	17,620	27,345	-	-	-	44,965
Belgium	1,800	15,105	-	-	-	16,905
Cyprus	-	650	-	-	-	650
Czech Republic	-	11,656	-	-	-	11,656
Denmark	-	377,903	5,221	-	-	383,124
Finland	-	33,974	-	-	-	33,974
France	66,717	188,669	-	-	67,685	323,072
Germany	180,524	197,726	5,158	1,006	-	384,414
Greece	-	4,961	-	-	-	4,961
Hungary	-	3,022	-	-	-	3,022
Iceland	-	1,205	-	-	-	1,205
Ireland	15,389	16,916	-	-	-	32,305
Italy	8,400	122,135	-	-	-	130,535
Latvia	-	-	-	-	-	-
Luxembourg	10,166	-	-	-	-	10,166
The Netherlands	-	61,101	-	-	-	61,101
Norway	1,672	107,694	-	-	-	109,366
Poland	35	1,230	-	-	-	1,266
Portugal	500	34,461	-	-	-	34,961
Slovakia	-	4,198	-	-	-	4,198
Spain	28,505	252,383	-	-	-	280,888
Sweden	-	221,990	-	-	-	221,990
United Kingdom	6,358	114,910	-	-	-	121,268
Total EEA	337,687	1,799,234	10,379	1,006	67,685	2,215,991
Australia	-	68,604	-	-	-	68,604
Canada	-	85,759	-	-	-	85,759
New Zealand	-	9,149	-	-	-	9,149
Panama	-	276	-	-	-	276
Singapore	-	919	-	-	-	919
South Korea	-	1,954	-	-	-	1,954
Switzerland	-	111,542	-	-	-	111,542
United States	-	4,000	-	-	-	4,000
Total non EEA	-	282,203	-	-	-	282,203
Grand Total	**337,687**	**2,081,437**	**10,379**	**1,006**	**67,685**	**2,498,195**

Source: EMF-ECBC

Notes: Please refer to section 5 for additional information on the ECBC statistics.

2.1.7 WHO BUYS COVERED BONDS?

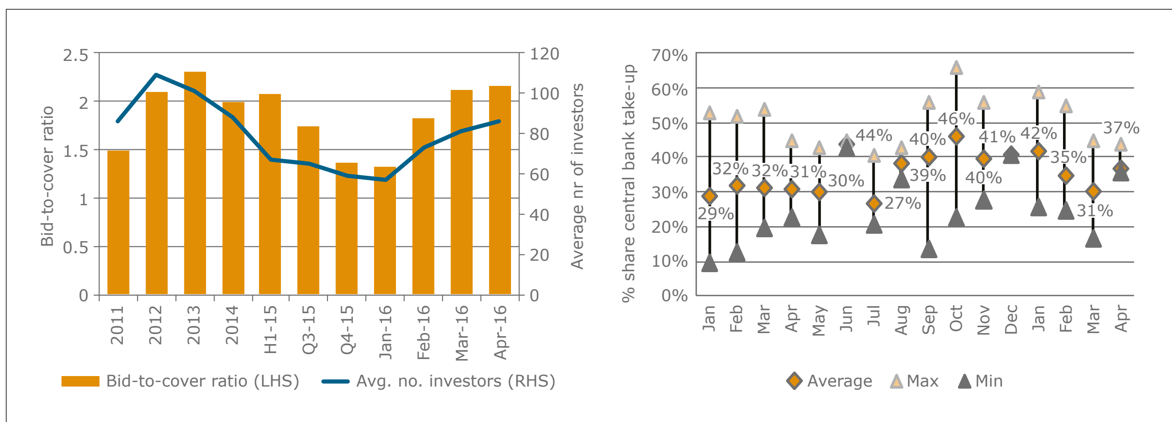
By Cristina Costa, Société Générale

Despite ongoing covered bond purchasing by the Eurosystem via the third covered bond purchase programme (CBPP3) and the ensuing draining of liquidity, covered bonds continue to be well bid overall. The first quarter of 2016 has seen the return of cash-rich real money investors to the primary market, lured back by new issue concessions and lack of supply on the senior unsecured front. The impact of the low-yield environment and the growing exposure of the euro system to the EUR fixed income market is being particularly felt in the secondary market. Traders' covered bond holdings have fallen due to regulatory constraints (increased capital costs) as well as the fact that with the large demand from real money investors for primary issues, trading desks are not being allocated paper. In this context, liquidity in the covered bond market has become an issue; traders' are finding it increasingly difficult to source paper in primary and, as such, are not willing to be short.

The crowding out of investors is less pronounced in the primary market, where bid-to-cover ratios have increased significantly since the start of the year and the share of central bank purchases has come down to an average of c.35% YTD from a peak of 54% in Q4 15. The return of real money investors is reflected in primary market statistics. The bid-to-cover ratio declined from c.2.1x in 2011-2014 to 1.7x in Q3 15 and 1.4 in Q4 15. However, in 2016, it has increased month on month, with some deals in April showing ratios of 3x (Vakifbank's inaugural Turkish CB was 6x oversubscribed). At the same time, 2016 has seen more granular triple-digit books in primary deals, particularly for those from the periphery, and longer-dated paper. Looking ahead, we expect sustained real money demand for covered bonds given the lack of suitable alternatives (particularly with the ECB buying corporate bonds via its CSPP), solid fundamentals and strong market technicals (high volumes of redemptions).

> FIGURE 1: RETURN OF REAL MONEY INVESTORS IN 2016

> FIGURE 2: LOWER SHARE OF CENTRAL BANKS IN PRIMARY



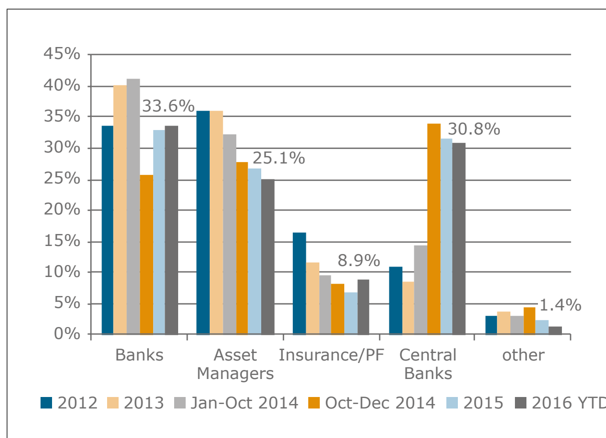
Source: SG Cross Asset Research/Rates

Why buy covered bonds? The rationale behind buying covered bonds has been based on their **favourable regulatory treatment** in Europe, with preferential risk weighting, lower spread-risk charges under Solvency II, favourable haircut valuations for repo transactions with the ECB (vs senior bank debt and ABS) and inclusion as Level 1 and Level 2A assets under the EU's liquidity coverage ratio (LCR – subject to fulfilling the requirements). In addition, covered bonds are the only non bail-in-able wholesale funding instrument. Although yielding much less today than they did pre-CBPP3, covered bonds continue to offer spread pick-up vs government bonds in most jurisdictions, except in European peripheral markets, where they usually trade inside due to fundamental reasons. The relative value of peripheral covered bonds vs govies is driven the fact

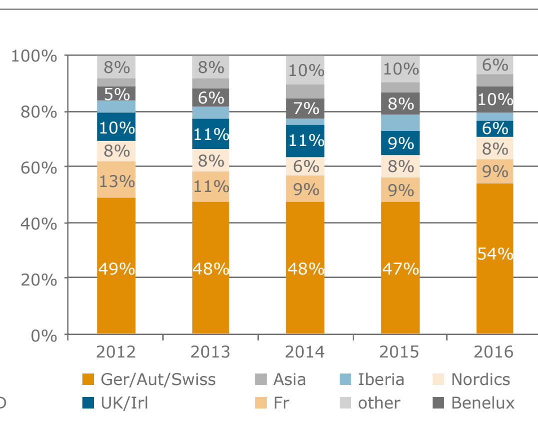
there is protection through non-public-sector-related cover pools (i.e. mortgages), issuers with diversified business models offer strong resilience to domestic crises, and covered bond spreads trend to be much less volatile in secondary markets than govies.

Who buys covered bonds? Bank treasuries remain the largest buyers, mainly due to the LCR bid but also due to the uncertainty on the bail-inability of bank senior unsecured debt. Since mid-2014, bank treasuries have been investing further out the curve to avoid negative rates and have added exposure to non-EEA paper and peripherals on a selective basis. However, given the combination of low spreads and declining yields, bank treasuries have scaled down their covered bond investments. **Asset managers** are the second-largest investors but have been reducing their holdings since October 2014 – both in terms of participation in primary deals as well as their total outstanding – in favour of other asset classes with more tightening potential. However, the arrival of higher-yielding CBs from Turkey could lure back these investors (they took 69% of the recent Vakifbank issue).

> Figure 3: Impact of CBPP3 strongly reflected in primary deal statistics



> Figure 4: Allocation of euro benchmark covered bond issues by geography



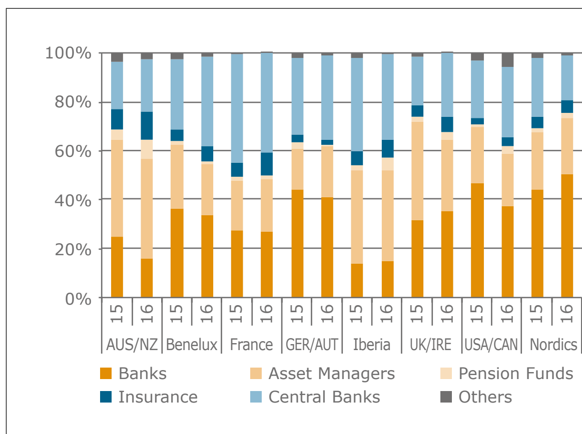
NB. 2016YTD = Jan-April;

Source: SG Cross Asset Research/Rates

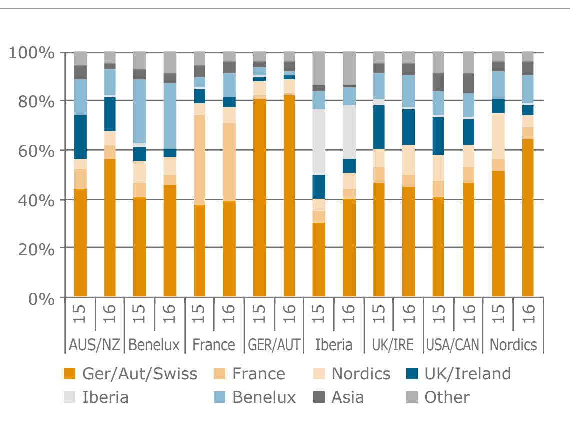
The biggest jump in investor demand has come from **central banks/official institutions**. These investors used to average 10-15% of order books, but with the ECB's CBPP3 programme, **central banks** are becoming one of the main covered bond investors. Although the ECB was initially ordering approximately 50% of a deal size, it has gradually decreased its purchases to around 30-35% on average currently. On the other hand, **insurance companies and pension funds have decreased their covered bond investments** in search of higher yielding alternatives, as they are being forced to go longer duration and lower down the capital structure. Finally, given the very low yields offered by covered bonds, **credit investors** have largely exited the market. Credit differentiation has faded away and investors are no longer being paid for the additional risk they take.

In terms of geography, Germany and Austria remain the largest investors in covered bonds, and as shown in the chart bottom right, there is a clear home bias. Demand from investors in France, the Nordics, Benelux and UK has remained relatively constant. All in all, investors remain cautious in their investment choices: Since the ECB's quantitative easing (QE) exit strategy is not yet known, they are concerned there could be a severe spread widening among covered bonds once the expanded asset purchase programme (EAPP) stops. The presence of Asian investors has expanded further, although they still prefer the best credits, whether in peripheral or core markets. US investors, mainly hedge funds, have largely exited the market.

> FIGURE 5: ALLOCATION OF EURO BENCHMARK COVERED BOND ISSUES BY INVESTOR TYPE



> FIGURE 6: HOME BIAS STILL PRESENT IN PRIMARY STATISTICS



NB. 2016YTD = Jan-April;

Source: SG Cross Asset Research/Rates

Where do we go from here? Decreasing liquidity is the biggest challenge facing the covered bond market. However, despite the Eurosystem central banks displacing part of the covered bond investor base, we expect real money demand for covered bonds to be sustained given the lack of suitable alternatives and strong market technicals – declining EUR benchmark supply coupled with high volumes of redemptions. Since the start of CBPP3, some real money investors have replaced part of their CB investments with credit. However, with the ECB's corporate sector purchase programme (CSPP) and yields compressing overall, the attractiveness of covered bonds will depend on the relative value they offer vs other products, including govies, SSAs and senior unsecured. Most investors we speak to remain neutral covered bonds, trying to add some exposure through primary when NIPs look interesting. However, switches in the secondary market are rare given increasing bid/offer spreads. So far, investors have managed to survive the squeeze by buying the outperforming and higher yielding periphery, going longer out the curve, switching into covered bonds not eligible for CBPP3 and turning to currencies other than EUR.

Why investors will remain interested in the product? Many large investors are holding bonds in hold-to-maturity portfolios where you cannot sell them. And many existing bond holdings are swapped, so you have to unwind the swap to actually get the bond. Bank treasurers are reluctant to sell their liquid portfolios because selling means having to replace assets in an extremely tight spread environment. Furthermore, client discussions (in particular with insurance companies) suggest that none of them are interested in selling their holdings at the current levels. Monetising mark-to-market gains would imply paying a high level of taxes, and reinvesting in fixed-income product at today's rich levels is therefore unattractive. One thing is for sure, having displaced so much private demand – which will be slow to come back – the ECB will need to give careful consideration to its exit strategy, ensuring there is enough time to wean investors off QE.

2.2 REGULATORY ISSUES

2.2.1 COVERED BONDS AND EU BANKING REGULATIONS

By Frank Will, HSBC and Chairman of the ECBC EU Legislation Working Group

Over the last few years, 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. Below we provide an overview of the planned or currently discussed major regulatory amendments which could affect covered bonds.

I. TOWARDS "BASEL IV"

The Basel Committee on Banking Supervision (BCBS) plans to further develop the requirements of Basel III. The discussed amendments go into the direction of a fundamentally overhauled standard – already dubbed by some as "Basel IV". The far-reaching changes include, among others, a revision of the Standardised Approach, the potential introduction of a capital floor and an overhaul of the internal risk models.

Revision of the Standardised Approach

Back in December 2015, the BCBS released its second consultation document on the revisions to the Standardised Approach for credit risk. Interestingly, the BCBS paper re-introduced the use of ratings, which was in stark contrast to the first consultation paper that proposed to replace references to external ratings with a limited number of risk drivers. Specifically, the Basel Committee suggests:

> The use of ratings is reintroduced for exposures to banks and corporates. However, in order to reduce mechanistic reliance on ratings, due diligence is required which could result in a higher risk weight.

> The proposed risk weighting (RW) of residential real-estate (RRE) exposures is based on the loan-to-value (LTV) ratio as the main risk driver, debt service coverage (DSC) has been removed, instead assessment of borrowers' ability to pay is proposed as a key underwriting criterion in operational requirements.

> All real estate exposures, including specialised lending exposures, are classified as the same asset class. Within this asset class there are three sub-categories (from less to more risky):

a) **General treatment** for exposures secured by real estate where repayment is not materially dependent on rent/sale of the property.

b) A **more conservative treatment** for exposures secured by real estate where repayment is materially dependent on cash flows (i.e. rent/sale) generated by the property. Specialised lending (corporate) exposures assigned to "income-producing real estate" under the Internal Ratings-Based Approach (IRB) would be classified under this category.

c) A **conservative, flat risk weight** for specialised lending real estate exposures defined as "land acquisition, development and construction" (i.e. loans to companies or special purpose vehicles (SPVs), unfinished property meeting the definition of specialised lending).

The Basel Committee will conduct a comprehensive impact study in 2016 and plans to finalise the revised Standardised Approach by end 2016. From a bank perspective, the proposal by the Basel Committee is not

without problems. In light of the diversity of global real estate markets in terms of risk profile, a one-size-fits-all approach does not seem appropriate. Moreover, the proposed risk weights would lead to significantly higher Standardised Approach capital charges for higher LTV loans which could be reduced by allowing LTV calculation based on loan tranching. In addition, the proposed treatment of income producing real estate (IP-RE) seems too harsh as there is no evidence that cash flow producing real estate is generally riskier exposure. Last but not least, the Standardised Approach consultation and the capital floors consultation (please see section below) have to be viewed together. A high capital floor would essentially mean that banks using the IRB Approach will be impacted by any changes to the Standardised Approach through the backdoor.

Revision of the Internal Ratings-Based (IRB) Approach

Besides the amendments of the Standardised Approach, the BCBS is conducting a strategic review of the IRB models. This review could result in an overall re-calibration of the framework to make the internal risk weights between banks more comparable. In March 2016, the BCBS published a consultation paper on changes to the IRB, aiming at improving comparability and addressing excessive variability in the capital requirements.

Specifically, the BCBS proposes to:

- remove the option to use the IRB for certain exposures (including financial institutions, large corporates with total assets of more than EUR50bn and equities), as model parameters cannot be estimated sufficiently reliably;
- adopt exposure-level floors on model parameters to ensure a minimum level of conservatism for portfolios;
- provide greater specification of parameter estimation practices (PD, LGD etc.) to reduce variability in risk weights; and
- set aggregate output floor of 60-90% of Standardised Approach or output floors at a more granular level.

A quantitative impact study (QIS) will analyse the final design and calibration of the proposal. The BCBS does not want to significantly increase overall capital requirements and will consider the interactions of input floors, output floors and leverage ratio.

Introduction of a new capital floor

The BCBS has also published a consultation paper on the introduction of a capital floor for the IRB-models. This capital floor would be based on standardised, non-internally modelled approaches and would replace the existing transitional capital floor based on the Basel I framework. The regulators believe that such a floor would mitigate model risk and measurement error stemming from internally-modelled approaches. It should also enhance the comparability of capital outcomes across banks, and ensure that the level of capital across the banking system does not fall below a certain level. Two options are currently discussed: (i) an aggregate output floor calibrated in the range of 60-90% of the Standardised Approach and alternatively (ii) separate floors for certain risk categories such credit, market and operational risk.

II. CAPITAL MARKET UNION: EUROPEAN SECURED NOTES (ESN)[1]

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 the paper, the European Commission also outlined its plans to discuss a range of policy options to achieve greater integration in the covered bond markets.

1 For more information about the ESN initiative, please refer to Key Theme Article 1.3.

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. The ECBC proposed two implementation options for ESNs: (i) an on-balance sheet dual recourse instrument with a dynamic pool for long-term financing purposes; or (ii) an off-balance sheet dual recourse instrument with static pool that could also offer risk sharing (and capital relief) as a response to deleveraging needs, as well as promoting risk transfer and risk-sharing. The ECBC suggests using various models and options for the national implementation of ESNs, as this would allow regulators, supervisory authorities and market participants to identify the best way of introducing such an instrument in different market and legislative environments. This would also help to facilitate a rapid legislative implementation of qualitative standards with a bottom-up approach, and to develop homogenous and comparable characteristics.

Crucial for the success of such a tool would be a positive regulatory recognition of this financial instrument, regardless of the respective structure. These regulatory incentives should ideally comprise of eligibility for LCR and central bank repurchase transaction, lower risk weight under the CRR and Solvency II, CRA III Regulation, as well as being exempted from bail-in under the BRRD.

The new issue volumes and achievable funding levels of ESN will to a large extent depend on the level of preferential treatment granted by the European regulatory authorities to this new asset class. Moreover, it will be important to ensure a clear distinction by market participants between the ESNs and the traditional covered bonds as the risk profiles of the underlying assets in terms of probability of default (PD) and loss given default (LGD) differ significantly.

III. 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 is planned to come into force by 2018, if deemed necessary. The CRR states that "by 31 December 2016, the Commission shall, if appropriate, […] and taking full account of the diversity of the banking sector in the Union, submit a legislative proposal to the European Parliament and the Council on how to ensure that institutions use stable sources of funding." The Basel Committee already went a step further and issued the final standard for the Net Stable Funding Ratio (NSFR) back in October 2014.

The following analysis is based on the Basel paper and highlights the issues for the covered bond market that could arise from a one-to-one implementation of the Basel standard into European law. It also takes into account the European Banking Authority (EBA) report on NSFR from December 2015, which has to be considered by the European Commission in its assessment of the appropriateness of having legislation on stable funding.

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.

$$\text{NSFR} = \frac{\text{Available Stable Funding (ASF)}}{\text{Required Stable Funding (RSF)}} \geq 100\%$$

The unmodified implementation of the Basel NSFR requirements into EU law would result in several issues for the covered bond market. The largest problems for the covered bond market are the following:

Encumbrance problem

In general, residential mortgages with a residual maturity of 1 year or more, that qualify for a risk weight of 35% or lower under the Basel II Standardised Approach, have a RSF of 65%. However, if mortgage loans form part of the cover pool, then they are regarded as encumbered which means that the required stable funding ratio jumps from 65% to 100%. This means that from a simple RSF perspective senior unsecured debt would be a more attractive funding channel than covered bonds.

Treatment of over-collateralisation

The different RSF treatment of encumbered and unencumbered assets becomes even more pronounced and could have unintended consequences in case of (voluntary) over-collateralisation. If the required funding for cover assets representing the over-collateralisation is higher than that for the same assets outside the cover pool, issuers will have an incentive to keep a low over-collateralisation level from a RSF perspective. Hence, the ECBC argued in its response to the EC Consultation Paper on Further Considerations for the Implementation of the NSFR in the EU from the 28th of June 2016 that the over-collateralisation should be generally treated as unencumbered.

Covered bonds with maturities under 1 year

As highlighted above, covered bonds with a remaining maturity of 1 year and more will provide available stable funding of 100%. Encumbered residential mortgages in the cover pool will have a matching RSF factor of 100%. However, if the remaining maturity of the covered bonds drops below 1 year or below 6 months, then the ASF will drop to 50% and 0%, respectively (see Figure 1). At the same time, mortgage loans encumbered for a period of less than 1 year will be treated as unencumbered and will have a RSF of 65% (assuming residual loan maturities of more than 1 year). This means that covered bonds will have a 15 percentage point shortfall between ASF and RSF for remaining maturities of 6 months to 1 year and even a 65 percentage point shortfall for the last 6 months before their maturity date. This seems inconsistent given the matched funding character of covered bonds.

FIGURE 1: DIVERGENT TREATMENT OF COVERED BONDS AND COVER POOL ASSETS

Covered bonds		Residential mortgages in the cover pool*
Remaining maturity	**Available Stable Funding**	**Required Stable Funding**
>= 1 year	100%	100%
6 months below 1 year	50%	65%
below 6 months	0%	65%

Source: HSBC, BCBS

* Residual maturity is above 1 year, risk weight of 35% or less under the Standardised Approach

There are also some question marks regarding the treatment of swap agreements on covered bonds. Moreover, the ECBC argues that the RSF should be consistent with the LCR rules. Hence, covered bonds that qualify for Level 1 HQLA should have a RSF of 5%, while Level 2A and Level 2B covered bonds should have a RSF of 15% and 50%, respectively.

In summary, there are several issues with the NSFR that would be problematic for the mortgage market and the covered bond product and would unduly hit the covered bond industry if introduced in Europe in the Basel format. However, given the importance of covered bonds in financing the mortgage market in Europe (which is for instance very different from the way mortgages are financed in the US) and given the favourable treat-

ment of covered bonds under the LCR, the final NSFR rules should take into account the warranted industry concerns if the European Commission decides to implement the NSFR. The NSFR will likely be applied from the beginning of 2018, which is in the not too distant future. This is even more true when taking into account that investors will likely demand from banks to fulfil the NSFR requirements already ahead of the actual introduction date, reducing the timeframe for making any amendments to the NSFR rules.

IV. LEVERAGE RATIO

The BCBS rules will require banks to maintain a leverage ratio of 3% from 2018 onwards. The final calibration is expected to be completed in 2016. The European Commission should follow with a leverage ratio proposal before the end of 2016 which could also come into force by 2018. There have been some efforts by the banking industry to achieve an exemption for specialist lenders, as a one-size-fits-all approach would unduly punish banks focusing on assets with low risk weights. The CRR explicitly states that during the review of the impact of a leverage ratio on different business models, particular attention should be paid to business models which are considered to entail low risk, such as mortgage lending and specialised lending with regional governments, local authorities or public sector entities. However, it seems that regulators are reluctant to grant an exemption for certain asset classes as this would open a Pandora's box and could trigger a wider discussion about the treatment of other low-risk asset categories. One other option would be to exempt smaller institutions from the leverage ratio – although such a size-based rule would not work too well with the idea of a 'level playing field' in Europe.

Besides this, there are even discussions at the BCBS level about a potential increase of the leverage ratio beyond the current 3% limit driven primarily by the United States representatives. In the US, the forthcoming requirements for large banks are already significantly higher. From the beginning of 2018, the US regulators will demand a minimum leverage ratio of 3% for US banks using the advanced internal rating models. Globally systemically important banks (G-SIBs) will be required to have higher leverage ratios of 5%. Insured deposit-taking institutions of G-SIBs must maintain even a leverage ratio of at least 6% to be considered as 'well capitalised'.

In Canada, the Office of the Superintendent of Financial Institutions (OSFI) requires bank to maintain a leverage ratio of 3% or higher. However, the OSFI can set higher requirements on an institution-by-institution basis. This so-called 'authorised leverage ratio' is considered supervisory information and is not permitted to be disclosed.

An increase in the leverage ratio beyond the currently envisaged 3% would hurt the willingness and ability of particularly European banks to lend and would over-proportionally hit European issuers with large mortgage portfolios. In stark contrast to the US where large parts of the mortgage financing is indirectly provided by Government Sponsored Enterprises (GSEs), such as Fannie Mae or Freddie Mac, real estate lending in Europe is still mainly funded by the banking sector.

V. LIQUIDITY COVERAGE RATIO (LCR)

On 10 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 phasing-in of the LCR started back in October 2015 and will be fully implemented at the beginning 2018. This phase-in period grants 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.

The phase-in schedule is defined as follows:

- 60% of the final requirements from 1 October 2015;
- 70% from 1 January 2016;
- 80% from 1 January 2017; and
- 100% from 1 January 2018.

The full implementation of LCR by 2018 is one year earlier than demanded by the Basel standard. Furthermore, at the national level, banks can be required by their regulators to hold LCR levels up to 100% before the LCR is fully introduced in 2018. 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 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 EBA estimates), the implementation of the LCR is likely to sustain the demand for eligible bonds. Currently, most European banks already over-fulfil the LCR requirements, as highlighted by several quantitative impact studies. According to issuer feedback, many bank treasuries have initially focused on cash and government bonds to reach the required LCR levels. We expect that over the coming years, banks will aim at optimising their liquid asset portfolios under both liquidity and return aspects as it becomes increasingly difficult for bank treasurers to produce a positive profit contribution in the current low or even negative yield environment.

Quick overview of the various LCR classifications

Level 1 HQLAs (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 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 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 (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 (High Quality Liquid Assets) 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 over-collateralisation 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 over-collateralisation of 7%;

> EEA covered bonds with a credit quality step 1 rating (AA- or better), an issue size below the EUR500m threshold (but still meeting the minimum size of EUR 250 m equivalent) need a lower minimum over-collateralisation of 2%;

> Non-EEA covered bonds rated at credit quality step 1 (AA- or better) with a minimum over-collateralisation of 7%. There is no minimum size requirement. However, bonds with a size of EUR500m equivalent or more need only a minimum over-collateralisation of 2%.

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 comprise high quality securitisations for RMBS, auto, SME and consumer loans. These 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%. Other high quality EEA covered bonds that do not meet the rating threshold of Level 1 and 2A also fall under this category. However, the haircut for these covered bonds is relative 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%.

VI. 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. In order to be eligible for the preferential risk weights, 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). 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 outstanding 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 over-collateralisation 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 2 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 2: 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 3 below).

FIGURE 3: 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)

The Internal Ratings-Based Approach (IRB)

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 4 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 1983-2015), 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 0.07%) and a maturity of 5 years would have a risk weight of 6.37% under the FIRB and of 10.62% under the AIRB.

FIGURE 4: 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%	3.45%	5.06%	5.87%	6.67%	8.28%	9.89%
Baa/BBB	0.20%	7.96%	10.41%	11.63%	12.86%	15.31%	17.76%
Ba/BB	0.96%	19.06%	22.41%	24.09%	25.76%	29.12%	32.47%
B/B	3.62%	31.05%	34.29%	35.91%	37.53%	40.77%	44.01%
below B	10.58%	47.66%	50.71%	52.23%	53.76%	56.81%	59.85%

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 CIB and Chairman of the ECBC Statistics & Data Working Group

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.

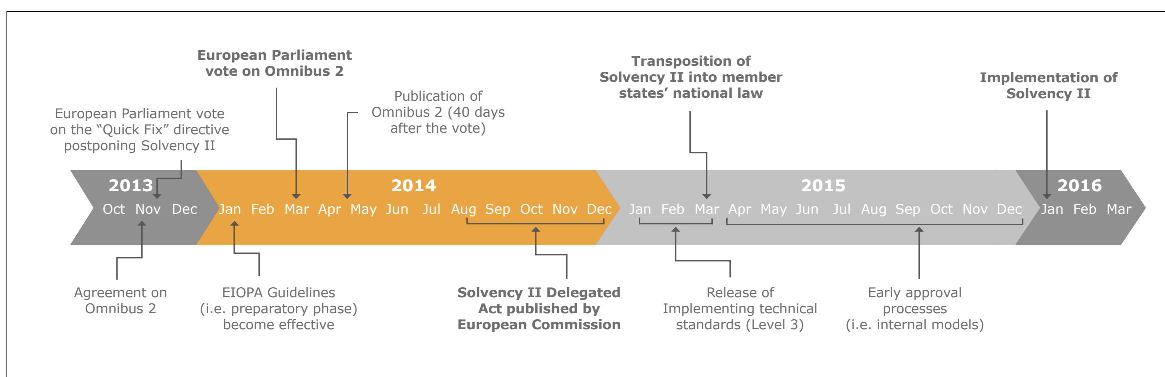
While the Solvency II Directive was adopted by the European Parliament and the Council of the European Union in November 2009, the actual implementation, however, was delayed quite a few times. In the past, the implementation date was rather a moving target that was regularly pushed down the road whenever the previous target became unrealistic.

In the meantime, amendments to the original Solvency II Directive had 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 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 the 1st of January 2016.

The journey does not end there, however. There have already been adjustments to the treatment of securitisation (lower spread risk capital charges) and work is currently being done by EIOPA on infra-structure exposures. Future work will involve a review of the capital requirement standard formula, the reporting on the application of long-term guarantee mechanisms and measures on equity risk.

Figure 1: Timeline of implementation



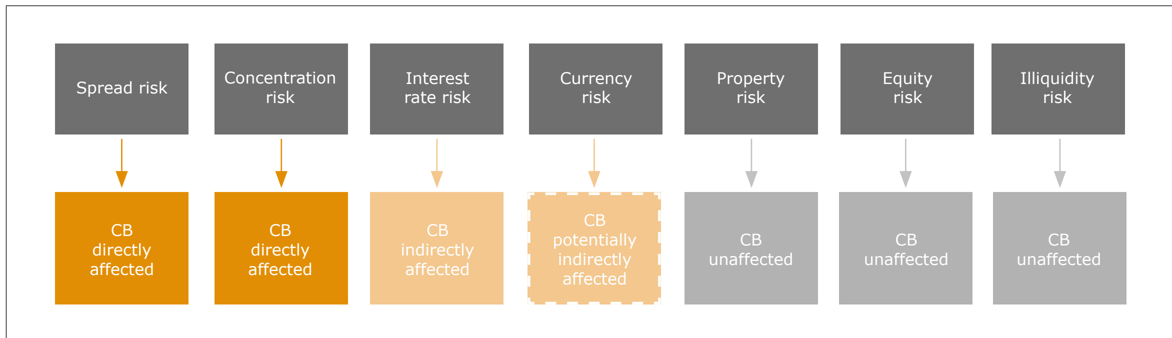
Source: European Commission, Crédit Agricole CIB

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. Initially, Solvency II had planned for a strictly linear relationship between duration and capital. This, however, was changed with the increase per extra year of duration beyond 5Y having been reduced and a further flattening of the increase after 10Y. After all, the long end is exactly where insurance companies are active and regulators did not want to dis-incentivise them through onerous capital charges.

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 conditional pass-through (CPT) covered bonds have however become much 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 Approach 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.

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 but 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 ABS	2.1% * D for type 1; 12.5% *D for type 2; 33% * D for re-securitisations				
AA + to AA- ABS	3.0% * D for type 1; 13.4% *D for type 2; 40% * D for re-securitisations				
A+ to A- ABS	3.0% * D for type 1; 16.6% *D for type 2; 51% * D for re-securitisations				
BBB+ to BBB- ABS	3.0% * D for type 1; 19.7% *D for type 2; 91% * D for re-securitisations				
BB+ to BB- ABS	82.0% *D for type 2; 100% * D for re-securitisations				

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 ABS (type1)	2.1%	4.2%	6.3%	8.4%	10.5%	12.6%	14.7%	16.8%	18.9%	21.0%	23.1%	25.2%	27.3%	29.4%	31.5%
AA + to AA- ABS (type1)	3.0%	6.0%	9.0%	12.0%	15.0%	18.0%	21.0%	24.0%	27.0%	30.0%	33.0%	36.0%	39.0%	42.0%	45.0%
A+ to A- ABS (type1)	3.0%	6.0%	9.0%	12.0%	15.0%	18.0%	21.0%	24.0%	27.0%	30.0%	33.0%	36.0%	39.0%	42.0%	45.0%
BBB+ to BBB- ABS (type1)	3.0%	6.0%	9.0%	12.0%	15.0%	18.0%	21.0%	24.0%	27.0%	30.0%	33.0%	36.0%	39.0%	42.0%	45.0%

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

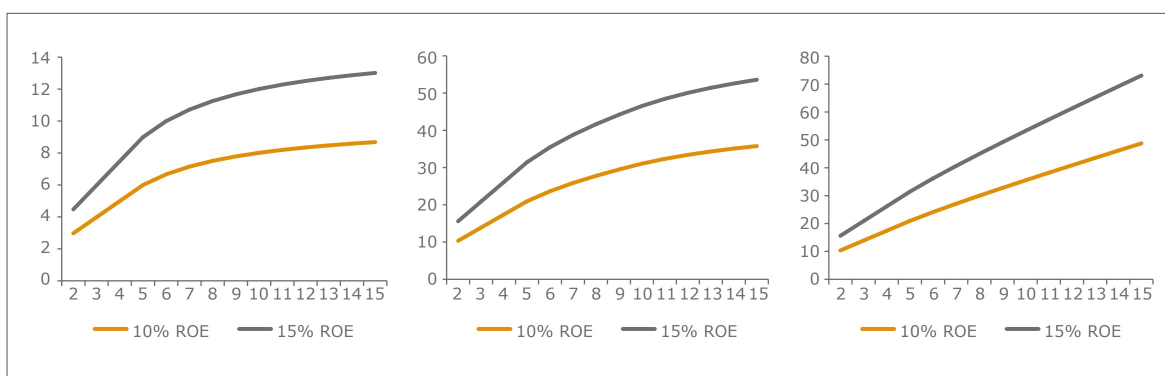
many others driving the final SCR. It also depends on the return on equity an insurance investor needs to generate. Nonetheless, we have tried to estimate the additional yield required to cover the extra capital from this risk module.

> We have calculated the average capital charge for a buy and hold investor over the whole life of the investment;

> We have then used two different ROEs, 10% and 15%, to calculate the extra return needed to fulfil this return requirement.

> FIGURES 5: SPREAD IN BP NEEDED TO COMPENSATE FOR ADDITIONAL CAPITAL BETWEEN...

...AA RATED COVERED AND AAA RATED COVERED BOND BY MATURITY | ...A RATED COVERED / CORPORATE AND AAA RATED COVERED BOND BY MATURITY | ...AAA RATED COVERED AND AAA RATED SOVEREIGN BOND BY MATURITY



Source: EIOPA, Crédit Agricole CIB

The figures above show the required spread pickup for a range of product pairs.

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%.

> 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.

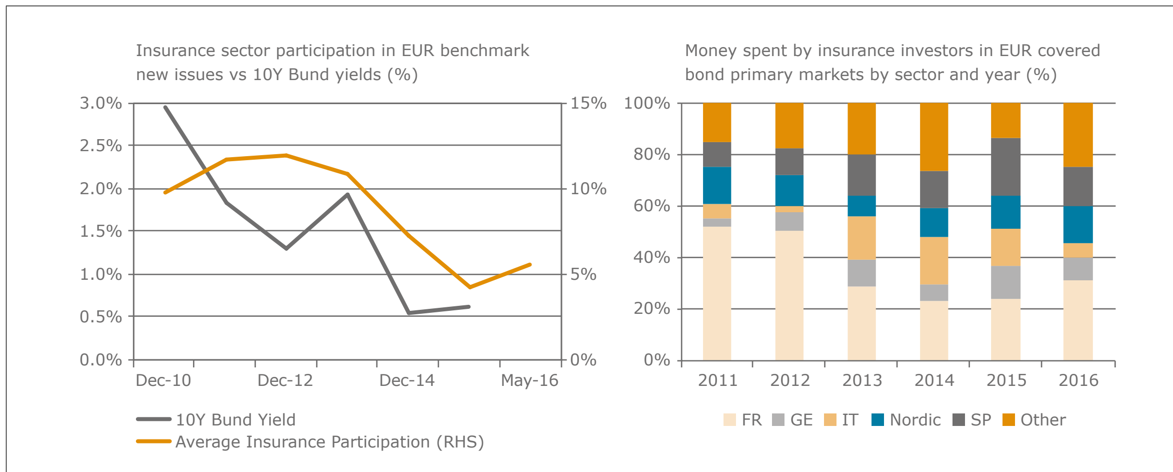
Apart from the comparison with sovereign debt, highly rated UCITS-compliant covered bonds do fare relatively well overall. They get preferential treatment in both the spread risk and concentration risk modules as long as they are rated at least AA−. Non-UCITS-compliant covered bonds are treated as senior unsecured exposure but as long as they are highly rated, at least capital charge differences to UCITS-compliant covered bonds are not major. Capital charges do, however, start to go up the moment ratings drop to below AA−, as even UCITS-compliant covered bonds are then treated as senior unsecured exposure from A+ onwards. 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. And 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.

In our view, covered bonds will thus maintain an integral part of insurance companies' investments despite the disadvantage to sovereign debt.

The bigger problem for insurance companies these days are low yields overall, something that is not specific to covered bonds but fixed income assets in general. Insurance companies' share in covered bond new issues has come down in the last years as yields have dropped. Initially they tried to move into the lower-rated still higher-yielding products, but as spreads have compressed across sectors and issuers, activity levels by insurance sector investors in covered bond space has clearly taken a hit.

> FIGURE 7: INSURANCE PARTICIPATION IN EUR BENCHMARK COVERED BOND NEW ISSUES



Source: Bloomberg, IFR, The Cover, Covered Bond Report, Crédit Agricole CIB

Solvency II is not going to keep insurance accounts from buying covered bonds (apart from maybe conditional pass-through ones), but it will require higher yield levels overall to reignite the flame.

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

Since the onset of the financial markets crisis, central banks worldwide have stepped in, putting in place a number of measures to backstop the banking system. Wide-scale unsterilized asset purchases (Quantitative Easing, QE) have been extensively used by the Federal Reserve and the Bank of England. The European Central Bank (ECB) responded with two covered bond purchase programmes initiated in mid-2009 and in late-2011. A crucial pillar of the responses of almost all central banks has been their monetary policy operations, either by increasing the number or nature of their short and long term repo operations such as the two 3-year Long-Term Refinancing Operations (LTROs) from the ECB in December 2011 and in February 2012, or by widening the pool of repo eligible collateral. The targeted LTROs announced by the ECB back in June 2014 and in March 2016 as well as the Expanded Asset Purchase Programme including the third covered bond programme, however, aim at enhancing the functioning of the monetary policy transmission mechanism by supporting bank lending to the real economy rather than being a direct response to the financial market crisis.

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 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 applied. 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.

> 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	Covered bonds compliant with UCITS Article 52(4) or similar safeguards	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	US Covered Bonds	AUD, CAD, CHF, DNK, EUR, GBP, JPY, SEK	BBB	Lowest Rating	n/a	No
			German Pfandbriefe		AAA			
BoE	Operating Standing Facilities, Short term OMOs	No	n/a	GBP, EUR, USD, AUD, CAN, CHF, SEK	n/a	n/a	n/a	n/a
	Level B Collateral (ILTR, DWF, CTRF and FLS)	Yes	UK, French, German & Spanish 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 & EEA (based on the location of the underlying assets)		Broadly equivalent to A-/A3		None	Yes

1 Foreign currency-denominated debt instruments constitute eligible collateral for Eurosystem credit operations from 9 November 2012 onwards, subject to the fulfillment of the relevant eligibility criteria. 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).

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	Secu-rity 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 excep-tions Issuer's country: AA-/Aa3		CHF 1 bn equivalent (issuance amount)	
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	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 crite-ria 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

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 and the European debt crisis through its repo operations. Within the ECB's liquidity operations, covered bonds play an increasingly 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. Measures of this type include the two 3-year long-term refinancing operations the ECB conducted in December 2011 and in February 2012. Banks took more than EUR 1 trn in gross liquidity – backed by eligible collateral. Many covered bond programmes have been set up not just as an additional funding channel, but also in order to allow the banks to use the repo facilities at the ECB as means to access liquidity in a closed wholesale market.

After reviving the covered bond market back in 2009 with its EUR 60 bn purchase programme, the ECB has seen covered bonds being one of the fastest growing assets in terms of collateral posted, tripling amounts posted in the 5-year period from 2007 to 2012 and largely exceeding the overall increase in total collateral posted for repo operations. However, over the last three years, the posted covered bond volume has dropped by about a third in line with overall volumes. See the section below for a more detailed discourse on covered bond usage in ECB operations and the ECB classification of a "covered bank bond".

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"[2]. 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 ECB approved for nine national central banks (Ireland, Spain, Portugal, Italy, Belgium, Germany, Slovenia, France and Austria) specific national eligibility criteria to accept additional performing credit claims as collateral. In February 2015, the ECB stated that the rating waiver for debt instruments issued or fully guaranteed by Greece would be waived making these bonds effectively no longer eligible.

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 (i.e. it will make a 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:

2 Protocol on the Statute of the European System of Central Banks and of the ECB, Article 18.1.

> 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) and (b) a coupon that cannot result in a negative cash flow > 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	> The ECB does not provide an official definition of what they classify as covered bonds in the context of eligible collateral > In general, 'Covered Bank Bonds' for ECB collateral purposes means bonds issued in accordance with Article 52 (4) of the UCITS Directive, (i.e. subject to covered bond specific legislation) or similar safeguards > 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
Cash Flow Backing ABS	> Must be legally acquired in accordance with the laws of a member state in a "true sale" > Must not consist of credit-linked notes (i.e. cannot be a synthetic structure), or contain tranches of other ABS
Tranche and Rating	> Tranche (or sub-tranche) must not be subordinated to other tranches of the same issue > 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 minimum ratings for ABS are A- (S&P) / A3 (Moody's) / A- (Fitch) / AL (DBRS) on a second-best basis. Certain ABS fulfilling additional requirements could qualify if they have at least two triple-B ratings
Place of Issue	> European Economic Area (EEA)
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 or private sector entities or supranational institutions
Place of Establishment of the Issuer/ Guarantor	> Issuer must be established in the EEA or in non-EEA G10 countries and guarantors must be established in the EEA
Currency of Denomination	> EUR, USD, GBP, JPY[3]

Source: HSBC, ECB

In January 2011, the ECB implemented its new haircut scheme, graduating haircuts according to differences in maturities, liquidity categories and the credit quality of the assets concerned (see Figure 3 & 4). The Governing Council also decided to retain the minimum credit threshold for marketable and non-marketable assets in the Eurosystem collateral framework at investment grade level.

3 Foreign currency-denominated debt instruments constitute eligible collateral for Eurosystem credit operations since 9 November 2012. This measure reintroduces a similar decision applicable between October 2008 and December 2010. 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).

In June 2012, the ECB further increased the collateral availability of ABS, when it lowered the minimum rating threshold to "BBB-" (second-best) from "A-". Based on the amended haircut schedule, ABS with ratings below "A-" fulfilling additional requirements are subject to higher haircuts of 22%.

In September 2012, the ECB decided that marketable debt instruments denominated in currencies other than EUR, namely USD, GBP and JPY, and issued and held in the euro area, are eligible as collateral until further notice. This measure reintroduces a similar decision applicable between October 2008 and December 2010, with appropriate valuation markdowns. 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 (since 31 March 2013). However, the ECB granted a grandfathering period of two years until 28 November 2014 for already issued covered bonds. As of 1 March 2015, own-name covered bonds where the asset pool contains own-name uncovered government-guaranteed bank bonds will no longer be accepted by the Eurosystem.

In July 2013, the ECB amended again its haircut schedules. One of the biggest changes was the reduction of the haircut for ABS from 16% to 10%. Several haircuts for other assets classes were also lowered, though by significant smaller margins. In case of triple-B rated assets, the haircuts for assets in liquidity category I and II were increased whilst the haircuts of liquidity category III and IV were slightly reduced.

> Figure 3: ECB haircuts by liquidity category and residual maturity[4]

Credit Quality Steps 1 and 2 (AAA to A-)	**Liquidity Category I** (Government Bonds)		**Liquidity Category II** (Local & Regional Govt, Supras & Agencies, Jumbo Covered Bonds*)		**Liquidity Category III** (Traditional Covered Bonds*, Structured Covered Bonds*, Multi-Issuer Covered Bonds* Corporates Bonds*)		**Liquidity Category IV** (Unsecured Bank Bonds*)		**Liquidity Category V** (ABS*)
Residual maturity (years)	**Fixed coupon**	**Zero coupon**	**Fixed coupon**	**Zero coupon**	**Fixed coupon**	**Zero coupon**	**Fixed coupon**	**Zero coupon**	**Fixed or zero coupon**
0-1	0.5	0.5	1.0	1.0	1.0	1.0	6.5	6.5	10.0
1-3	1.0	2.0	1.5	2.5	2.0	3.0	8.5	9.0	
3-5	1.5	2.5	2.5	3.5	3.0	4.5	11.0	11.5	
5-7	2.0	3.0	3.5	4.5	4.5	6.0	12.5	13.5	
7-10	3.0	4.0	4.5	6.5	6.0	8.0	14.0	15.5	
>10	5.0	7.0	8.0	10.5	9.0	13.0	17.0	22.5	

Source: ECB

*Assets that are given a theoretical value will be subject to an additional 5% haircut; additional valuation markdowns for own-use covered bonds (8 % for CQS1&2 and 12 % for CQS3).

4 Haircuts of variable rate debt instruments included in liquidity categories I to IV, excluding "inverse floaters", will be those applicable to the 0-1 year maturity bucket of fixed coupon instruments in the corresponding liquidity and credit category.

> FIGURE 4: ECB HAIRCUTS BY LIQUIDITY CATEGORY AND RESIDUAL MATURITY

Credit Quality Step 3 (BBB+ to BBB-)	**Liquidity Category I** (Government Bonds)		**Liquidity Category II** (Local & Regional Govt, Supras & Agencies, Jumbo Covered Bonds*)		**Liquidity Category III** (Traditional Covered Bonds*, Structured Covered Bonds*, Multi-Issuer Covered Bonds*, Corporates Bonds)		**Liquidity Category IV** (Unsecured Bank Bonds*)		**Liquidity Category V** (ABS)
Residual maturity (years)	**Fixed coupon**	**Zero coupon**	**Fixed coupon**	**Zero coupon**	**Fixed coupon**	**Zero coupon**	**Fixed coupon**	**Zero coupon**	**Fixed or zero coupon**
0-1	6.0	6.0	7.0	7.0	8.0	8.0	13.0	13.0	22
1-3	7.0	8.0	10.0	14.5	15.0	16.5	24.5	26.5	
3-5	9.0	10.0	15.5	20.5	22.5	25.0	32.5	36.5	
5-7	10.0	11.5	16.0	22.0	26.0	30.0	36.0	40.0	
7-10	11.5	13.0	18.5	27.5	27.0	32.5	37.0	42.5	
>10	13.0	16.0	22.5	33.0	27.5	35.0	37.5	44.0	

Source: ECB

*Assets that are given a theoretical value will be subject to an additional 5% haircut; additional valuation markdowns for own-use covered bonds (8 % for CQS1&2 and 12% for CQS3).

Classification of covered bonds within the Eurosystem operations

The ECB considers covered bonds to be a relatively 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, for example, ABS. Moreover, unlike senior bank debt (and government-guaranteed senior bank debt from 2015), 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 is classified as "covered bond". In general, the Eurosystem accepts both UCITS and non-UCITS compliant covered bonds as collateral as long as they otherwise fulfil the general eligibility criteria. Generally, debt instruments are classified as "covered bank bonds" if they are issued in accordance with the criteria set out in Article 52(4) of the UCITS Directive. 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.

"Structured" covered bonds are issued under a general legal framework, rather than being subject to "special public supervision", they do not fall within the UCITS definition and as such have not been recognised as covered bank debt by the ECB from a liquidity haircut perspective and in the past were assigned to category IV similar to senior unsecured bank debt. However, since 1 January 2011 all non-Jumbo covered bonds, including "structured covered bonds" and multi-issuer covered bonds, together with traditional (UCITS-compliant) covered bonds, have been classified in liquidity category III. As of August 2015, also all Spanish covered bonds – including single name bonds – are classified as Category III securities. Interestingly, the ECB has classified Commerzbank's inaugural EUR 500 mln SME covered bond issued in February 2012 as "structured covered bond" and has put it into Liquidity Category III next to other non-Jumbo covered bonds.

For "structured covered bank bonds" there are additional requirements, including the following: (1) substitution asset limit of 10%, which can be exceeded at the discretion of the National Central Bank, (2) maximum LTV limit of 80% for residential and 60% for commercial mortgages, (3) minimum mandatory OC of 8% for residential and 10% for commercial mortgages, (4) maximum loan amount for residential real estate loans of EUR 1mln, (5) covered bond must have a long-term minimum rating of A-/A3. 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 (since 31 March 2013). As of 1 March 2015, own-name covered bonds where the asset pool contains own-name uncovered government-guaranteed bank bonds are no longer accepted by the Eurosystem.

Covered bonds and "close link" exemption

"Covered bank 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"[5]. This means that banks cannot, for example, use their own senior unsecured debt directly as collateral with the ECB.

In the past, issuers were able to securitise assets on their balance sheet and retain them as collateral for central bank repo operations. However, in addition to certain other changes outlined below, as a result of the increased use of securitisation technology to create ABS assets solely for use as collateral for central bank liquidity purposes, the ECB broadened the definition of 'close links'. The definition now also extend to situations where a counterparty submits an asset-backed security as collateral when it (or any third party that has close links to it) provides support to that asset-backed security by entering into a currency hedge with the issuer or guarantor of the asset-backed security or by providing liquidity support of more than 20% of the nominal value of the asset-backed security.

The main exemptions from the "close links" rule remain "covered bank bonds". Self-issued UCITS compliant covered bonds (as well as structured covered bank bonds, subject to strict additional criteria, as outlined above) can be used by counterparties as collateral, i.e. an issuer can use its own covered bonds and there are no close link prohibitions. This has been one of the drivers of the strong increase in new covered bond programmes since 2008.

In November 2012, the ECB amended the close-link provisions regarding own-use of covered bonds as collateral. As of now only CRD compliant covered bonds and UCITS compliant covered bonds that offer comparable protection are eligible. Our understanding is that some of the structured CB programmes that have been used for ECB funding but are not UCITS compliant may cease to be eligible if retained and submitted (close-links).

In February 2015, the ECB clarified that the own-use rules for multi-cédulas issued after 1 May 2015 will consider the relation between each of the underlying cédulas issuers and respective counterparties for determining the existence of close links.

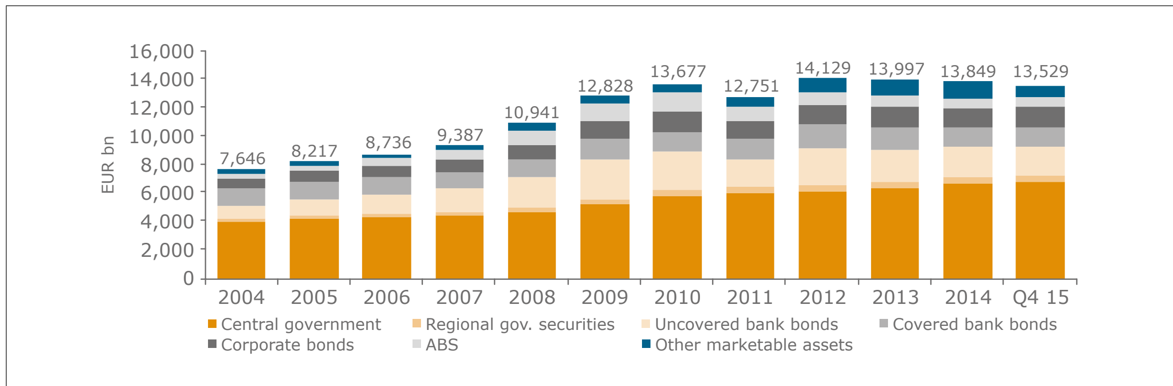
Use of covered bonds as collateral in Eurosystem operations

The overall volume of marketable assets which had become eligible for repo operations had increased by almost 80% from EUR 7.6 trn in 2004 to EUR 13.5 trn at year-end 2015. At the end of Q4 2015, central government debt accounted for the largest share (50%), followed by uncovered bank bonds (15%), corporate bonds (11%), covered bank bonds (10%), and ABS (5%). Other bonds and regional government securities make up 9%.[6]

5 "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].

6 Although included within the list of eligible collateral, the volume of potentially eligible non-marketable assets is difficult to estimate since the eligibility of credit claims (the largest share of non-marketable assets) are not assessed until they are registered with the Eurosystem.

> Figure 5: Eligible collateral by asset type



Source: ECB, HSBC

The actual breakdown by type of the collateral used for repo transaction differs significantly from the market composition of the available eligible collateral as relative value considerations play an important role in the banks' decisions as to which collateral to post.

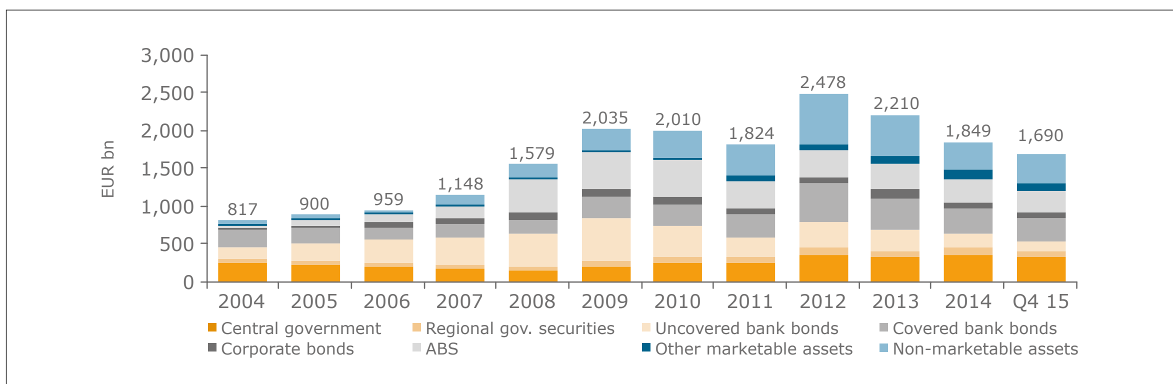
During the financial crisis there was a general trend to lower the overall quality and/or liquidity of the collateral used by the banks for repo operations. The share of central government debt fell sharply from 31% in 2004 to just 10% in 2008; However, this trend has reversed over the last few years and the government share has increased to 20% as of Q4 2015.

The use of covered bank bonds in the Eurosystem repo operations dropped from 26% in 2004 to 11% in 2008. Since then it increased again and stood at 18% as of Q1 2015. The share of uncovered bank bonds has continuously dropped from 32% in 2007 to just 7% as of Q4 2015.

ABS grew from 6% in 2004 to 28% in 2008 before stabilising at 23% and 24% in 2009 and 2010 respectively. Their level decreased again to 17% as of end Q4 2015.

Figure 6 also shows the large rise in the main and long-term refinancing operations of the Eurosystem banks in autumn 2008 and then an even larger increase during the course of 2009. Total usage stabilised in 2010 and declined in 2011 before marking new heights in 2012 at EUR 2.5 trn thanks to the large LTROs. As of Q4 2015, the volume has dropped again to EUR 1.7 trn.

> Figure 6: Actual use of collateral by asset type

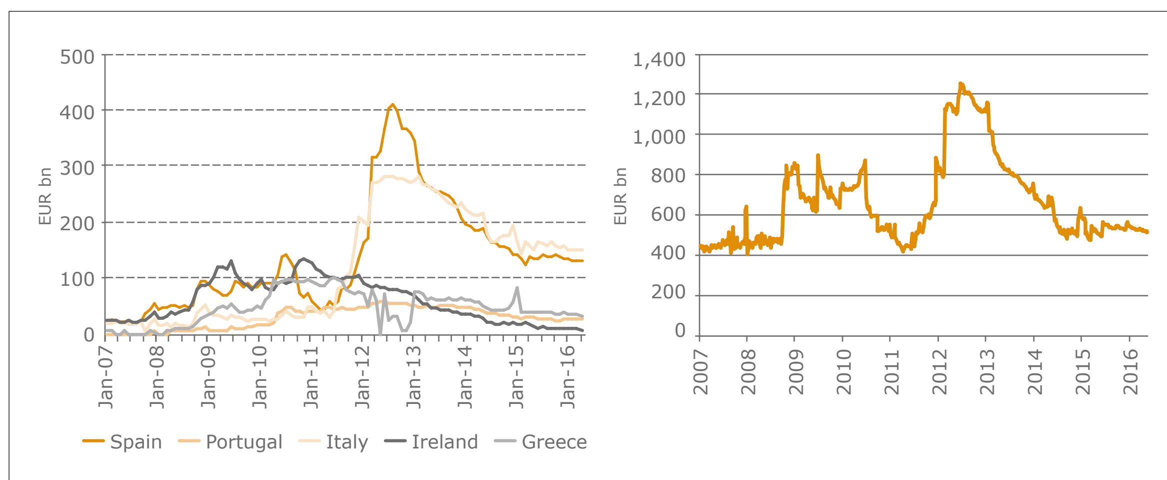


Source: ECB, HSBC

Only some of the European central banks publish figures relating to the national usage of repo facilities. Nonetheless, these clearly show that whilst banks increased their usage of the ECB facility since the beginning of the credit crunch, with the onset of the sovereign crisis the composition of the banks using the facility has changed significantly with a disproportionally high increase in usage of ECB repo facilities from banks in the periphery. Figures by the national central banks show that the usage of the central bank facilities by banks out of Europe's periphery has significantly increased since 2011 until the peak of June 2012. The ECB remains an important funding channel for many peripheral banks, which have seen their share consistently increase on a relative basis, even as absolute levels declined.

> Figure 7a: Composition of Eurosystem lending to euro area credit institutions

> Figure 7b: Total Eurosystem lending to euro area credit institutions



Source: Eurosystem, Bloomberg, HSBC

Targeted LTRO

In June 2014, the ECB announced a series of targeted longer-term refinancing operations (TLTROs) which will be conducted over a window of two years and are designed to enhance the functioning of the monetary policy transmission mechanism by supporting bank lending to the real economy. In March 2016, the ECB decided to launch a new series of four TLTROs (TLTRO-II). The interest rates on the TLTRO will be determined based on the lending history of the participants in the period February 2016 to January 2018 and is linked to the interest rate on the deposit facility at the time of the allotment of each TLTRO. In the TLTRO II, the same Eurosystem collateral rules apply (in relation to eligibility criteria, valuation, haircuts and rules on the use of eligible assets) as in other refinancing operations, i.e. repo-eligible covered bonds can also be posted as collateral.

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 in the past for the covered bond market. This was most obviously the case with its highly successful EUR 60 bn covered bond purchase programme in 2009/2010, but was also underline with smaller second purchase programme in late 2011 and the third programme that started in October 2014 which exceeds already the aggregated amounts of the previous two programmes. 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 of accessing 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. All these issues are all the more important 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 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 (i) 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 and the explicitly guaranteed German agency KfW) and (ii) in the ongoing changes the ECB implements to these operations, for example the re-classification of liquidity category and more favourable haircuts applied to 'structured covered bonds' and 'multi-issuer covered bonds' since the beginning of 2011. At the same time, the ECB has tightened the requirements back in November 2012 to ensure the quality of the covered bonds posted as collateral.

III. THE UK: ELIGIBILITY CRITERIA FOR BANK OF ENGLAND OPERATIONS

Latest changes to the framework

In October 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. In the past, liquidity was provided against collateral by way of repurchase transactions. The new approach allows participants to 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). The Bank of England expects 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 two active collateral pools: the Main Collateral Pool and the DWF pool. In addition, there is a 'Pre-positioned pool for loan collateral' for loans meeting the collateral eligibility requirements but have not yet been used to cover any transactions. The Funding for Lending Scheme (FLS) already operates on a collateral pooling basis and will remain as a separate pool for the time being.

Covered bonds under the Sterling monetary framework

The Bank of England (BoE) 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 degree 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.

7 European Central Bank, "Covered Bonds in the EU Financial System", December 2008.
8 Keynote address by Jean-Claude Trichet, Munich, 13 July 2009.

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, (2) Discount Window Facility, (3) Contingent Term Repo Facility as well as (4) the Funding for Lending Scheme.

The eligibility criteria for covered bond inclusion can be found below:

> Figure 8: Bank of England's covered bond eligibility criteria

	Level B	Level C Collateral Securities
Eligible currencies	GBP, EUR, USD, AUD, CAN, CHF, and SEK	
Geography	UK, French, German and Spanish regulated Covered Bonds	UK, US and EEA covered bonds, including covered bonds backed by Export Credit Agency (ECA) guaranteed loans (subject to individual review)
Rating Requirements	Broadly equivalent to AAA	Broadly equivalent to A3/A- or higher
Minimum Size	At least £1bn or €1bn (depending on issue currency)	n/a
Own Name Covered Bonds	No	Yes
Underlying assets	UK or EEA residential mortgages, social housing loans or public sector debt	UK or EEA residential mortgages, or public sector debt, social housing loans, SME loans, commercial mortgages from the UK, the US, EAA. ECA guaranteed loans from the UK, the US and EEA

Source: Bank of England, HSBC

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, whereas Spanish covered bonds are generally included but probably do not fulfil the minimum rating (equivalent) requirement at the moment. 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, Denmark or Finland 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 9: 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

As mentioned above, the Bank of England conducts a number of different monetary policy and liquidity insurance operations. Figure 10 below shows the eligibility of different collateral sets for the various operations and facilities:

> Figure 10: Eligibility of different collateral sets for the various operations and facilities

Sterling Monetary Framework operations & lending facilities	Level A	Level B	Level C
Real Time Gross Settlement	Yes	No	No
Operational Standing Facilities	Yes	No	No
Short-term Repo OMOs	Yes	No	No
Indexed Long-term Repo Operations	Yes	**Yes**	**Yes**
Discount-Window Facility	Yes	**Yes**	**Yes**
Contingent Term Repo Facility	Yes	**Yes**	**Yes**
Funding For Lending Scheme	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 50 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.

Short-term open market operations (OMOs)

Short-term Open Market Operations (OMOs) are designed to supply the quantity of reserves consistent with the aggregate target set by the banks for that maintenance period (the period over which compliance with reserve requirements is calculated) under the reserve averaging process. These operations have been suspended since March 2009 as a result of the BoE's asset purchase scheme (QE), so the supply of reserves is currently determined by the level of reserves. At the moment the BoE is operating a "floor system" where all reserves are remunerated at the Bank Rate.

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. Since 2014 the term of all ILTR lending has been extended to 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 extreme 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 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:

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.

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 10; though such fees can vary at the bank's discretion.

> Figure 11: 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.

Funding for lending scheme (FLS)

The FLS was launched in July 2012 and is intended to encourage banks and building societies to increase their lending to UK households and corporates. Participants can borrow UK Treasury Bills against all collateral eligible under the DWF (i.e. Levels A, B & C). Both the fee and the amount participants can borrow will depend on their lending growth. The drawdown period started in August 2012 and was extended four times until January 2018. As part of this extension (in April 2013) the FLS was also expanded to count lending by certain non-bank providers of credit to the UK real economy. On 31 January 2014, the first phase of the FLS ended. Since then, household lending no longer generates any additional borrowing allowances. The FLS will gradually phase out, i.e. allowances will be reduced by 25% every six months.

> Figure 12: Summary of the BoE's monetary operations

	Operational Standing Facilities	**Indexed Long-term Repo**	**Discount Window Facility (DWF)**	**Funding for Lending (Extension)**
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	Boost lending to the UK real economy
What is being borrowed?	Deposit facility: n/a Lending facility: sterling cash	Sterling cash	Gilts	Treasury Bills
Eligible Collateral	Deposit facility: n/a Lending facility: Level A	Level A, B and C	Level A, B and C	Level A, B and C
Fee	Deposit facility: 0% Lending facility: 0.75%	Auction determined uniform spread indexed to Bank Rate	Fee dependant on size of drawing and collateral delivered	Flat rate of 0.25%
Maturity	Overnight	6 months	30 days	4 years
Frequency	Available daily	Typically monthly	Available daily	Available daily
Minimum bid/offer amount	n/a	£5mln	n/a	£1mln
Minimum bid/offer increment	n/a	£1mln	n/a	£0.1mln
Settlement date of the operation	T+0	T+2	T+0	T+0

Source: Bank of England, HSBC (as of May 2016)

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 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[12].

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. The banks must make the information available on a 'comply or explain' basis. Where issuers are not able to fill-in certain data fields, this will not render a transaction ineligible automatically; instead the BoE will look at the rationale before determining eligibility and may choose to add additional haircuts. Nonetheless the BoE expects that ultimately all the mandatory information will need to be provided. These additional transparency requirements do not apply to public sector covered bonds.

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[13] 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

Only a very small list of covered bonds are eligible for the discount window, namely: **US covered bonds** and **AAA-rated German Jumbo Pfandbriefe**. In the case of the German Pfandbriefe, for the AAA requirement the lowest rating of S&P, Moody's and Fitch is relevant. A much softer rating restriction of simply being investment grade is applied to US covered bonds.

"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 estimate and are designed to account for the risk characteristics of the pledged asset as well as the volatility of the value of the pledged asset over an estimated liquidation period. Securities are typically valued daily using prices supplied by external vendors. Eligible securities for which a price cannot readily be obtained will be assigned an internally modelled fair market value estimate based on comparable securities, and they will receive the lowest margin for that asset type."[14]

12 With the exception of covered bonds already pledged within the Special Liquidity Scheme.

13 Fannie Mae, Freddie Mac and Federal Home Loan Bank.

14 Federal Reserve, Collateral FAQs as 29 June 2015.

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 stripped Treasury notes, 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.

> Figure 13: Overview of the margins for securities

		Margins for securities (by Maturity)		
Asset Class	**Asset Type**	**0-5 yrs**	**>5-10 yrs**	**>10 yrs**
US Treasuries	Bills/Notes/Bonds/TIPs	1.0	3.0	5.0
	STRIPs/Zero Coupon	2.0	4.0	8.0
GSEs	Bills/Notes/Bonds	2.0	4.0	6.0
	Zero Coupon	3.0	5.0	9.0
Foreign Government Agencies	AAA-BBB rated USD denominated	2.0	4.0	9.0
	AAA rated foreign denominated	6.0	7.0	9.0
Foreign Government, Foreign Government Guaranteed and Brady Bonds	AAA rated USD denominated	2.0	4.0	6.0
	AA-BBB rated USD denominated	3.0	5.0	8.0
	AAA-BBB foreign denominated	6.0	7.0	9.0
Supranationals	USD denominated	2.0	4.0	6.0
	AAA rated foreign denominated	6.0	7.0	9.0
	Zero Coupon	3.0	5.0	9.0
Corporate Bonds	AAA rated USD denominated	2.0	5.0	7.0
	AA-BBB rated USD denominated	4.0	6.0	8.0
	AAA rated foreign denominated	8.0	9.0	12.0
US Issued Covered Bonds	**AAA rated USD denominated**	**2.0**	**5.0**	**7.0**
	AA-BBB rated USD denominated	**4.0**	**6.0**	**8.0**
German Jumbo Pfandbriefe	**AAA rated USD denominated**	**2.0**	**4.0**	**6.0**
	AAA rated- foreign denominated	**6.0**	**7.0**	**8.0**
Asset Backed Securities	AAA rated	2.0	6.0	10.0
	AA-BBB rated	4.0	12.0	23.0
	CDOs- AAA rated	17.0	18.0	22.0
	CMBS- AAA rated	5.0	11.0	15.0
Agency Backed Mortgages	Pass-throughs	2.0	4.0	6.0
	CMOs	2.0	4.0	6.0
	Private-label CMOs- AAA rated	11.0	11.0	14.0
	Trust Preferred Securities	11.0	12.0	13.0
	Trust Deposit Facility- Term Deposits	0	n/a	n/a
	CDs, Bankers' Acceptances, CP, ABCP	2.0	n/a	n/a

Source: Fed (applicable as of 3 August 2015), HSBC

There is also a separate schedule for the percentage margin applied to loans, a number of categories of which 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

Under its monetary policy framework, the Swiss National Bank (SNB) sets normally a 100 bps target range for the 3-month Swiss Franc LIBOR rate, with SNB targeting the middle of this range. 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 twelve 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[15]." 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).

15 Guidelines of Swiss National Bank (SNB) on Monetary Policy Instruments.

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 issuer must be domiciled in Switzerland or in the European Economic Area (EEA), 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;
- be traded on a recognised exchange or a representative market in Switzerland or EEA member state 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).

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 14: 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 or an EEA member state)	AA-/Aa3**	> CHF 1 bn equivalent (at time of issuance)	

* 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 receive 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, given 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 determined 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 in the past. 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; these even included the provision of a 3-year F-loan by the Norges Bank in February 2009.

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 one collateral set for all its operations. Its collateral rules group different securities into various liquidity categories, much like the ECB (see below for further detail).

Latest changes to the rules on collateral for loans from Norges Bank:

- Securities denominated in NOK are not excluded anymore from the restrictions on the maximum share of the volume outstanding that a bank may pledge as collateral.
- The additional haircut on the valuation of foreign currency securities has been increased to 6%.
- In contrast to previous guidelines, the second-best rating and not the best rating will be used where applicable.

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[16].

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.

16 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.

Requirements relating to minimum volume outstanding

Securities issued by private entities are subject to requirements relating to minimum volume outstanding:

> 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 bonds, a bank may not pledge more than 20% of the loan's outstanding volume to Norges Bank.

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% 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.

> 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.

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 15: 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 rated AAA to AA-* > Norwegian local government paper > Foreign local government paper rated A or better > 0% RW paper > Government-guaranteed paper > AAA rated corporates		> *Covered bonds rated A+ to A* > Corporate bonds rated AA+ to A > Units in eligible money market and bond funds		> Norwegian *covered bonds* rated A- or lower and unrated > Norwegian corporate bonds rated A- to BBB-	
Maturity	Fixed	Floating	Fixed	Floating	Fixed	Floating	Fixed	Floating
0-1 year	1.0	1.0	3.0	3.0	4.0	4.0	8.0	8.0
1-3 years	3.0	1.0	5.0	4.0	6.0	5.0	11.0	10.0
3-7 years	5.0	1.0	7.0	5.0	10.0	7.0	17.0	14.0
7+ years	7.0	1.0	10.0	6.0	13.0	9.0	22.0	17.0

Source: HSBC, Norges Bank

Notes: Securities in foreign currencies are subject to a further 6% haircut, own-name covered bonds to a further 5% haircut. ABS are subject to a 15% haircut, regardless of maturity. Additional haircuts apply on securities registered in a foreign securities depository if no price information is available.

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 any of the major rating agencies 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 minimum 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 16: Eligible securities and minimum rating requirements

	Minimum Rating
General Collateral	
Commonwealth 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	
Standard	A-1 or AAA
Other	A-1 or AAA
Other Private Securities	A-1 or AAA

* Minimum rating requirement waived for securities issued and/or guaranteed by the New Zealand government

Source: RBA, HSBC

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 17 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 17: 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+	15	17	20	23
	Other rated	20	n/a	n/a	n/a
Asset-backed Securities					
> Standard	A-1 or AAA	10	10	10	10
> Other	A-1 or AAA	15-20	15-20	15-20	15-20
Other Private Securities	A-1 or AAA	6	7	8	10

Source: RBA, HSBC

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 first 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 18: 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: Czech Republic, Hong Kong, Ireland, Malta, Spain, South Korea.

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

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-Lending Program**: The Bank supports the liquidity of Government of Canada securities by providing a secondary and temporary source of securities to the market through a tender process for a term of one business day.

> **Standing 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.

> **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:

> 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 *issuer* must have a minimum of two credit ratings from two major credit rating agencies, the second highest of which is at least A(low) by DBRS, A- by Fitch or S&P, or A3 by Moody's.

> 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 subject to a 5% issuer concentration limit.

> 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.

> Haircuts will be based on the second-highest issuer credit rating.

> FIGURE 19: 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	>10-35 years	>35 years
Securities issued by the Government of Canada	0.25%	0.5%	1.0%	1.5%	2.0%	3.0%	3.5%
Government of Canada – stripped coupons and residuals	0.25%	0.5%	1.0%	1.5%	2.0%	4.0%	11.5%
Securities guaranteed by the Government of Canada (including Canada Mortgage Bonds and NHA mortgage-backed securities)	0.5%	1.0%	1.5%	2.0%	2.5%	4.0%	4.5%
Government of Canada guaranteed – stripped coupons and residuals	0.5%	1.0%	1.5%	2.5%	4.0%	5.5%	13.0%
Securities issued by a provincial government	1.0%	1.5%	2.0%	2.5%	3.0%	4.0%	6.0%
Provincial government – stripped coupons and residuals	1.0%	1.5%	2.0%	3.0%	4.5%	6.0%	17.0%
Securities guaranteed by a provincial government	1.0%	2.0%	2.5%	3.0%	3.5%	4.5%	6.5%
Provincial government guaranteed – stripped coupons and residuals	1.0%	2.0%	2.5%	3.5%	5.0%	6.5%	17.5%
Securities issued by a municipal government	1.25	2.5%	3.0%	3.5%	4.0%	5.0%	7.0%
Bankers' acceptances, promissory notes, commercial paper, including those of foreign	1.5%	3.0%					
Term Asset-backed securities	3.75%	7.5%	8.0%	9.0%	12.0%	15.0%	17.0%
Asset-backed CP	3.75%	7.5%					
Covered bonds	2.0%	3.0%	3.5%	4.0%	6.5%	8.5%	9.0%
Corporate and foreign-issuer bonds	2.0%	3.0%	3.5%	4.0%	6.5%	8.5%	9.0%
Securities issued by the US Treasury*	1.0%	1.0%	1.0%	1.5%	3.0%	5.0%	

Source: Bank of Canada, HSBC

Notes: Non-mortgage loan portfolio: The Bank will provide a collateral-to-portfolio value of 60%; i.e. 60% of the reported value of the loan portfolio, implying a haircut of 40%.

* An additional 4% will be added to the margin requirements for securities issued by the US Treasury to account for foreign exchange risk.

X. 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 the haircuts.

2.4 COVERED BONDS VS. OTHER ASSET CLASSES

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I. INTRODUCTION

In the past, a traditional ranking of bond spreads would have always had sovereign spreads trade the tightest followed by sub-sovereigns and agencies, and then covered bonds followed by senior unsecured debt. However, with the financial crisis and the subsequent sovereign debt crisis and more recently quantitative easing (QE) programmes by the Eurosystem, this ranking as well as the differences between these products has been profoundly shaken up.

Instead of trading with a significant pick-up compared to the respective sovereign, covered bonds in a number of countries represent the tightest product these days sometimes trading more than 100bp inside their respective sovereign debt. 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 even inside covered bonds in some cases. And despite the introduction of the Bank Recovery and Resolution Directive (BRRD) the differences have yet to materially go wider.

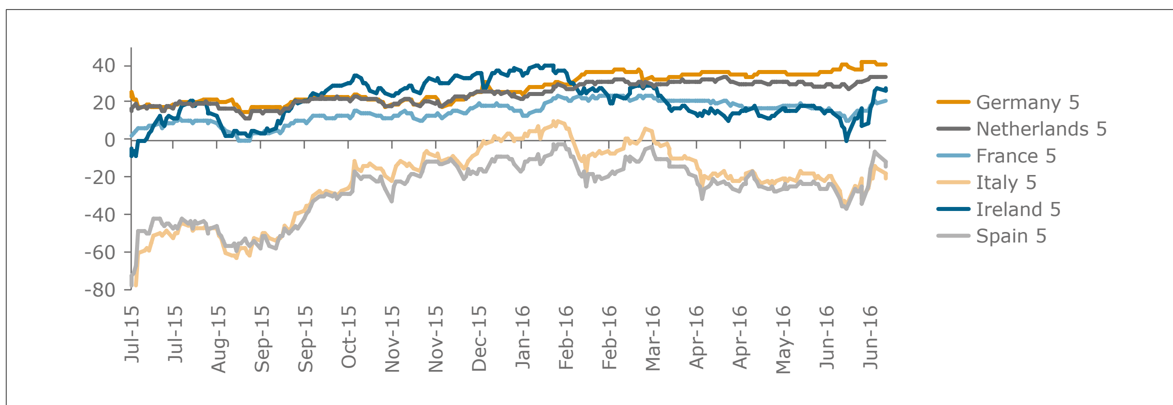
Last but not least and most recently, by including covered bonds in the first round of QE at the end of 2014 and only adding sovereigns, agencies and supranationals to the second round in 2015, the QE programmes of the Eurosystem have had a profound impact on the relationship of these sectors.

In this article we will take a look at how spreads have evolved between these products. We will assess what the rationale is for the differences and show how investors deal with the situation and why they buy at the levels they buy.

II. SPREAD OVERVIEW COVERED BONDS VS. SOVEREIGN DEBT AND SENIOR UNSECURED

Spreads between covered bonds and sovereign / agency / supra debt have in the last two years been driven to a large extent by the QE programmes of the Eurosystem. When the first round of QE started in October 2014 the European Central Bank (ECB) only included covered bonds and Asset-backed securities (ABS) in the scope of eligible purchases. This led to a substantial tightening of spreads between covered bonds and public sector debt up until mid-January. When the Eurosystem finally announced the expansion of QE to public sector debt, the differences widened again until March 2015. The substantial rates volatility in April / May then drove them to historic tight levels again before the covered bond repricing in H2 2015 pushed us to wider levels than we had before QE started. Most recently the increased pace of QE buying combined with the announcement of the new series of targeted longer-term refinancing operations (TLTRO II) in March 2016 first stabilised covered-govie spreads before the Brexit referendum related drop in yields pushed the spread difference to sovereign debt wider again.

> FIGURE 1: AVERAGE ASSET SWAP SPREADS 10Y SPANISH COVERED AND SOVEREIGN BONDS BP



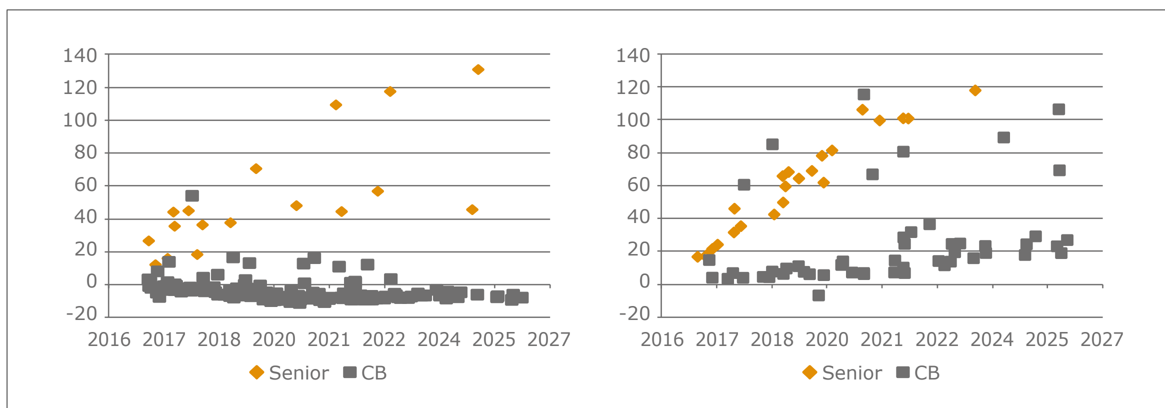
Sources: Bloomberg, Crédit Agricole CIB

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 the 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 over-collateralisation (OC). In particularly the rating agencies often demand high OC level going well beyond the legal requirements.

From an investor's 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.

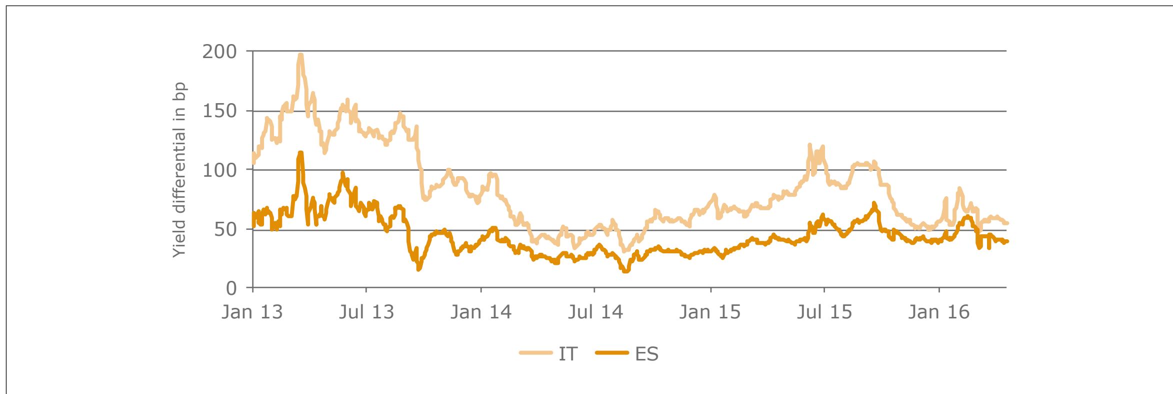
However, over the last few years the spread differentials between senior unsecured bank debt and covered bonds have generally remained relatively low. At the beginning of 2016 following the bail-in of senior unsecured investors in Portugal, there was a short period of higher spread volatility and a significant rise in senior unsecured spreads but this spread widening was short-lived and the spread differentials tightened in again. It seems that, in the current compressed yield environment, investors in search of yield are inclined to accept the higher risk of unsecured paper in return for a few more basis points; 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. Figures 2A and 2B show that at the longer end of the curve the risk premium for senior unsecured bonds over covered bonds is significantly higher than in the case of shorter maturities. Figure 3 show the trend for Italian and Spanish market segment. The yield differentials became more volatile in the second half of 2014, when the Eurosystem started to purchase covered bonds. It also shows the risk-off periods in the early summer 2015, in September/October 2015 and the above mentioned volatility at the beginning of 2016. Then again, volatility in both countries was much higher in 2013, when the overall yield environment was at a significantly higher level.

> Figure 2A & 2B: Senior unsecured vs covered bond spreads for German (left) and Italian (right) bonds



Source: Bloomberg, HSBC (as of 8 June 2016)

> Figure 3: Senior unsecured minus covered bond yields by country



Source: Bloomberg, 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 new 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. Moreover, covered bonds limit the issuer's flexibility regarding the underlying cover pool 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 new 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, ECB purchase programmes) 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.

Central bank haircuts

Before going into the fundamental factors driving each product pair (covered vs. senior and covered vs. sovereign debt), we want to provide a brief overview of how the various products are treated for repo purposes.

As part of its open market operations, the European Central Bank (ECB) has implemented risk-control measures to protect itself from potential collateral losses in case the underlying assets must be liquidated due to a counterparty's default. These measures encompass initial margins, valuation haircuts, variation margins, limits, additional guarantees and exclusions. The value of the underlying asset is calculated as the market value of the asset less a certain percentage ("valuation haircut").

> Figure 4: Eurosystem repo haircuts

AAA to A-	Liquidity categories								
	I		II		III		IV		V
	Government Bonds		Local & Regional Govt, Supras & Agencies, Jumbo Covered Bonds		Traditional Covered Bonds, Structured Covered Bonds, Multi-Issuer Covered Bonds, Corporate Bonds		Unsecured Bank Bonds		ABS
Residual maturity (years)	Fixed coupon	Zero coupon	Fixed coupon	Zero coupon	Fixed coupon	Zero coupon	Fixed coupon	Zero coupon	Fixed / Zero coupon
0-1	0.5	0.5	1.0	1.0	1.0	1.0	6.5	6.5	10.0
1-3	1.0	2.0	1.5	2.5	2.0	3.0	8.5	9.0	10.0
3-5	1.5	2.5	2.5	3.5	3.0	4.5	11.0	11.5	10.0
5-7	2.0	3.0	3.5	4.5	4.5	6.0	12.5	13.5	10.0
7-10	3.0	4.0	4.5	6.5	6.0	8.0	14.0	15.5	10.0
>10	5.0	7.0	8.0	10.5	9.0	13.0	17.0	22.5	10.0
Retained CB	**+13% (+5% for non marketable + 8% for retained)**								
BBB+ to BBB-									
Residual maturity (years)	Fixed coupon	Zero coupon	Fixed coupon	Zero coupon	Fixed coupon	Zero coupon	Fixed coupon	Zero coupon	Fixed / Zero coupon
0-1	6.0	6.0	7.0	7.0	8.0	8.0	13.0	13.0	22.0
1-3	7.0	8.0	10.0	14.5	15.0	16.5	24.5	26.5	22.0
3-5	9.0	10.0	15.5	20.5	22.5	25.0	32.5	36.5	22.0
5-7	10.0	11.5	16.0	22.0	26.0	30.0	36.0	40.0	22.0
7-10	11.5	13.0	18.5	27.5	27.0	32.5	37.0	42.5	22.0
>10	13.0	16.0	22.5	33.0	27.5	35.0	37.5	44.0	22.0
Retained CB	**+17% (+5% for non marketable + 12% for retained)**								

Sources: Eurosystem, CréditAgricole CIB

The ECB applies different valuation haircuts for covered bonds and senior unsecured debt as shown in the figure above. While covered bonds belong to liquidity categories II and III, unsecured bank bonds are in liquidity category IV with substantially higher haircuts. Moreover, covered bonds have been exempt from the ECB's close-link prohibition under which a bank cannot submit its own senior unsecured bonds as collateral. Own-name covered bonds are accepted, subject to additional haircuts.

When comparing covered bonds vs. sovereign debt on the other hand one can see that sovereign debt still gets the most favourable treatment by the Eurosystem. Covered bonds are not far behind though. For a 5Y AAA jumbo covered bond in category 2, the haircut differential is a mere 2% while for a covered bond from category 3 the difference is 2.5%.

For repo purposes we thus still have the old traditional ranking between asset classes. Sovereign debt is treated best, covered bonds follow closely behind and senior unsecured exposure has the highest haircuts and the most limitations (close link rule).

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.

> **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 over-collateralisation (OC) level and the quality of the collateral are decisive factors for the expected recovery of a covered bond relative to senior unsecured bonds. Given that normally only high quality assets are included in the cover pool and the sometime 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 under-collateralised 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.

> **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 is 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 should be the case even more under the revised criteria.

> Figure 5: 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 > 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 being issued by an institution out of the European Economic Area, being credit quality step 1 (i.e. a rating of AA- or better), having a minimum size of EUR500m as well as a minimum over-collateralisation of 2%. Whilst other Level 1 assets are neither subject to liquidity buffer limits, nor to haircuts 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 assets include regional governments, local authorities or PSE 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 EUR250mn 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 EUR250mn 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 Q2 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 and sub debt.

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.

2. Recent examples regarding bail-in

Over the last two years, there have been several examples of bail-ins where covered bonds where differently treated than senior unsecured bonds. The analysis below shows the different approaches the various countries took in order to make bonds bail-in-able. However, it seems as if the European regulators aim at increasing the level of harmonisation of the bail-in rules within the different countries. Especially Germany, France and Italy have already changed their national law (see below for more details) and EU Commission is getting increasingly uncomfortable with this kind of 'dis-harmonisation', as this situation could impede the resolution of cross-border banks and provide uncertainty for issuers and investors alike. Brussels also raised concerns regarding the distortion of the competitive landscape across the countries as a result of the different rules.

Austria: HETA

Following the collapse of Hypo Alpe-Adria-Bank International, HETA Asset Resolution AG was setup as bad bank or wind-down institution. In February 2015, the results of HETA's Asset Quality Review (AQR) showed a capital shortfall in the range of EUR4.0-7.6bn, indicating that HETA will not be able to repay its debts and meet its liabilities. On 1 March 2015, the Austrian government stated that they would not inject additional capital into the wind-down entity. As a consequence, the Finanzmarktaufsicht (FMA; Financial Market Authority) deferred the maturity and interest payment dates of most HETA debt instruments to the end of May 2016. Importantly HETA's covered bonds were among certain others instruments explicitly exempted from this moratorium. After investors rejected the offers by the Kärntner Ausgleichsfonds (KAF) to buyback bonds at a discount, the FMA announced on 10 April 2016 severe haircuts (100% for sub debt and 54% for senior debt) for creditors of HETA Asset Resolution AG as well as the cancellation of all interest payments and the harmonisation of the maturities of all eligible liabilities to end-2023. The FMA haircuts were watering down in May 2016 and creditors were

presented a cash payment of 75% for senior HETA bonds while subordinate instruments were offered 30%. Alternatively, creditors had the option to swap into a 13.5Y zero coupon bond guaranteed by the Austrian state on a 1:1 ratio for HETA senior debt. For subordinate debt holders, the swap into the new bond can be done on a 1:2 ratio. In both proposals, HETA's covered bonds were not affected by the measures.

Germany: BRRD/SRM implementation introduce different treatment of senior unsecured debt

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 illusive. In 2015, the German government amended the Single Resolution Mechanism Act (Abwicklungsmechanismusgesetz; AbwMechG), its existing recovery and resolution act (Sanierungs- und Abwicklungsgesetz; SAG) as well as its general banking act (Kreditwesengesetz; KWG), clarifying that senior unsecured debt will rank below guaranteed deposits but above the issuer's tier-2 capital. This would apply for bearer and registered bonds (Inhaber- and Namensschuldverschreibungen) as well as promissory notes (Schuldscheindarlehen) but not for money market instruments. Crucially, the proposed amendments (namely, Art. 46f (6) KWG) grant an exemption from this rule for senior bonds (i) where the principal or the coupon payment is not certain at the time of issuance or (ii) where the redemption payment will not be in form of money. (Though just having a variable coupon structure would not be sufficient to benefit from this exemption.) These 'structured' senior unsecured bonds would rank above plain vanilla senior bonds.

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. To prevent the loss of eligibility as repo collateral with the Eurosystem, the German lawmakers have made amendments to the initial proposal. The new version explicitly states that senior unsecured debt is not subordinated. However, structured senior unsecured debt will continue to benefit from special treatment in case of issuer insolvency and would be exempted from bailing-in. Moreover, the implementation of the new insolvency procedure was shifted by one year to the beginning of 2017 to allow banks more time to adjust to the new rules.

As of June 2016, the ECB has not publicly commented if the amendments to the planned changes of the German banking act would trigger the loss of the repo eligibility of senior unsecured debt issued by German banks. On the one hand, the removal of the subordination language will not change the actual outcome in case of issuer insolvency. On the other hand, covered bonds also benefit from a special treatment under the bankruptcy law. This could also be applied to senior unsecured debt that has derivative features.

Portugal: Novo Banco

In November 2015, the ECB's stress test revealed additional capitals need at Novo Banco of at least EUR1.4bn. A month later, the Bank of Portugal transferred five bonds of Novo Banco with a total volume of EUR1.9bn back to Banco Espirito Santo (BES), which was setup as bad bank after the rescue of the troubled BES group. All five bonds were issued by BES before the banks rescue under Portuguese law. Moreover, because of the high minimum ticket size these bonds were primarily sold to institutional investors rather than retail clients. After the transfer of the bonds to the bad bank, the cash price dropped from roughly 90% to below 20%. At the same time, the transfer significantly improved Novo Banco's capital position. This show two things, first the central bank can actual discriminated between bondholders of the same asset class and second, covered bonds were exempted again.

France: Introduction of new asset class (junior senior/tier-3 bonds)

In December 2015, the French Finance Minister implemented the European bail-in directive by introducing a new category of senior debt. Although the French proposed law differs from those in Italy and Germany, the objective is similar as it aims to give the French banks more legal certainty in order to meet Financial Stability Board's (FSB) requirements on Total Loss Absorbing Capital (TLAC)/MREL that go into effect from the beginning of 2019.

The new category of senior debt will be subordinated to other senior obligations but ranking senior to the traditional subordinated debt. The law modifies the hierarchy of claims in case of a resolution, in order to create

space for the new junior obligations, often referred to as tier-3 or junior senior. It differs from the German approach in two ways: Firstly, the French banks will continue to be able to issue traditional senior debt while the junior senior/tier-3 debt will have to be designated as such contractually. Secondly, it is intended that only the tier-3/junior senior securities will be counted toward TLAC/MREL, as opposed to the German or Italian laws which de-facto turn all outstanding plain-vanilla senior unsecured bonds into TLAC eligible liabilities.

The first issuance of junior senior bonds will only take place after the new law has been passed which should be in the second half of 2016. In any event it will take some time for banks to build up a sufficient buffer of tier-3 capital in order to protect the senior unsecured bonds.

Italy: Recapitalisation of four smaller banks

In November 2015, the Bank of Italy rescued four smaller Italian banks (Banca delle Marche, Banca Popolare dell'Etruria, Cassa di Risparmio di Ferrara and Cassa di Risparmio di Chieti). The largest domestic credit institutions UniCredit, Intesa Sanpaolo and UBI Banca as well as the Italian deposit guarantee fund were required by the supervisor to contribute about EUR3.6bn. As part of the rescue process, the non-performing loans of the four troubled banks were transferred onto a bad bank, subordinated creditors were bailed in while senior unsecured and covered bond creditors were spared. This is another example where covered bonds (and senior unsecured) were exempted from a bail-in. However, this took place in 2015 under the old resolution regime. It might have played out differently for the senior unsecured investors under the new BRRD set of rules.

Conclusion

The abovementioned examples highlight the different treatment of various types of seniority in distressed environments. The differences will get even more pronounced as the implementation of the new Bail-in regulation into national laws progresses. According to Moody's, 16 EU countries fully implemented the bail in tool before the 1st of January 2016.

> FIGURE 6: BRRD IMPLEMENTATION PROGRESS

	Moody's-observed implementation status			
	Implemented and Bail-in Tool before 1 Jan 16	**Implemented, but Bail-in Tool not introduced or expected before 1 Jan 16**	**Partly implemented, Bail-in Tool not introduced or expected before 1 Jan 16**	**Not (sufficiently) implemented**
EU countries	Austria	Finland	Belgium	Czech Republic
	Bulgaria	France	Cyprus	Luxembourg
	Croatia	Greece	Slovenia	Netherlands
	Denmark	Ireland	Spain	Poland
	Estonia	Latvia		Romania
	Germany	Malta		Sweden
	Hungary			Italy
	Portugal			Lithuania
	Slovakia			
	UK			

Colour Code (base on EC-classification)

Fully implemented	Partly implemented	Expected implementation before end-October	Not implemented (insufficiently in case of Netherlands)

Source: Moody's

3. Ratings

New rating methodologies

In light of the new bank resolution regimes, the major rating agencies have introduced new 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. Furthermore, there have recently been several upgrades in the senior unsecured space driven by the improvement of financial and capital ratios which resulted in a narrowing of the rating gap.

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 newly introduced 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 reflect at least partly these 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 over-collateralisation levels, which in most cases significantly exceed the legal over-collateralisation 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 over-collateralisation levels, further reduce the available headroom for covered bond issuance.

IV. WHICH FUNDAMENTAL FACTORS DRIVE COVERED BONDS VS. SOVEREIGN AND SUPRA/AGENCY DEBT…?

Despite the fact that covered bonds in a number of countries trade well inside their sovereign debt, sovereign risk does fundamentally impact covered bonds. In fact it impacts covered bonds in virtually all aspects of the product – the issuer, the quality of the cover pool, liquidity and refinancing risk in the structure as well as ratings.

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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.

- 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 via external liquidity. 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 does play too big of a factor in covered bond structures to just ignore it. Nonetheless there are reasons why in some cases covered bonds can very well trade inside their respective sovereign bond curves.

Being part of QE programmes and the respective weight the Eurosystem has in these markets

We have mentioned above that the QE programmes by the Eurosystem have played a major role in the evolution of the spreads of all affected markets. Beyond the short term trading view that has driven the affected markets tighter after the respective QE announcements, the longer term spread impact of QE strongly depends on the actual share the Eurosystem's acquires in these sectors. And while the short term reaction of the CBPP 3 and the PSPP has been similar (spreads went tighter), the longer term impact will be very different.

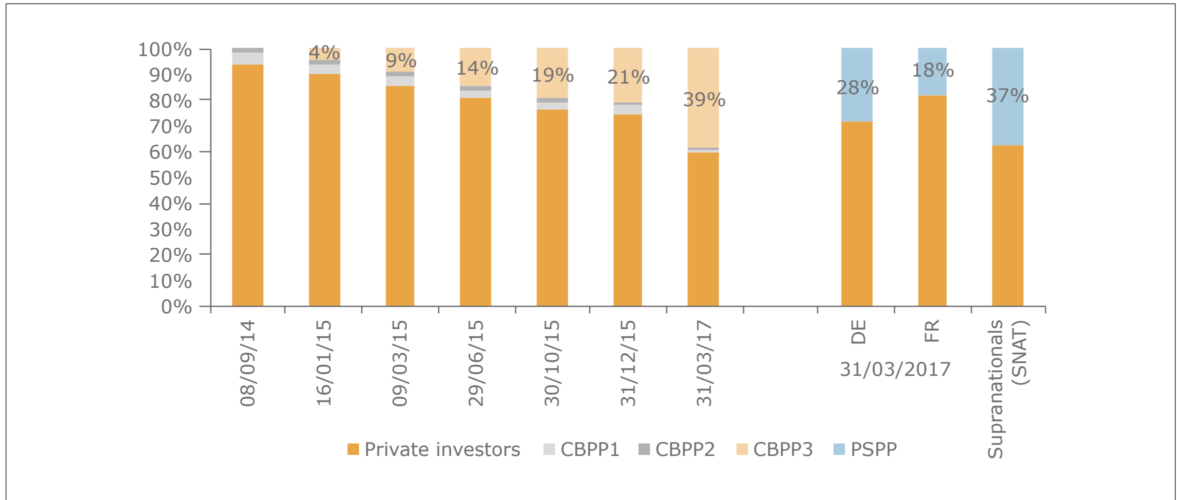
The CBPP 3 has been buying around EUR7bn of covered bonds per month in 2016. At the same time it needs around EUR70-75bn in eligible government, agency and supra debt for the PSPP to fill the EUR80bn monthly QE buying target. Despite the lower absolute volumes purchased by the CBPP 3 compared to the PSPP, the CBPP 3 has and will continue to be substantially more distortive in covered bond markets than is the case for the PSPP.

After all, by March 2017, the Eurosystem will hold around 40% of the eligible covered bond universe. The only other market where QE plays a somewhat similar role is in debt issued by supranational issuers. Because of the buying target of 10% of the additional asset purchases, the ECB could end up holding around one third of the eligible universe.

At the same time, despite the upsized QE pace, the impact on sovereign or agency markets is not quite as pronounced. There is no quota for agency debt and considering the size of sovereign debt markets the purchases by the Eurosystem will probably lead to a market share in the mid to high-single digit territory.

The best example for the relative impact the various QE programmes can have on covered bond markets is Portugal. While Portuguese sovereign debt has been fairly volatile at times during 2016, Portuguese covered bonds have not moved at all. The spread between the two has as a result of this become deeply negative with Portuguese covered bonds trading as much inside the sovereign debt as 150bp-200bp. And while one can argue that Portuguese covered bonds are backed by a solid framework and residential mortgage only cover pools, rated well above the sovereign and should thus trade inside the Portuguese sovereign, these arguments are certainly not worth 200bp. A large part of this difference is rather due to low new issue volumes in Portuguese covered bonds coupled with relentless buying by the Eurosystem.

> Figure 7: Share of the Eurosystem's purchase programmes in the outstanding eligible covered bond universe (%)



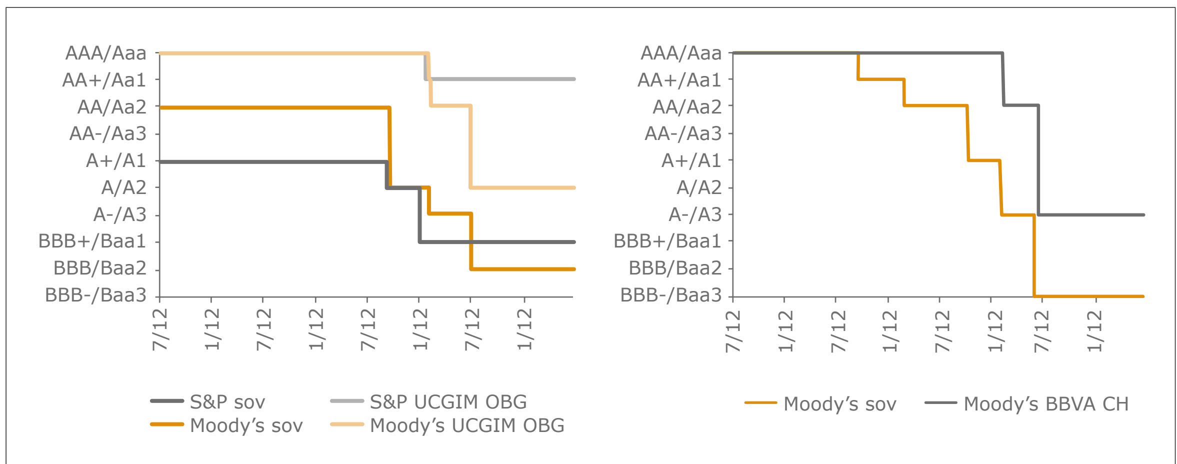
Source: CréditAgricole CIB

Rating stability

Despite rating agencies factoring in sovereign ratings into covered bond ratings, they do allow for a certain rating uplift above the sovereign. The maximum uplift depends on the rating agency and collateral type but it can reach up to 6 notches in general with Moody's or 4 notches for mortgage backed covered bonds with S&P. Thanks to this uplift covered bond ratings do not react as fast as their respective sovereign ratings. Especially when sovereign ratings start to come under pressure, covered bonds often see their ratings remain stable. Only once the maximum uplift above the sovereign is used up do they start to move as well.

S&P's OBG ratings of Italian national champions for example are still rated 4 notches above the Italian sovereign while Moody's grants six notches of uplift. In addition, the OBG ratings have been much more stable historically than the Italian sovereign.

> Figure 8: Covered bond vs. sovereign bond ratings



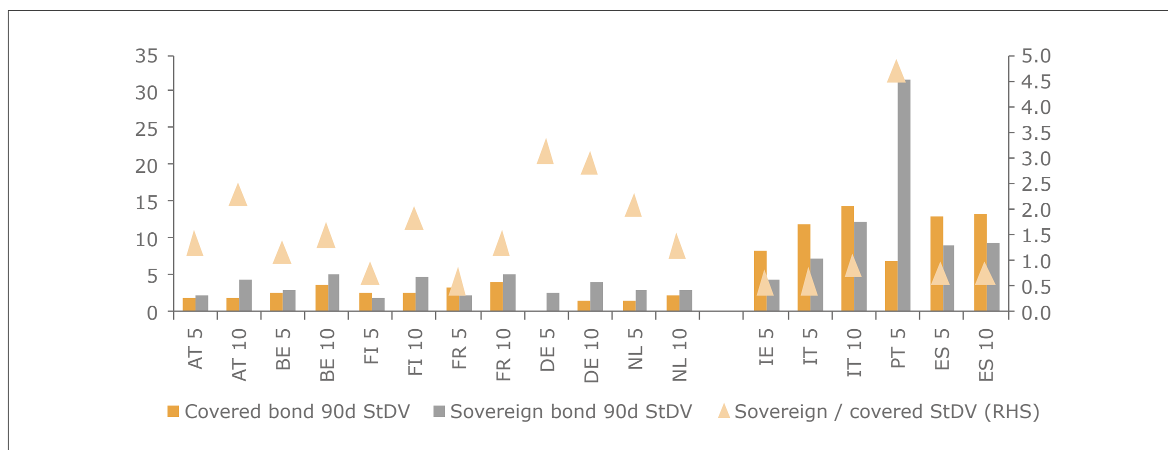
Sources: Bloomberg, CréditAgricole CIB

In Spain, the sovereign is rated Baa2 by Moody's while the Cedulas of at least the better issuers are by now back to Aa2. And in Portugal, investors that are prohibited from holding non-investment grade debt have Portuguese covered bonds as one alternative that can be rated as high as A1 with Moody's while the sovereign still has a Ba1 rating.

Spread stability

One of the main arguments pro covered bonds throughout the sovereign crisis or the more recent episodes of rates volatility in 2015 and 2016 has been their spread stability. While even German Bunds experienced intra-day volatility of 20bp and more, covered bonds remained extremely stable. Looking at 90d standard deviation of ASW spreads shows that the covered bond volatility has been a fraction of their corresponding sovereign debt markets.

> FIGURE 9: COVERED BOND VS. SOVEREIGN BOND VOLATILITY (BP)



Source: CréditAgricole CIB

One of the reasons for this lagging of covered bonds is certainly the different investor base and less active trading in covered bonds. Buy and hold investors play a much more important role in covered bonds and the impact of the CBPP 3 is substantially higher than the PSPP in sovereign debt whereas trading accounts are more active in sovereign debt.

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 a certain asset is the more capital banks have to hold. Spread stability of covered bonds thus has a very feasible economic value and reduces the overall capital consumption difference to sovereign debt.

ECB repo efficiency

Bank investors are a major investor base in both sovereign debt as well as covered bonds. One of the main things bank treasuries focus on when investing is the repo efficiency of an investment. The lower the haircut and the less volatile price the better.

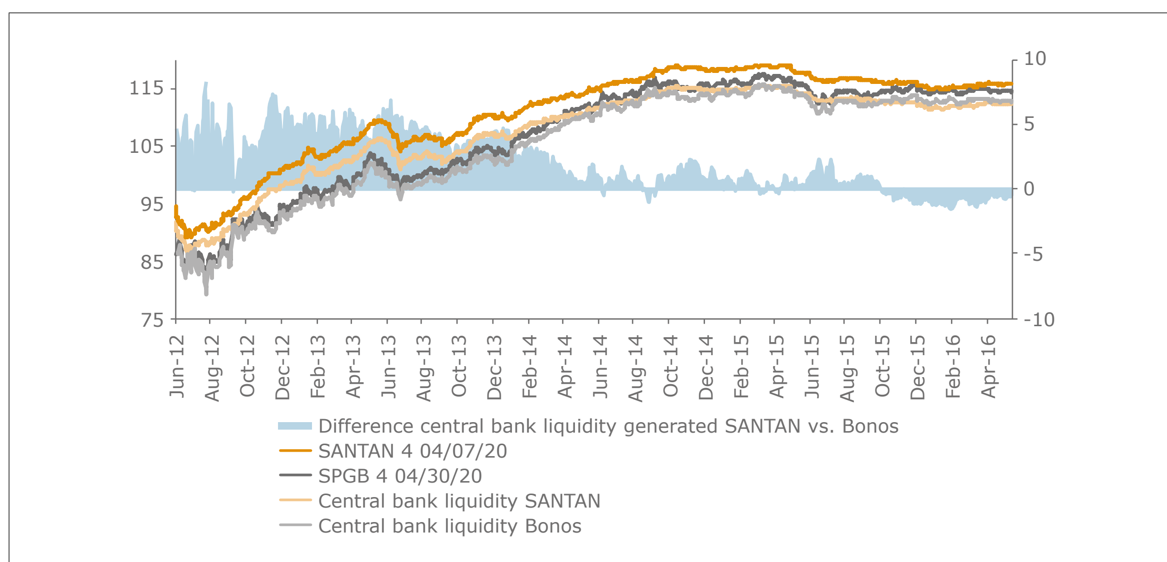
As mentioned above, repo haircuts for covered bonds are fairly similar to those of sovereign debt as long as both are rated at least A- by one rating agency (the best rating is relevant for this purpose). Currently most covered bonds in the market fall into the lower haircut table, even if in some cases they only benefit from this thanks to their DBRS rating.

If we look at two bonds with identical coupons and similar maturities, the one with the significantly tighter spread is trading at the higher price and thus generating more central bank liquidity (liquidity is measured based on market price minus haircut). When running this comparison between sovereign bonds and covered bonds, sovereign debt is the clear winner in virtually all core countries thanks to slightly lower haircuts but most of all lower spreads and higher prices.

However, in some peripheral countries, covered bonds have been able beat their sovereign when it comes to ECB liquidity generated throughout the crisis. The liquidity advantage was also highest whenever the degree of stress in the market was highest, which is exactly when banks require stable central bank liquidity the most.

The SANTAN 4 07/2020 Cedulas Hipotecarias was generating almost 6 points more cash from repoing it with the Eurosystem than the SPGB 4 03/2020 at the height of the sovereign crisis. And what adds to the argument is the higher degree of price stability of Cedulas. Not only was the covered bond generating more liquidity, it was generating the more stable liquidity.

> Figure 10: Liquidity generated from repoing 7Y Santander Cedulas vs. 7Y Bonos



Sources: Bloomberg, Eurosystem, CréditAgricole CIB

This rationale obviously only works for covered bonds, that are already trading deeply inside sovereign debt as mentioned and only in instances where coupons and maturities are comparable. It does not work for covered bonds in core sectors where sovereign debt is still the more ECB repo efficient tool in general. And even in the periphery, the situation is very rating dependent. Below A-, the pendulum swings back towards sovereigns as the repo haircut differences become bigger. Last but not least, one could argue that the liquidity argument is more a reaction to than a cause for negative covered-sovereign spreads.

Bottom line is repo efficiency is not something that would drive covered bonds deeply into negative spread territory relative to sovereign debt. But it is certainly a factor in stabilising spreads once they get there, as it becomes a self-enforcing factor which weighs more the deeper negative spreads are.

Tail risk – expected recoveries

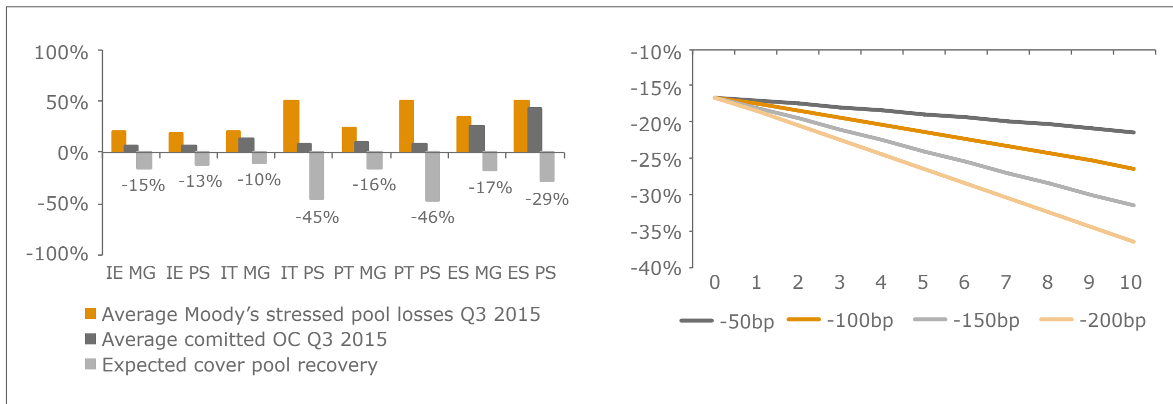
One of the most powerful arguments that can be brought forward to defend negative covered-sovereign bond spreads is the expectation that tail risk in covered bonds is less than it is in sovereign debt. Especially some

long-term investors such as insurance companies started to feel more comfortable with the collateralised claim than the sovereign debt during the sovereign crisis.

When making this argument, it is however important to go one step further as the validity of this statement depends on the actual pool backing the covered bonds, the framework regulating it and most importantly as well the issuer itself. Chances that this view will prove right are much higher for high quality residential mortgage backed covered bonds from a country with a strong framework that are issued by a systemically important bank than lower quality public sector backed covered bonds issued by a small non-systemically important issuer. Another important aspect is that the stronger a sovereign is the less relevant are considerations about tail risks and recoveries while they become much more important where sovereigns are in a difficult situation.

It is hard to estimate cover pool recoveries based on issuer reporting. Rating agencies such as Moody's however 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 Spanish mortgage cover pools for example the estimated loss is slightly less than 20% if the bond was purchased at par (committed OC of 25% and stressed pool losses of 33%).

> FIGURE 11: 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 a purchase should result in a positive return even if both the bank and the covered bonds 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 Spanish case for example, if a sovereign haircut on Spain were to be in excess of 20%, the expected recovery on the Cedulas would be higher. If investors believe the haircut is lower, sovereign debt would be the better option.

If one adds the negative covered-sovereign spread in Spain to the equation, for example in case of Cedulas levels 100bp inside Bonos, the Bonos obviously produces 100bp extra carry p.a. which in effect means that the Bonos investor builds up an additional buffer or 1% p.a. and that this expected recovery moves by 1% to the disadvantage of covered bonds per year. In other words, the better recovery on covered bonds has its price and at some point, the balance shifts to the sovereign debt depending on the cover pool quality, strength of the bank and framework.

What this calculation does not take into account though is the probability that some banks can very well survive a sovereign debt restructuring (via capital support by the domestic sovereign or a European entity and liquidity support by the Eurosystem) and that, irrespective of potential pool recoveries, covered bonds could be the better choice. Countries need to maintain a basic level of banking services and sovereigns would most likely re-capitalise

at least some of the country's large retail banks immediately after the sovereign debt restructuring. National Bank of Greece is the best example for this.

Recoveries based investing is something that took place at the height of the crisis when peripheral covered bonds were trading in the 60 to 70 cash price range. At the current price levels the investors that focussed on this for their trading are long gone from covered bond markets. For long term investors that want to assess tail risks, the recovery assessment vs. sovereign debt can however still make sense.

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 which maintain spreads often at a level below fundamental values.

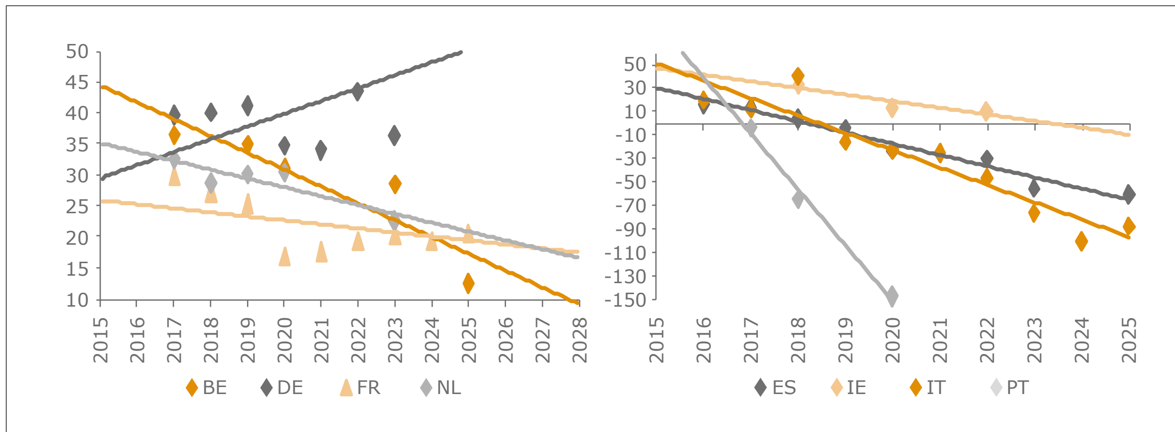
Covered-sovereign

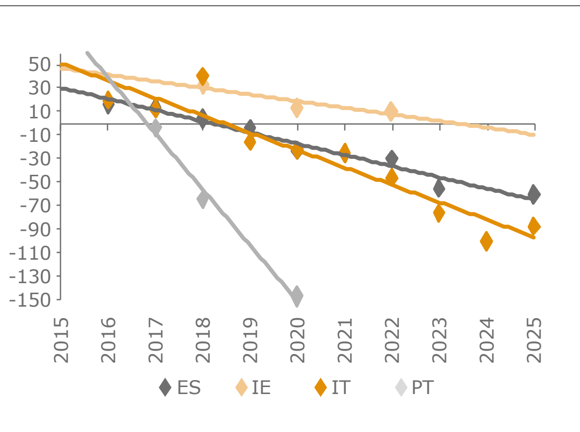
It is important to note that not all investors focus on the spread to local sovereign debt. Similar to some senior unsecured investors not caring much about covered bond levels and buying at very tight spreads relative to covered bonds, there are investors that will not focus on the spread to sovereign debt. They might have a narrow covered bond mandate not allowing for sovereign debt to be added or they might focus more on alternatives in credit space. There are also investors that might not agree with the rationale for or the extent of the negative spreads to sovereigns, but are literally forced into buying covered bonds even at deeply negative spread levels. Asset managers receiving fresh cash inflows that do not want to fall behind their benchmark weights while not wanting to hold too much cash at negative rates might invest as well even at deeply negative spreads. The biggest focus on the covered bond to sovereign debt relationship can probably be found amongst bank treasuries and more generally domestic investors. For many of them the sovereign is still the relevant benchmark and buying into products that produce a significant negative carry vs. the own benchmark is problematic.

For those investors that do compare covered bonds to sovereign debt there are a number of factors that are relevant. In 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 sovereign debt are valid across the curve. However while spread stability as well as recoveries are no major topics at the very short end, these topics become more and more relevant the longer a bond is. Consequently covered bond – sovereign bond spread curves should slope downwards over time. And the weaker the sovereign, the stronger the cover pool and the less volatile a covered bond program is the steeper should the curve slope downwards.

> FIGURE 12: COVERED GOVIE SPREAD CURVES PER COUNTRY (BP)

> FIGURE 13: COVERED GOVIE SPREAD CURVES PER COUNTRY (BP)





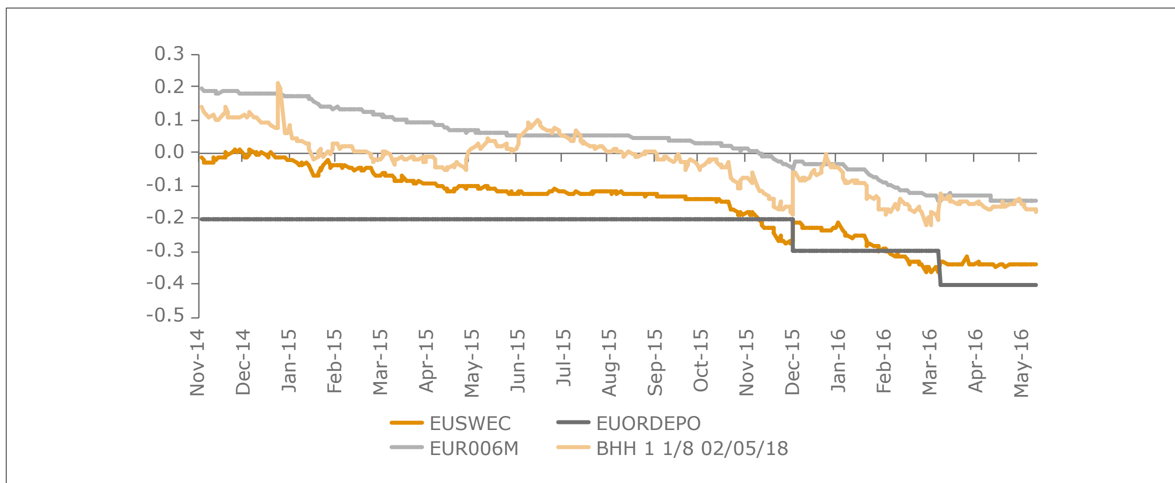
Sources: Bloomberg, Crédit Agricole CIB

Since we have moved into negative yield territory for much of Eurozone core sovereign debt as well as covered bonds, one additional factor has been added to the mix. While bunds have moved to yields inside -0.5%, covered bonds initially struggled to follow into negative territory. Consequently the spread to the underlying sovereign became more positive the shorter the maturity and we ended up with smiley shaped covered-sovereign spread as well as covered bond ASW spread curves in the tightest core sectors.

More recently investors in covered bonds have become more open to accepting negative rates as well though and we have even had Berlin Hyp issue a 3Y covered bond at a negative re-offer yield of -17bp. After all, asset managers are being charged for holding cash these days (often a rate linked to EONIA) and bank treasuries are faced with a negative deposit rate or even deeper negative sovereign debt.

Consequently as covered bond investors have gotten used to the thought that buying at negative rates can be beneficial and as portfolio guidelines preventing buying at negative yields have been adjusted, the negative yield factor should lose some of its relevance for covered-govie spreads.

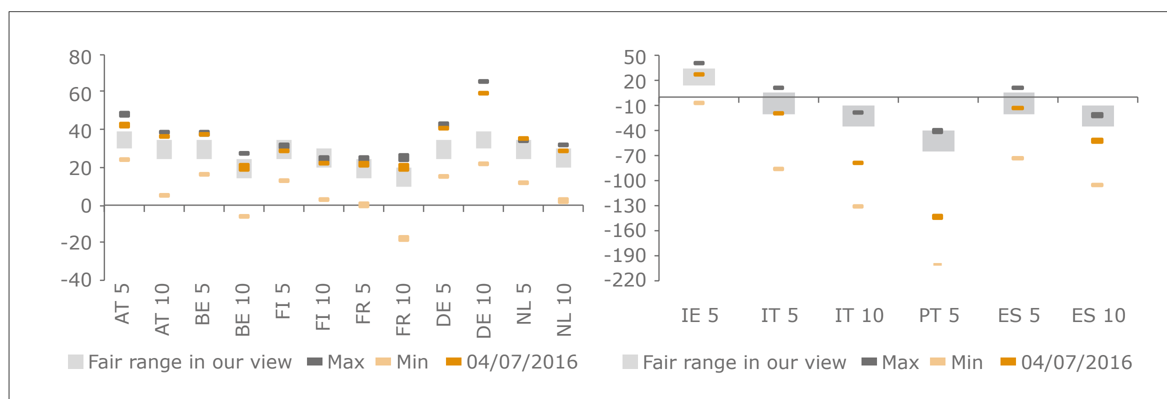
> FIGURE 14: EVOLUTION OF EONIA, ECB DEPOSIT RATE, 6 MONTHS EURIBOR AND BHH 1 1/8 02/05/18 (%)



Sources: Bloomberg, CréditAgricole CIB

All of this does not yet say anything about the absolute level of covered-sovereign spread that is acceptable to investors. We have had new issues price in the primary markets at high double-digit basis points through sovereign debt. We are thus not talking about illiquid secondary screen prices that do not represent reality. We have however compressed in ASW spread terms and pricing deeply through the sovereign if ASW spreads are still above 100bp and differences to other core markets in high double-digit basis points territory is something else than if ASW spreads are around mid-swaps flat. In the former case investors could still hope for spread compression of the affected covered bonds vs. swaps and other covered bond sectors, something that is harder to achieve in the current context. Below we have tried to estimate fair value ranges between covered bond and sovereign debt by country and maturity.

> FIGURE 15: 5Y /10Y EUR COVERED BONDS VS. LOCAL SOVEREIGN DEBT (BP)



Sources: Bloomberg, Crédit Agricole CIB

VI. WRAP UP

We believe that – given the various purchase programmes of the Eurosystem – the absolute yield level and therefore the spread between various asset classes, will stay low for an extended period of time. From an investor's point of view, in times of low yield differences, covered bonds gain attractiveness compared to senior unsecured debt. By accepting a relative low yield give-up (which is often observed at the short end of the curve), investors are able to switch into an instrument of much lower risk and much higher regulatory support. In a low-yield environment where every investor is looking for the extra basis point, this argument might be of less relevance, but as yield levels go up, risk return considerations should become more important.

The spread between sovereign and covered bonds has been and will continue to be driven to a large extent by the relative activity levels of the various Eurosystem's QE programmes and absolute yield levels. Covered bonds traded inside their sovereign curves almost across the board before the PSPP started and have moved to fairly wide levels at least in core markets more recently. Also while i.e. bunds easily moved to within -50bp in yield terms, covered bonds almost seem to have an implicit yield floor at around -20bp yield.

At up to 50bp yield pick-up in some cases, covered bonds more than compensate for the regulatory disadvantages they have vs sovereign bonds and make them an attractive investment for bank treasury investors or asset managers running external LCR funds. If anything, one can make the point that QE has deteriorated liquidity in covered bonds at a much faster pace than it has in sovereign bond markets and that a higher spread pickup is thus justified than was the case in the past. Peripheral covered bonds on the other hand still trade at deeply negative spreads to their underlying sovereign. In times of TLTRO and thus low funding needs in the market this situation could well stay with us for a bit longer. While slightly negative spreads in peripheral markets can make sense for stronger issuers, values close to or even in excess of 100bp do however not make much fundamental sense.

2.5 USD AND GBP DENOMINATED COVERED BOND MARKETS

The new issue volumes in the USD- and GBP-denominated covered bonds have revived over the last two years underlining the strategic importance of the non-EUR denominated covered bond markets. They represent attractive diversification opportunities from an issuer perspective, both in terms of investor base as wells in terms of different dynamics compared to the EUR-denominated market as detailed below. From an investor perspective, USD- and GBP-denominated covered bonds may also offer cross-currency arbitrage opportunities depending on the swap costs which are worth monitoring. This article was written before the EU-Referendum in the UK and it will be interesting to see how (if at all) the Brexit vote will impact new issue volumes in GBP and the spread developments of Sterling covered bonds over the coming years.

2.5.1 USD-DENOMINATED COVERED BONDS: 2016 ISSUANCE – PROMISING, SO FAR

By Alexander Batchvarov and Anne Caris, Bank of America Merrill Lynch

After a quiet 2014, the USD-denominated covered bond market revived in 2015 with gross issuance doubling to USD18bn. This trend was driven largely by a favourable cross currency basis and, as such, was visible in other sectors like supranationals and agencies. This year has been promising with new issue volumes in line with 2015, and already exceeding 2014 levels with USD10bn between January and April 2016. However, the breakdown by country has differed with no European issuers, only Canadian, Australian and South Korean in the first four months of the year. This can be explained by the following, we think:

> The cross currency basis remains favourable in the shorter end of the curve – ie, +/- 5 year – a maturity preferred by non-European banks for ALM purposes unlike their peers in Europe. The latter tend to favour longer maturities in the EUR market as highlighted below. The USD market is also a more natural market for non-Europeans including the new Asian issuers.

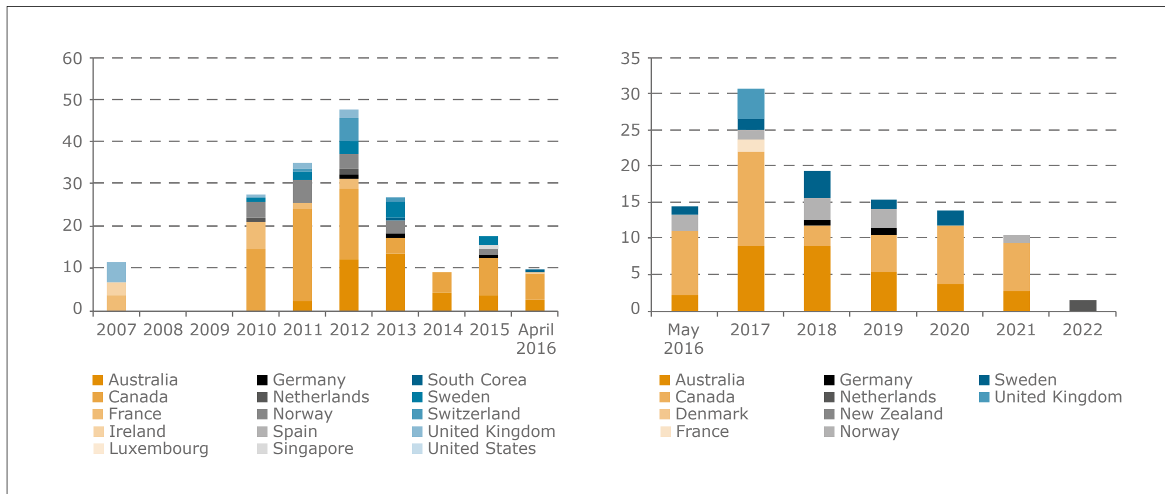
> Funding needs for Canadian and Australian banks have been more material than for European institutions, leading them to diversify their financing strategies across currencies. Large USD redemptions notably for Canadian issuers have also encouraged them to tap the market in order to maintain a curve.

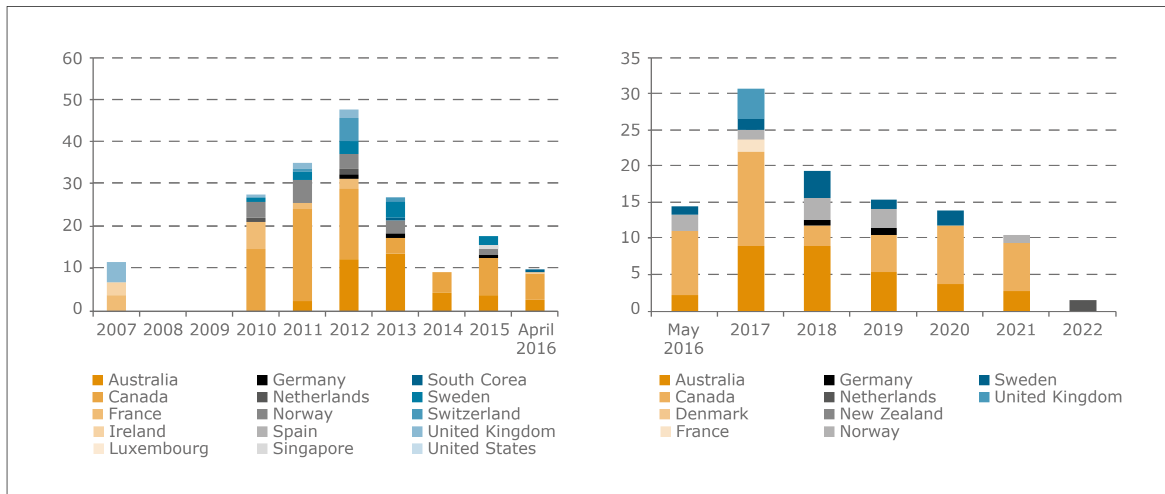
> Given the current ECB purchase programmes, European issuers have taken advantage of very strong EUR market technicals – also supported by a preferential regulatory treatment for covered bonds in Europe as detailed below.

Despite these structural elements, which are likely to remain in the foreseeable future, we expect European banks to remain active in the USD covered bond market, although more likely on a name-by-name basis, depending on pricing and funding needs, in order to maintain a curve and investor base.

> FIGURE 1: USD-DENOMINATED BENCHMARK ISSUANCE BY COUNTRY (USD BN) [1]

> FIGURE 2: USD-DENOMINATED BENCHMARK REDEMPTIONS BY COUNTRY AND YEAR (USD BN) [1]





Source: BofA Merrill Lynch Global Research; [1] Excluding FRNs

DIFFERENCES BETWEEN THE USD AND EUR MARKETS PERSIST

The USD covered bond market has been more opportunistic than the EUR one for issuers and investors but remains the second-largest. There are several features of the USD covered bond market which we believe differentiate it from its EUR counterpart and impact market technical:

> An **"AAA" market**: the USD market largely remains a "AAA" market, as required by most investors. This effectively limits the market to the strongest issuers from Australia and Canada, which have largely emerged unscathed from sovereign debt issues of recent years, and the strongest European issuers. While Australian and Canadian issuers have accounted for the majority of USD covered bond issuance historically, the strongest European banks tend to use the market as a funding alternative to the EUR market, notably for diversification purposes as mentioned above. In 2015, they accounted for about 10% of the total.

> **Larger but shorter new issues**: USD covered bonds are typically large, and are mostly "jumbo"-like, with few bonds issued at less than USD1bn. Sub-EUR1bn bonds are frequently issued in the EUR market, on the other hand. The average size of USD covered bond issuance in 2015-16 was USD 1-1.5 bn versus EUR 0.8-0.9 bn in the EUR covered bond market. USD covered bonds are also typically shorter than EUR covered bonds, with an average original maturity of 4.5-5 years for USD covered bonds issued over the same period compared with 6.9 years for EUR covered bonds.

USD covered bonds are mainly issued in the 144a format. Given the limited issuance of USD covered bonds, the narrower investor base for 144a bonds does not appear to have a material impact on liquidity or pricing of these bonds compared to SEC registered bonds. The 144a format can only be sold to Qualified Institutional Buyers under specific restrictions, unlike the SEC format, which opens the door to retail clients as is the case in Europe with UCITS-compliant covered bonds.

> **Variations in regulatory treatment**: covered bonds receive different regulatory treatment around the world, with the highest divergence between Europe and the US in several key areas. Distinction takes into account the issuer's country of origin but also currencies and ratings.

First, covered bonds – including USD-denominated – are favourably treated under the EU implementation of Basel's Liquidity Coverage Ratio (LCR), which allows for covered bonds as part of Level 1, 2A and 2B

liquid assets under specific criteria. In contrast, covered bonds – independent of their currency – do not qualify for the LCR in the US and are restricted to Level 2A assets, in line with Basel's recommendation, in other countries such as Canada, Australia or Singapore.

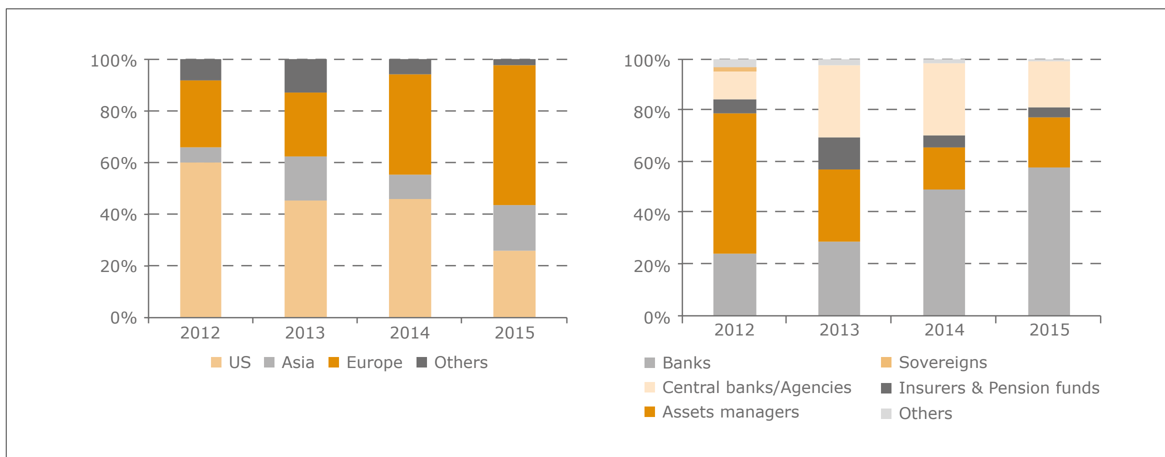
Another key discrepancy concerns repo eligibility with central banks. The range of eligible covered bonds by country of origin, type (ie, legislative vs structured), currency and rating is widest for the ECB. Bank of England is the second-widest, accepting different countries, ratings and currencies, though is somewhat more restrictive than the ECB. This is in contrast to the US Fed which accepts different currencies but AAA German and minimum BBB- US covered bonds only. The central banks in Canada and Australia are also strict, focusing on their domestic covered bond market and currency.

Furthermore, covered bonds are one of the main pillars of ECB QE with the launch of the Covered Bond Purchase programme 3 (CBPP3) in October 2014, which has three main objectives: (1) the enhancement of the transmission of monetary policy; (2) facilitation of credit provision to the EUR area economy; and (3) generation of positive spill-overs to other markets. This strategic role for covered bonds is again specific to Europe and emphasises the importance of the product.

> **More European buyers recently**: Until recently, US investors accounted for the majority of the investor base for USD covered bonds. However, this trend has changed recently with European and Asian investors playing a greater role in the USD market. For the few bonds for which we have distribution data in 2015, only a quarter of USD issuance has been accounted for by US investors, with European investors accounting for 54% and Asian investors for 18%. Banks have become the most significant investor type in USD covered bonds, followed by central banks/agencies and asset managers. Investing cross currency has been a way to pick up spreads for European investors in the QE world.

> FIGURE 3: ALLOCATION OF USD CB BENCHMARK ISSUANCE BY COUNTRY

> FIGURE 4: ALLOCATION OF USD CB BENCHMARK ISSUANCE BY INVESTOR TYPE



Source: BofA Merrill Lynch Global Research; [1] Excluding FRNs

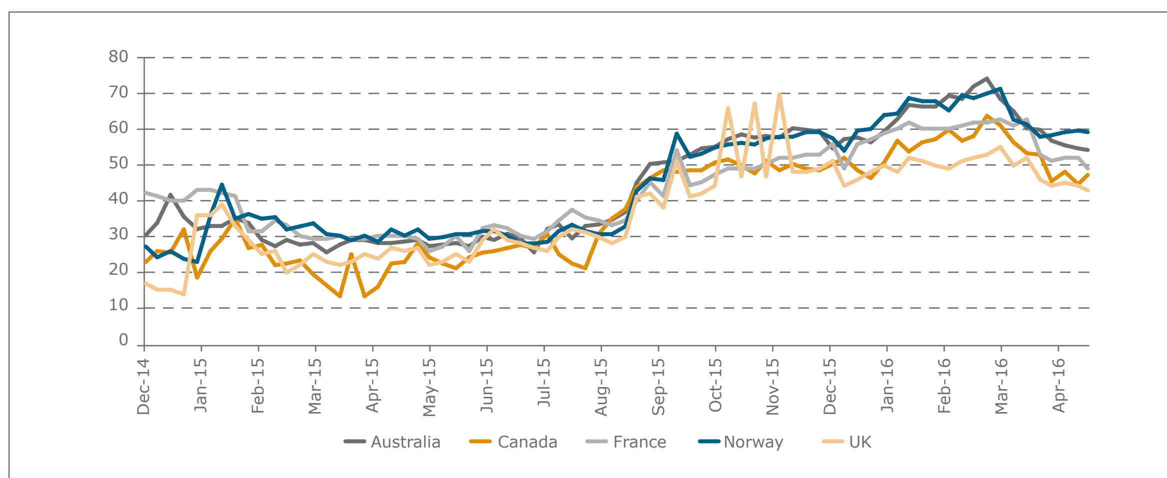
MACROS RISKS IMPACT SPREADS IN THE SECONDARY MARKET

In the secondary market for USD covered bonds, ASW spreads have widened quite significantly since mid-2015. Market concerns around the Fed's increase in interest rates have been a major driver. The Fed's more dovish tone in 2016, together with the ECB bigger QE from 1 April 2016, has contributed to the market rally as investors anticipate a slower and softer monetary policy from the Fed.

The spread tiering, which faded in 2015, is noticeable again on the back of macro risks. For example, countries with high exposures to commodities like Australia and Norway are trading among the widest. Similarly, the economic slowdown in Canada has affected ASW spreads, which have suffered, especially at the start of 2016. Interestingly, however, risks with respect to the UK referendum on the European Union have not been priced – as it has been the case in the EUR market.

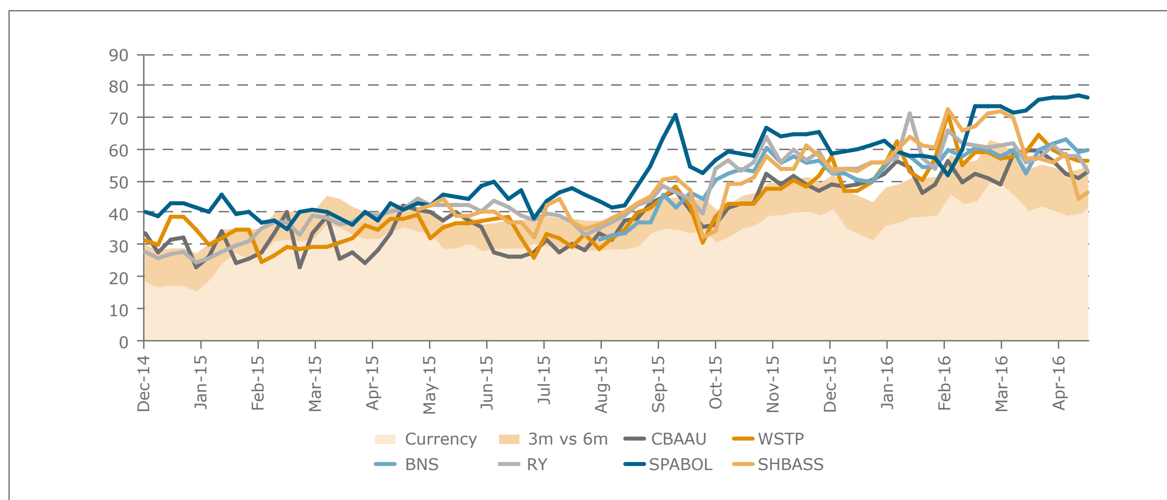
Based on our simple display of the difference between spreads for USD and EUR covered bonds, and indicative swap costs, USD covered bonds may still offer a spread pick-up to investors, although more selectively than in 2015. Relative value between the USD and EUR markets continues to be essential as it still switches from time to time, even under the Fed's and ECB diverging monetary policies.

> Figure 5: 1-3yr USD covered bond spreads by country



Source: BofA Merrill Lynch Global Research (data as of end April 2016)

> Figure 6: 3-5yr USD minus EUR covered bond spreads by issuer and indicative swap costs



Source: BofA Merrill Lynch Global Research, Bloomberg (data as of end April 2016)

2.5.2 GBP-DENOMINATED COVERED BOND MARKET

By Frank Will, HSBC & Chairman of the ECBC EU Legislation Working Group

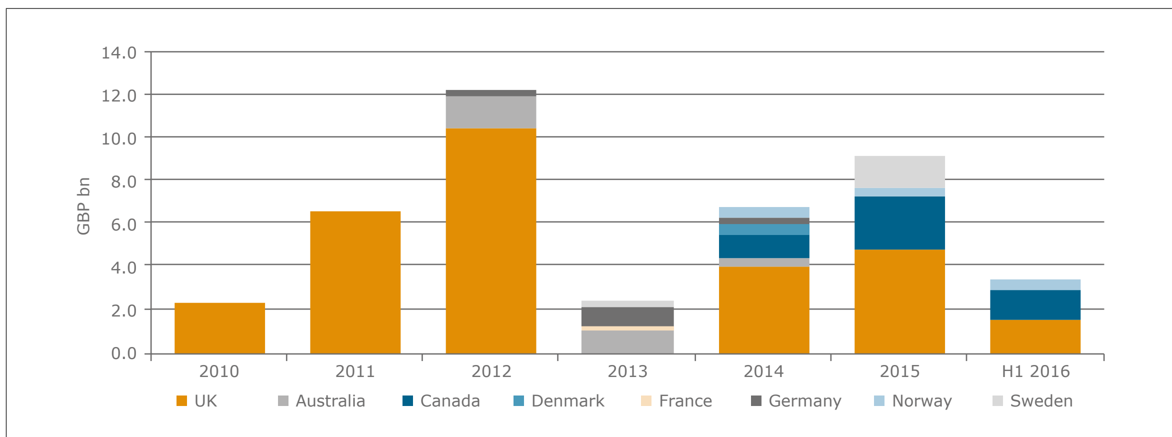
The GBP-denominated covered bond market is a small fraction of the total covered bond universe. However, with the entrance of new issuers from non-domestic jurisdictions such as Canada and Australia, the issuance size and volume is set to increase further in the coming years.

The primary market activity in this segment has been quite volatile over the last ten years. Back in 2008 (c. GBP 85bn) and 2009 (c. GBP 10bn) large volumes of Sterling-denominated covered bonds were issued that were not publicly placed in the market. Most of these issues were retained by the issuers at a time when the Bank of England provided funds under the Special Liquidity Scheme in response to the financial crisis. These retained covered bonds were used as collateral.

In 2012, publicly placed covered bond supply in Pound Sterling reached a record volume of about GBP 13bn, double the volume of the previous year, driven by strong demand from insurance companies at the long end of the curve, as well as money market funds and bank treasuries at the short end. After the record volumes of 2012, the GBP covered bond primary market activity in 2013 dropped significantly due to the Funding for Lending Scheme of the Bank of England which triggered a complete halt of GBP covered bond supply by UK banks.

Since then the GBP covered bond market has slowly recovered as both issuance by UK banks and non-Eurozone banks has picked up. However, GBP denominated covered bond issuance is currently less attractive for Eurozone issuers as the largest buyer segment, the central banks of the Eurosystem, are not buying GBP-denominated covered bonds under the third covered bond purchase programme (CBPP3) even if the bonds are issued by Eurozone banks. Thus, the current GBP issuance levels achievable for Eurozone issuers cannot compete with the heavily distorted prices of EUR-denominated CBPP3-eligible covered bonds.

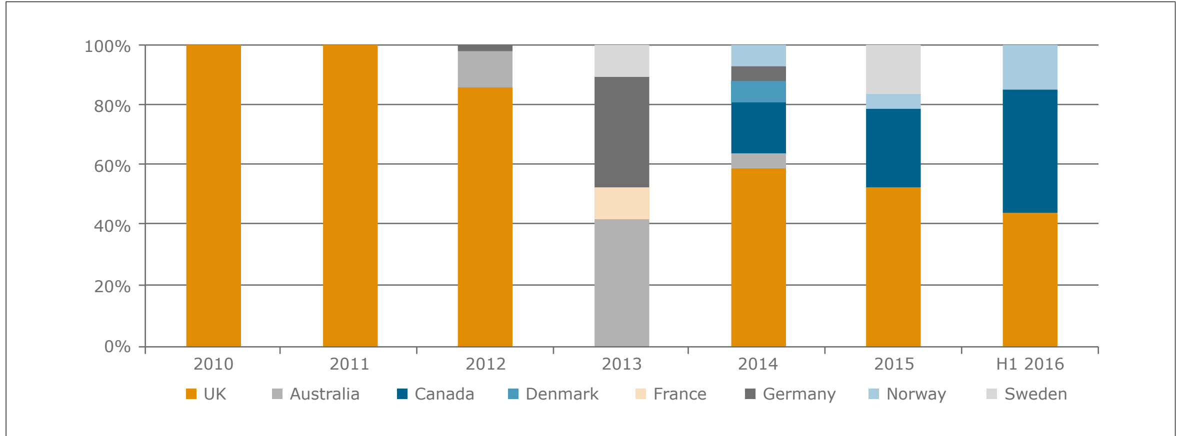
> Figure 1: Publicly placed GBP-denominated covered bond issuance



Source: Bloomberg, HSBC (H1 16 figures as of 21 June 2016)

The breakdown by country shows that up until 2012 the GBP-denominated covered bond market has traditionally been dominated by the UK based issuers, however, over the past few years, non-domestic issuers from Australia, Germany, Scandinavia and Canada have also opted to issue in Sterling. In the first half of 2016, non-UK issuance actually exceeded domestic supply. This has been at least partly driven by the uncertainty ahead of the EU referendum.

> Figure 2: GBP-denominated benchmark covered bonds supply by country

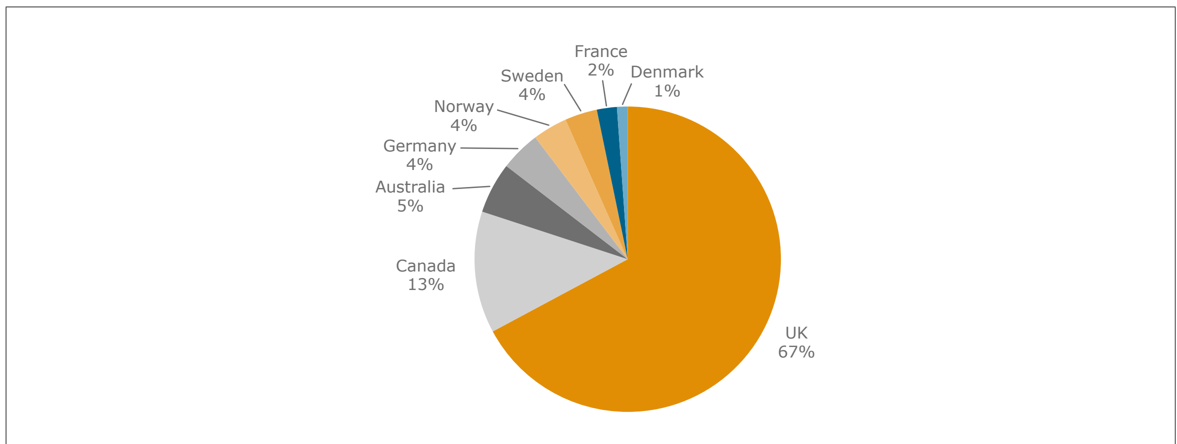


Source: Bloomberg, HSBC (H1 16 figures as of 21 June 2016)

In principle, issuance in non-domestic currencies has a number of advantages from a covered bond issuer perspective. Besides opportunistic issuance depending on the basis swap valuations to optimise the funding mix, issuers are able strategically to broaden their investor base. Another advantage for issuers is that non-Euro issuance, for instance, reduces the supply in Euros, which should support the valuations of the outstanding Euro benchmarks of the particular issuer and might free up credit lines at investors. Last but not least, issuance in non-domestic currencies can be used to hedge foreign-currency denominated assets in the cover pool without the need to swap currency risk.

The total outstanding of publicly placed Sterling covered bonds currently exceeds the GBP 40bn mark. Including non-publicly placed deals the total outstanding volume actually peaked in 2009, following high issuance volumes of retained covered bonds at the height of the financial crisis, of which large parts have subsequently been redeemed or matured. However, the last few years with relative strong issue activity has led to a considerable increase in the outstanding volume.

> Figure 3: Outstanding volume of public deals by country

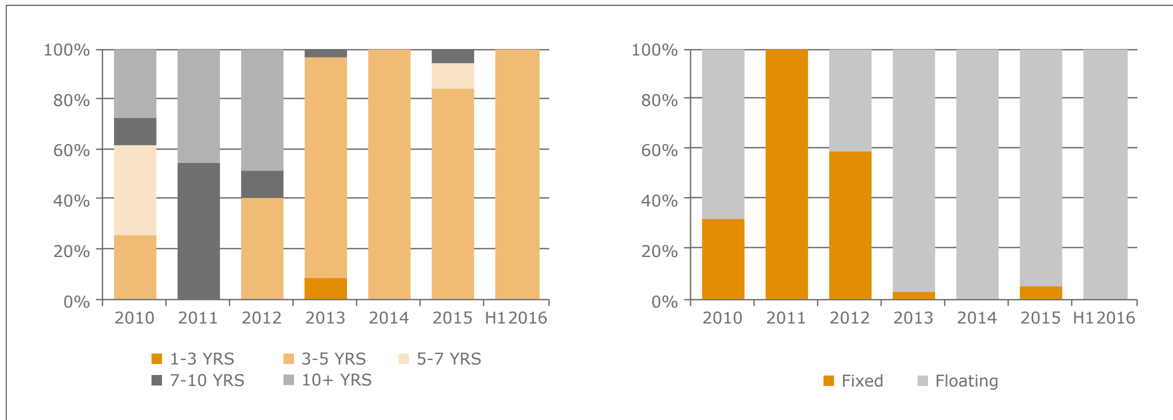


Source: HSBC, Bloomberg, (data as of 20 June 2016)

The figure below show the issuance patterns in the Sterling covered bond segment since 2010. In the years up to 2008 only a small percentage of new issuance came with maturities longer than seven years. With the exception of 2009 when no syndicated publicly placed issues were sold, demand for long-dated GBP-denominated covered bonds picked up in 2011 and 2012, while over the last three and a half years deals were almost exclusively issued at the short end of the curve, with floating-rate coupons.

> Figure 4: Maturity breakdown of new issuance (public placements only)

> Figure 5: Breakdown between fixed and floating rate coupons (public placements only)

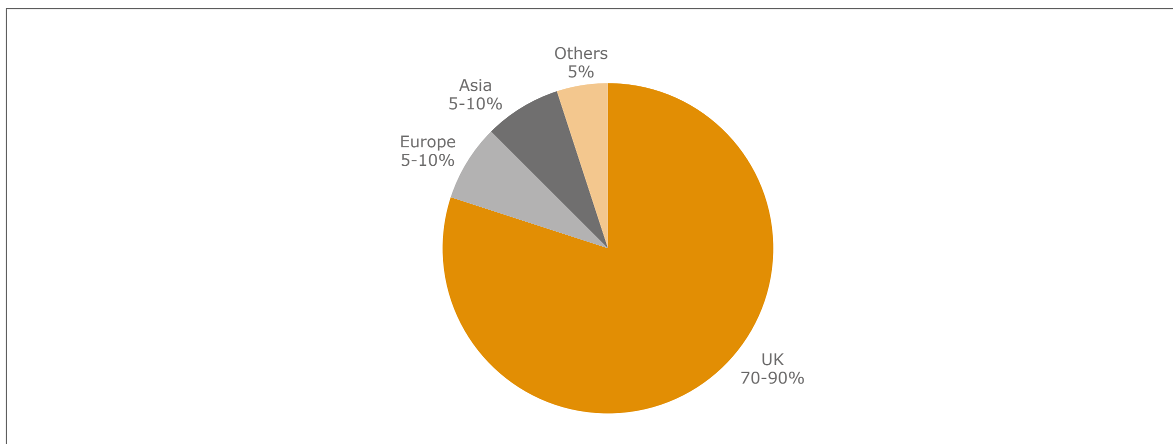


Source: Bloomberg, HSBC (H1 16 figures as of 21 June 2016)

INVESTOR PARTICIPATION BY GEOGRAPHY

Investors in Sterling-denominated covered bonds are largely based in the UK. Analysing deal allocation statistics of primary market transactions over the last few years shows that about 80% has been placed with UK investors with the remainder spread almost equally across Europe and overseas.

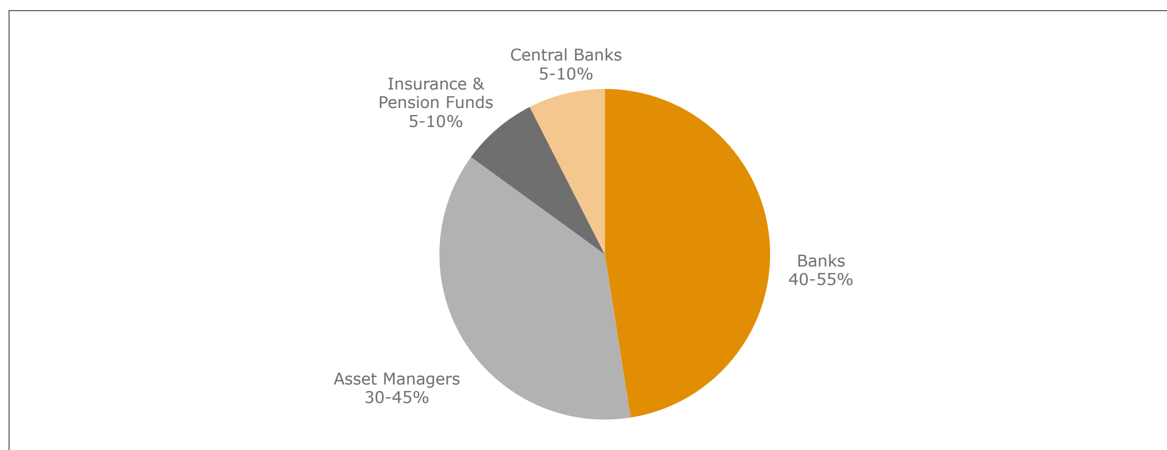
> Figure 6: Investor participation by geography



Source: Publicly available deal allocation statistics, HSBC (data as of 20 June 2016)

The breakdown of investor base by type varies considerably between floaters and fixed-coupon bonds. While asset managers have a large share of both, banks have bought only a low share of fixed rate paper compared to more than half of floating rate note (FRN) issues. Insurance companies and pension funds account for just around a third of fixed rate covered bonds but have a significantly lower participation level in FRNs. This is to a large extent due to the fact that the majority of privately placed fixed-rate bonds in the record years 2011 and 2012 were issued at the long end of the maturity spectrum, while the floaters predominately had a 3-year maturity. The central bank share in recent years (mostly short-dated floaters) has been around the 10% mark.

> Figure 7: Investor participation by type (FRN only)



Source: Publicly available deal allocation statistics, HSBC (data as of 20 June 2016)

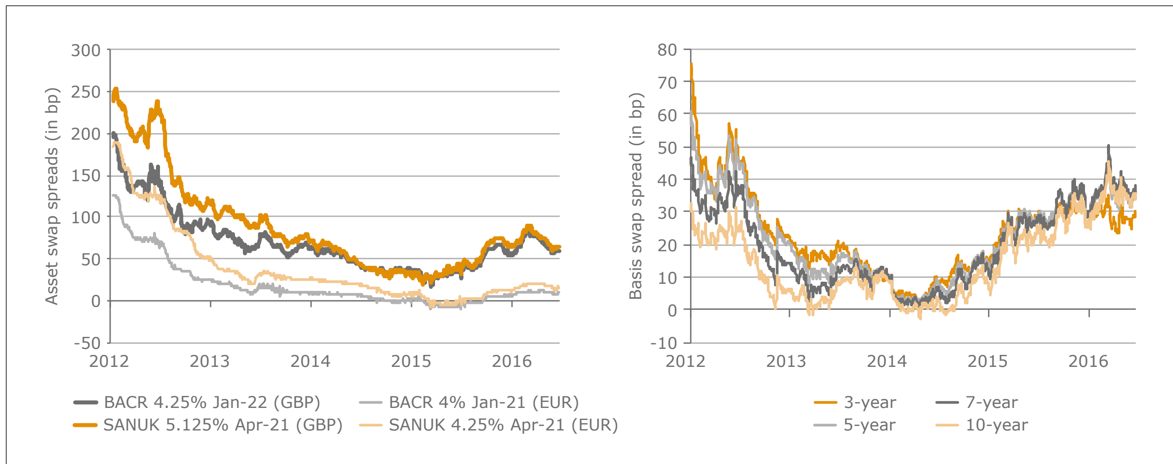
SECONDARY MARKET CROSS CURRENCY OPPORTUNITIES

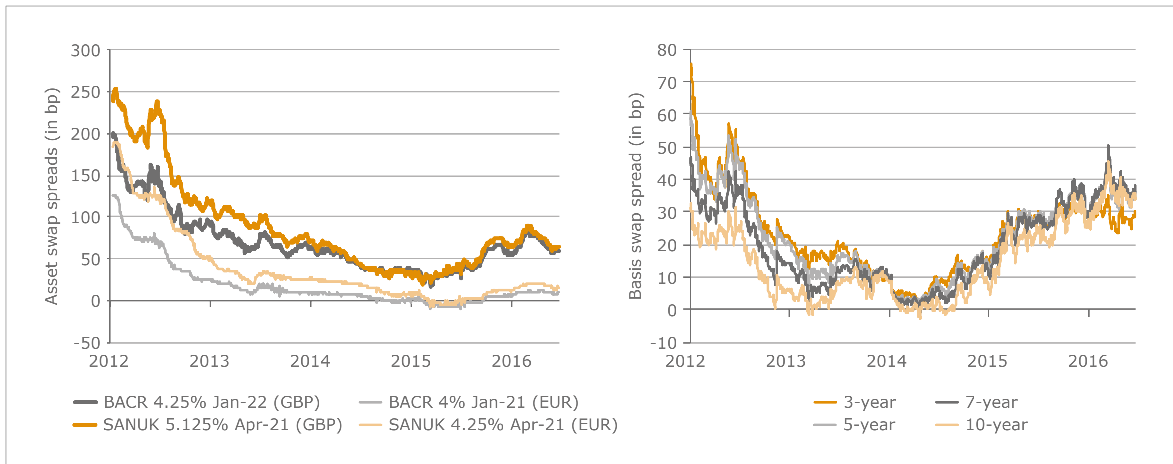
The direct overlap between the EUR and the GBP markets is relatively small in the publicly-placed benchmark segment. The Sterling-denominated market is largely split between the short-end, with mostly floating-rate issues, and the long-end of the curve with fixed rate coupons; while the biggest part of the corresponding EUR-benchmarks have maturities of less than ten years. Nevertheless, there have been arbitrage opportunities between direct comparables in both segments. The figures below show the asset swap spread developments of bond pairs of similar maturities and coupons issued in both markets.

Relative value between GBP and EUR-denominated covered bonds is driven by the developments in the cross-currency basis as well as 3-month vs 6-month swaps. In the recent past, for example, EUR-investors have been able to earn additional spread by buying GBP-denominated covered bonds and hedging the currency risk, compared to making an outright investment in a corresponding EUR Covered Bond. Different investor bases as well as restrictions in investor guidelines that prevent the exploitation are amongst the reasons why such arbitrage opportunities exist.

> Figure 8: GBP vs EUR covered bond ASW spreads

> Figure 9: EUR-GBP basis swap development

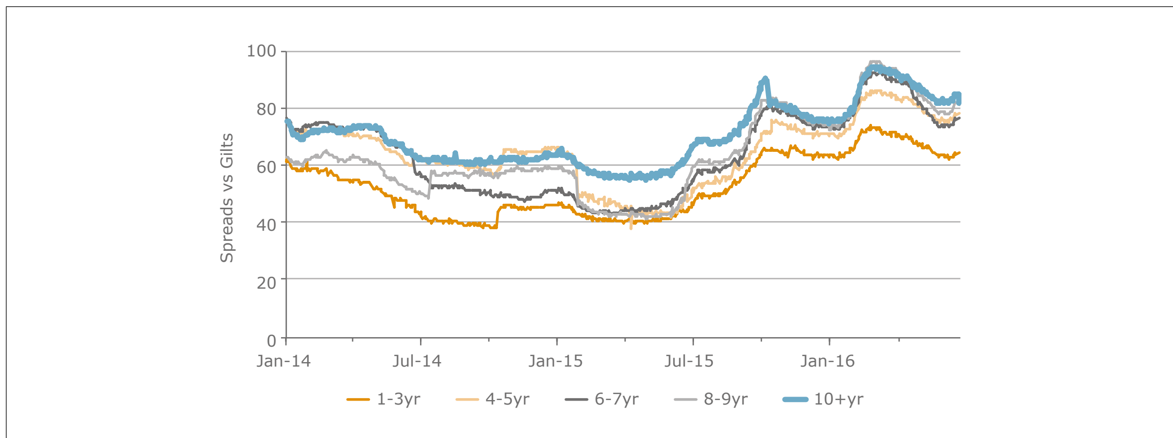




Source: Bloomberg, HSBC (data until 17 June 2016)

From a relative value perspective, GBP-denominated covered bonds provide a decent pick-up to the Gilts with similar maturities. Figure 10 shows that the gap between covered bonds and the government curve ranges from 40bp up to 100bp.

> Figure 10: Spread of GBP-denominated covered bonds vs Gilts



Source: HSBC (data until 17 June 2016)

THE FUTURE PROSPECT OF THE MARKET

Issuance volumes of Sterling covered bonds have started to pick-up from the lows hit in 2013, partly driven by the slowly rising funding needs of the UK banks, which have proved to be the backbone for Sterling-covered bond supply over the last few years. The Bank of England's Funding for Lending Scheme and the lower loan demand, combined with a general deleveraging trend in the industry, has resulted in much lower funding needs for UK banks. The supply from non-domestic covered bond issuers highly depends on the basis swap environment which has proved to be very volatile over the years. Moreover, the targeted longer-term refinancing operations (TLTRO) programmes by the European Central Bank (ECB) significantly lowered the wholesale funding needs of

euro-area banks while the massive purchase volumes under the CBPP3 heavily compressed the spread levels in the EUR market. Both aspects negatively affected Sterling covered bond supply from euro-area entities.

Under the old Liquid Assets Buffer rules of the Prudential Regulation Authority (PRA) in BIPRU 12.7, covered bonds were not eligible. In 2013 the PRA extended the list by an interim definition of level 2 assets limited to 40% of the liquidity requirement and subject to a 15% haircut. CRR-compliant covered bonds issued by credit institutions domiciled in the EEA, Australia, Canada, Japan, Switzerland and the US, subject to a minimum rating of AA- and a minimum volume of GBP /USD/EUR 250m, were included in Level 2.

This all became obsolete with the European Commission's delegated act on the Liquidity Coverage Ratio (LCR) which requires the EU member states to implement the new LCR rules. In June 2015, the PRA therefore announced that it will revoke the liquidity standards contained in BIPRU 12 and phase-in the European Commission's rules on liquidity requirements. In line with the EU rules, covered bonds are now eligible for Level 1 assets with a 7% haircut as specified in the EC's Delegated Act. The PRA has clarified that it has no intention to impose additional haircuts on top of the 7% on Level 1 covered bonds. In terms of currencies, the PRA emphasised that the assets including qualifying covered bonds do not have to be only GBP-denominated. In fact, the currency denomination of the liquid assets has to be consistent with the currency distribution of the net liquidity outflows. The final LCR rules came into force on 1 October 2015, making GBP-denominated covered bonds more attractive for UK banks to cover their liquidity needs and providing a positive catalyst for the primary market as well.

CHAPTER 3 - THE ISSUER'S PERSPECTIVE

3.1 AUSTRALIA

By Chris Dalton, Australian Securitisation Forum

I. FRAMEWORK

The legal framework is principally a contractual one in nature, with a statutory overlay that makes certain provisions for the prudential regulator to make regulations in relation to issuers' covered bond programmes, as well as provisions for minimum overcollateralisation levels (103% at all times).

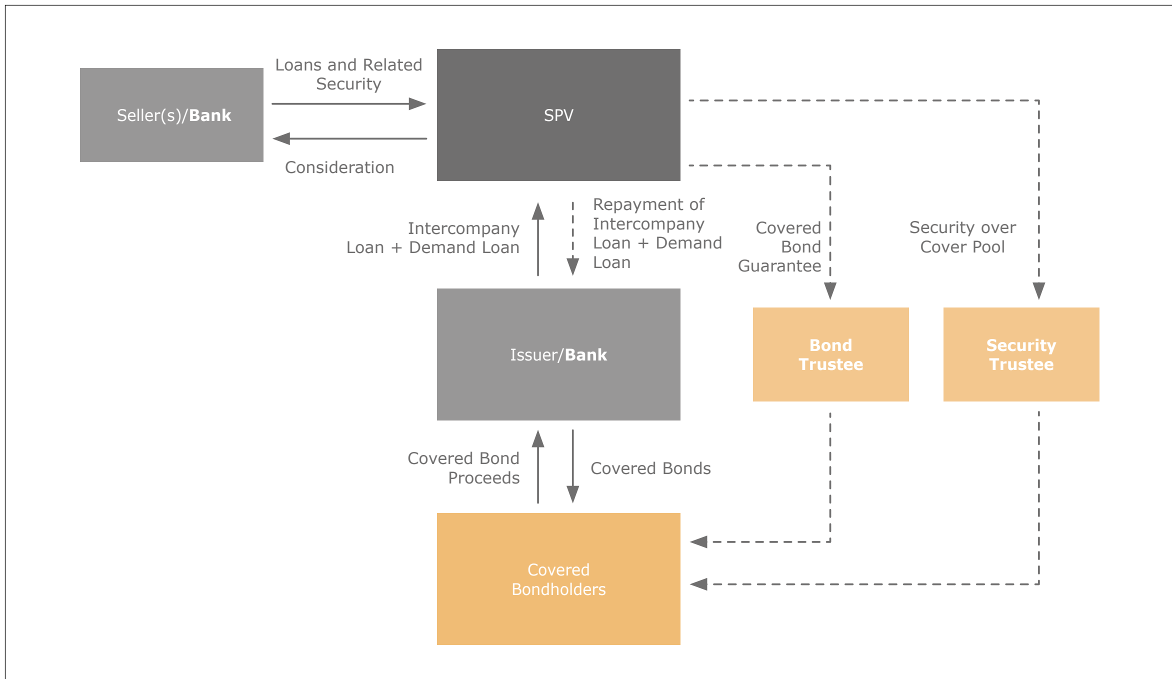
Prior to the introduction of amending legislation, the prevailing view among the regulatory community was that the Banking Act 1959 prohibited banks from placing any other class of creditors above depositors. The amendment to the Banking Act in November 2011 permitted this to occur, subject to an encumbrance limit of 8% (or such other percentage as may be prescribed by regulations) of an issuer's *assets in Australia*, as defined.

II. STRUCTURE OF THE ISSUER

Australian banks are the issuers of covered bonds; not SPVs or any other entity. However, the issuer makes an inter-company loan to the cover pool SPV to enable the SPV to acquire the cover pool and therefore provide a guarantee over the issuer's obligation to bond holders. This guarantee will be called upon in an event of default in respect of the issuer. The cover pool permits the SPV to continue to make scheduled payments on the bonds following an issuer event of default and the bond holders' benefit from security granted by the SPV over the cover pool to secure the SPV's obligations, including in respect of the guarantee. At present, the cover pool assets may not exceed 8% of an issuer's *assets in Australia*. With the exception of the fixed 8% maximum, the Australian covered bond resembles the British and New Zealand models. The charge over the assets of the cover pool does not, however, remove any claim creditors may wish to also make on the estate of the bank issuer.

Under the Banking Act, the cover pool cannot exceed 8% of the issuer's *assets in Australia*. An Authorised Deposit-taking Institution (**ADI**) must not issue a covered bond if the combined value of assets in cover pools securing covered bonds issued by the ADI would exceed this 8% but there may be voluntary overcollateralisation (e.g. in the form of a demand loan) that takes the total value of assets held by the SPV over 8%. The voluntary overcollateralisation may rank equally with covered bonds (thus forming part of the cover pool and subject to the 8% cap) or senior to the covered bonds (thus outside the 8% cap). In keeping with other jurisdictions the voluntary overcollateralisation serves as a management buffer in order to avoid inadvertent contractual breaches in respect of the Asset Coverage Test and to make ongoing covered bond issuance more efficient. Where the voluntary overcollateralisation ranks senior to the covered bonds (i.e. it is not part of the cover pool) such voluntary overcollateralisation remains part of the bank's estate and may be returned to the bank at any time. Further, whilst the bank can exceed the 8% maximum, it will attract a deduction from its regulatory capital base equal to the value that exceeds 8%.

Any amount recovered against the insolvency estate (and for which bondholders rank equally with all other senior unsecured creditors but behind depositors) will be paid over to the SPV to be held as additional collateral which is used to make payments under the guarantee. Any excess of assets in the SPV over and above the amount of the bonds issued – once repaid – will, after the satisfaction of other secured liabilities of the SPV, be paid to the insolvency estate of the issuer by way of repayment of the amount outstanding under any remaining intercompany loan amounts. However where voluntary overcollateralisation ranks senior to covered bond payments, the voluntary overcollateralisation will be returned to the issuer ahead of payments on the covered bonds.



III. COVER ASSETS

The Banking Act 1959 – Section 31[1] 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. providing no greater than 15% of the total cover pool, 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.

1 http://www.austlii.edu.au/au/legis/cth/consol_act/ba195972/s31.html.

At the time of publication, all Australian covered bond issuers have limited themselves contractually to excluding any commercial mortgage collateral in their cover pools.

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 – are contained in Section 31A[2] of the Banking Act. Specifically, they are as follows:

> Residential mortgages – if the mortgage exceeds 80% of the value of the property then the value of the loan is reduced by the amount of the excess.

> Commercial mortgages – if the mortgage exceeds 60% of the value of the property 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 five 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:

> Legend

> Dates

> Parties

> Asset Coverage Tests Bond Issuance

> Prepayments

> Pool Summary

> Mortgage Pool

> Contact

> Disclaimer

> Terminology

> Ratings Compliance Tests

Please refer to the Australian Securitisation Forum's covered bonds landing page[3] to access the template in full as well as web links to individual issuer's programmes.

2 http://www.austlii.edu.au/au/legis/cth/consol_act/ba195972/s31a.html.

3 http://www.securitisation.com.au/cbprofile.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Prudential Standard APS 121 – Covered Bonds[4] contains the regulations set by the administrator (regulator) of the Banking Act in Australia.

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 the bank regulator on request. Specific tasks it must perform, and report on, biannually are:

> No breach of the 103% statutory minimum overcollateralisation

> Assess compliance by the issuer with assets permitted to be in the cover pool under the Banking Act

> Confirm that the covered bond pool asset register is being maintained in line with regulation (APS121)

> Contractually, also obliged to check the arithmetic accuracy of asset coverage tests on an annual basis

The bank regulator has the power to instruct – publically or privately – a bank to cease topping up its cover pool should it wish to invoke its broad powers under the Banking Act, in the event that it has broader concerns about the bank's prudential condition.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Cover pool assets are sold by the bank issuer to the SPV, backed by contract. The security interest held over the cover pool assets is recognised at law and will not be jeopardised in the event of the bankruptcy/insolvency of the issuer.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Not 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 be deemed to be Level III LCR assets on a case by case (under the Australian Prudential Regulation Authority's implementation of Basel III LCR guidelines) subject to satisfying an application for repurchase eligibility with the Reserve Bank of Australia (and which must be made separately for each covered bond issue).

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 prioritise claims subject to the regulators interpretation of the changes to the Act. The first covered bond issues from Australian banks occurred in late 2011. Issuance volumes subsequently increased dramatically through 2012 as issuers properly established their programs in global bond markets. Covered

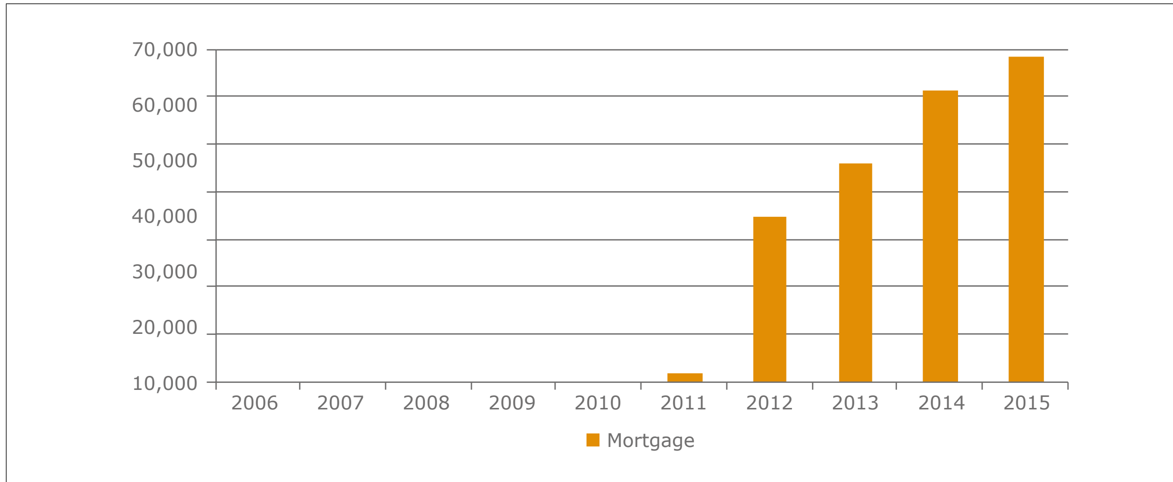
4 http://www.apra.gov.au/adi/PrudentialFramework/Documents/120719-APS121-Covered-bonds-final2.pdf.

bond issuance in 2013 was much lower than that for 2012, as issuers moved from ramping up their programs towards an ongoing program maintenance mode.

In principle, Australian ADIs have three primary term funding options for their balance sheets: senior unsecured bonds, residential mortgage backed securities and covered bonds. In practice, the larger institutions have effective access to all three options while smaller institutions principally used senior unsecured bonds and residential mortgage backed securities for term funding. Interestingly, it appears that Master Trusts have been practically excluded from the potential funding mix due to regulatory constraints on the capacity of issuers to pre-define call dates on all liabilities excepting covered bonds.

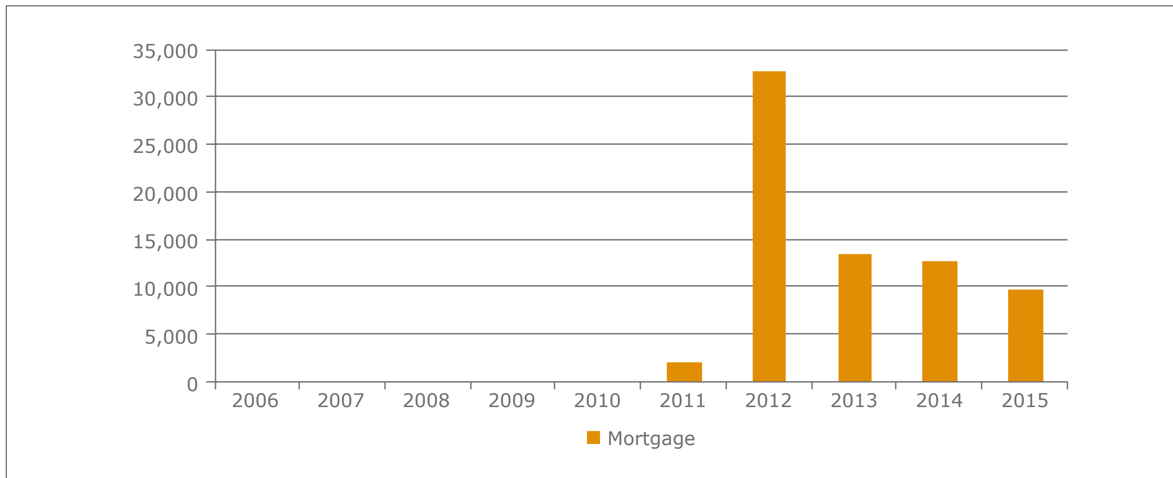
In the future, it is expected that Australian covered bond issuers will use their issuance capacity sparingly; balancing maintaining a global market presence against the higher all-in funding costs associated with covered bonds and program management costs (in comparison to funding through senior unsecured 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.

> Figure 1: Covered Bonds Outstanding 2006-2015, EUR m



Source: EMF-ECBC

> Figure 2: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: At present there are five 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 and Suncorp Bank. A number of other Australian ADIs are considering establishing Covered bond programs and funding through these programmes. Investor acceptance of easier redemption provisions is supporting this move. However, it is unlikely that the smaller Australian ADIs will be seeking to issue Australian covered bonds. The reason for this is due to the legislative asset encumbrance limit restriction of 8%. This is perceived by many issuers as compromising their ability to support a sufficiently broad market in a prospective programme.

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/98/Australian_Covered_Bonds.

3.2 AUSTRIA

By Alexa Molnar-Mezei, Erste Group Bank and Friedrich Jergitsch, Freshfields Bruckhaus Deringer

I. FRAMEWORK

Austria has three different frameworks under which covered bonds can be issued. These are:

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"

Each of these was last amended in 2010.

Under these laws banks can issue two kinds of covered bonds, Pfandbriefe which are issued under the Mortgage Banking and Mortgage Bond Act, and Fundierte Bankschuldverschreibungen (FBS) issued under the Law on Secured Bank Bonds.

Amendments of all three laws have been suggested by Austria's banks to the legislator with the aim of further harmonizing/unifying Austrian Pfandbrief legislation in a single Act, and including, for example, an improved risk management system and standardised reporting requirements to achieve more transparency that offer investors a high level of security in terms of frequency and scope of the reports and ensure that investors receive clearly defined data relating to the cover assets.

II. STRUCTURE OF THE ISSUER

All three laws provide that only duly authorized credit institutions, with a special license to such effect, may issue covered bonds.

The Mortgage Banking Act stipulates a specialist banking provision and this would apply to any new mortgage bank. However, the only 2 issuers under the Mortgage Banking Act currently are universal banks into which former specialised issuers were merged.

The Mortgage Bond Act applies to public-sector "Landes-Hypothekenbanken", which used to be owned by the Austrian provinces and some of which have been privatised.

The Law on Secured Bank Bonds applies to all banks that have a license allowing them to issue covered bonds.

Under all frameworks, the issuer holds the cover assets on its balance sheet (unless it uses another bank's assets as cover, which is permitted under pooling rules contained in all three laws) and the assets are not transferred to a separate legal entity. This means that the covered bonds are an unconditional obligation of the issuer, rather than a direct claim (solely) on the cover assets. In the case of insolvency of the issuer, the cover assets will form a pool which is separate from the issuer's other assets and a special cover pool administrator will be appointed to manage the cover assets. The covered bond holders have a preferential claim on the cover assets.

III. COVER ASSETS

Eligible cover pool assets are loans secured by (predominantly) first-ranking mortgages and public-sector assets. ABS/MBS are not eligible. Pfandbriefe backed by mortgage loans are commonly referred to as "Hypothekenpfandbriefe", while Pfandbriefe backed by public sector assets are referred to as "öffentliche Pfandbriefe".

The Law on Secured Bank Bonds allows mixed cover pools consisting of mortgage loans and public-sector assets but in practice, issuers under that law form separate pools with mortgages and public-sector assets, too, each backing a separate class of covered bonds.

The geographical scope of eligible mortgage assets is restricted to EU / EEA countries and Switzerland.

USA, Canada and Japan are not eligible. For eligible countries that do not recognise the bondholders' insolvency privilege, a 10% limit is in place. For "öffentliche Pfandbriefe", the geographic scope of assets is the same as for "Hypothekenpfandbriefe".

The limits for FBS are similar. In addition to mortgage loans and public-sector assets, FBS may also be backed by assets which, by law, are suitable for investment of a ward's assets ("Mündelgelder"). This includes certain local public bonds, or Austrian Pfandbriefe.

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.

So-called substitute cover assets are limited to 15% of the amount of covered bonds outstanding and may consist of cash, bank deposits and bonds from public issuers from EEA countries and Switzerland.

IV. VALUATION AND LTV CRITERIA

The Mortgage Bank Act stipulates conditions for property valuation and the value of mortgage lending. One condition is a 60% LTV (loan to value) limit for residential and commercial mortgages based on the so-called "mortgage lending value" (which is a conservatively assessed value).

For Mortgage Bond Act issuers, the 60% LTV limit is stipulated in the statutes of each issuer for historical reasons.

There is no explicit provision for property valuation for FBS but – to our knowledge – issuers mostly adhere to the 60% LTV limit stipulated in the Mortgage Bank Act.

In practice, monitoring of the property value is done by the issuer and regular audits of the cover register are undertaken. Valuation guidelines mostly follow the guidelines prepared by each issuer for solvency purposes, which are approved by the regulator.

V. ASSET – LIABILITY MANAGEMENT

All Austrian covered bond laws contain the matching principle whereby the total volume of assets in the cover pool must at least cover the total nominal amount of outstanding covered bonds, the interest payable on the outstanding covered bonds and potential running costs in case of insolvency of the issuer (expressed under the Mortgage Bank Act and Mortgage Bond Act as mandatory overcollateralization of 2% which must be held in highly liquid substitute cover assets).

In addition, issuers may opt in their statutes to maintain cover on a net present value basis, which is used by many of the international benchmark issuers. Issuers may also provide additional over-collateral at their discretion, for instance in order to meet rating requirements and withstand stress tests.

The legislation also contains a simple maturity matching formula, limiting the issuance of bonds the maturity of which is considerably greater than the maturity of assets in the cover pool.

VI. TRANSPARENCY

The Austrian issuers organised in the Austrian Covered Bond Forum have set up a working group developing and analysing the CBIC Template Guidelines. As a result, Austrian issuers have developed a National Transparency Template –available on the Covered Bond Forum and of the Covered Bond Label websites – with quarterly updates – based on the CBIC European Transparency Standards. The cover pool reports can be found at:

One central website of Austrian Covered Bond Forum: http://www.pfandbriefforum.at/downloads.html

The National Transparency Template includes the following information:

- Programme, Issuer Senior and Covered Bond ratings;
- Overcollateralization values (based on nominal and net present values);

> The total volume of Pfandbrief outstanding as well as the related cover pools in terms of nominal, net present and stressed net present value;
> The share of further cover assets;
> The maturity structure of the Pfandbrief and cover assets;
> Information on the size of the cover assets;
> Information on the mortgages by property type/type of use, region and state;
> Information on the claims against the public sector by state and type of issuer;
> Information on the mortgages registered liens by register country;
> Summary tables including LTV, currency, interest and maturity profile;
> Information on non-performing loans (the percentage of loans more than ninety days past due);
> Information on interest rates and currencies of cover assets and outstanding covered bonds.

The National Transparency Template covers the Guidelines according to the ECBC's Covered Bond Label Initiative that have been introduced in the Transparency Template over the last year by the Austrian Covered Bond Forum. Moreover the items above disclose the information required in Article 129(7) of the Capital Requirements Regulation (CRR).

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The cover pool is monitored by a trustee ("Treuhänder" or, in the case of the Law on Secured Bank Bonds, "Regierungskomissär"), who is appointed by the Minister of Finance. 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 from the cover pool. Any disputes between the issuer and the trustee would be settled by the regulator.

If a concern exists that the rights of the covered bond holders are being infringed, the court must appoint a joint special representative of the covered bond creditors ("Kurator").

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 to the cover, must be registered in the cover register.

The issuers must inform the debtors (or, as the case may be, counterparties) of the cover assets that their debt (or derivative contract) is made part of the cover pool. On that occasion the issuer must also notify the debtor that it is not allowed to discharge its 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 "Sondervermögen") 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 upon 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 ''Sondervermögen'' (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, 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 over-collateralisation, 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.

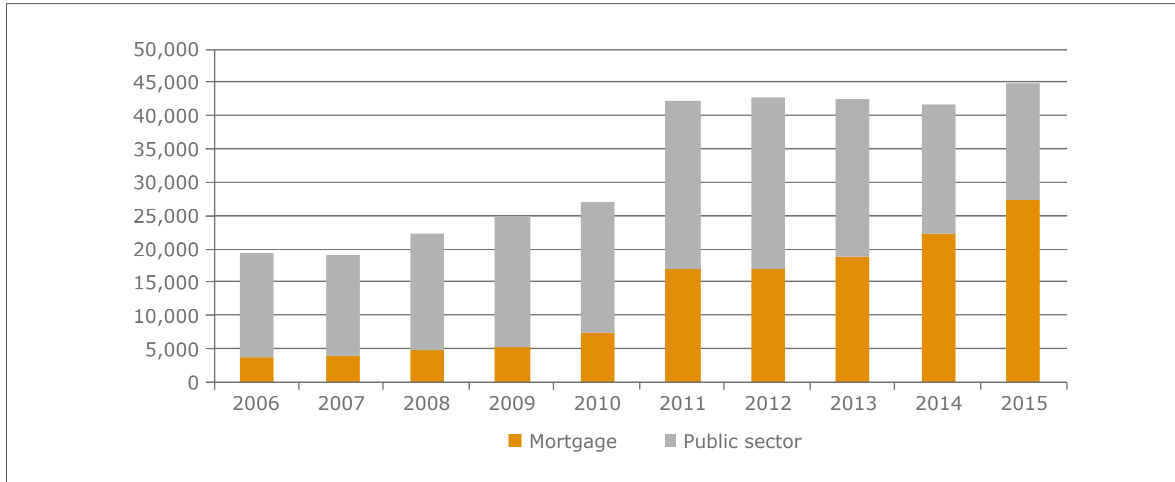
IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

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 Pfandbriefe, as well as Austrian covered bonds (FBS), fulfil the criteria of Article 52(4) of the UCITS Directive as well as those of Article 129 of the CRR[1]. 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.

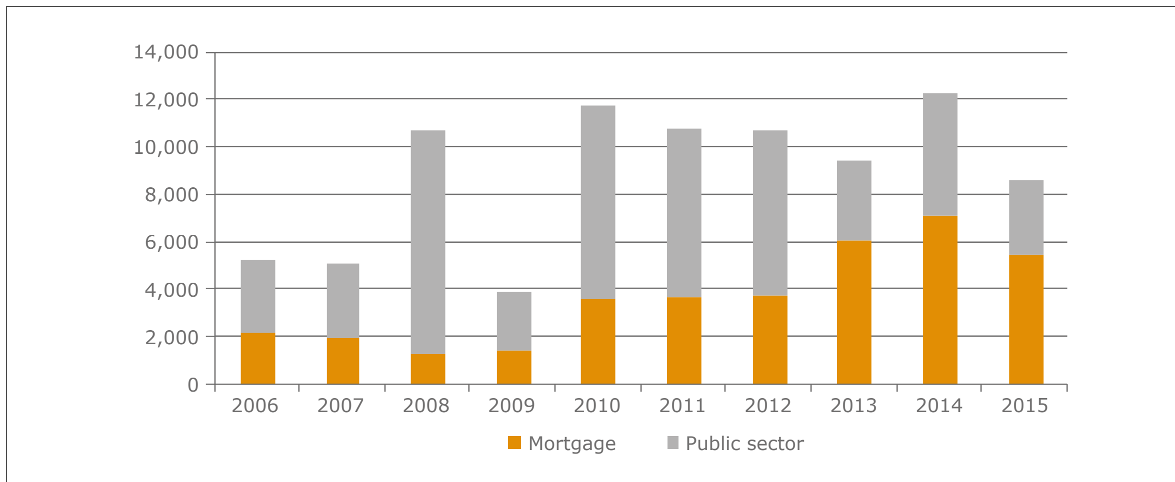
1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> FIGURE 1: COVERED BONDS OUTSTANDING, 2006-2015, EUR M



Source: EMF-ECBC

> FIGURE 2: COVERED BONDS ISSUANCE, 2006-2015, EUR M



Source: EMF-ECBC

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, Hypo Steiermark, BKS Bank AG, Oberbank AG, BTV-Bank für Tirol und Vorarlberg AG, Sparkasse Schwaz and Heta Asset Resolution.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/8/Pfandbriefe, and http://www.ecbc.eu/framework/95/FBS_-_Fundierte_Bankschuldverschreibungen.

COVERED BOND LABEL : UniCredit Bank Austria AG Credit Public Sector; UniCredit Bank Austria AG Credit Mortgage.

3.3 BELGIUM

By Carol Wandels and Dries Janssens, Belfius Bank

I. FRAMEWORK

On 3 August 2012, the Belgian Parliament adopted the legislation on covered bonds. This law provides a statutory framework for the issuance of covered bonds by Belgian credit institutions.

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") that replaced the Act of 22 March 1993 on the status and the supervision of credit institutions. Since 11 October 2012 the legislation with respect to Belgian covered bonds has been supplemented by two Royal Decrees (a general Royal Decree on the issuance of covered bonds and a specific Royal Decree dedicated to the cover pool administrator) and several regulations (inter alia concerning the issuer reporting requirements).

The following gives an overview of the legislative framework for Belgian covered bonds:

> The Law of 3 August 2012 establishing a legal regime for Belgian covered bonds, which is implemented in 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)* (the "**Banking Law**");

> The Law of 3 August 2012 on various measures to facilitate the mobilisation 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 (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 (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 3 August 2012 that establishes a legal regime for Belgian covered bonds dated 29 October 2012 (the "**NBB Covered Bonds Regulation**"); and

> The Regulation of the National Bank of Belgium addressed to the statutory auditors and the cover pool monitors of Belgian credit institutions with respect to their involvement in the context of the issuance of Belgian covered bonds in accordance with Chapter VIII of the Law of 22 March 1993 dated 29 October 2012 (the "**NBB Cover Pool Monitor Regulation**").

II. STRUCTURE OF THE ISSUER

Belgian covered bonds can be issued by universal credit institutions[1] established in Belgium. However such institutions first need to be licensed by the NBB as covered bond issuer (general authorisation 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 aspects 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 organizational capacity of the credit institution to issue and follow up the covered bonds.

1 Existing credit institutions could decide to issue themselves or to issue from a newly created credit institution. The latter would typically but not necessarily be a subsidiary or an affiliate of the mother company.

The license might be conditional upon respecting issuance limits that the NBB on a case-by-case basis might decide on. If licensed, the issuer and the program(s) are added to specific lists that are available for consultation on NBB's website.

An indirect issuance limit on covered bonds has been integrated in the Covered Bond Royal Decree by limiting the amount of cover assets to 8% of the Belgian GAAP balance sheet.

At program level a distinction is made between Article 129 CRR[2]-compliant covered bonds, i.e. "Belgian pandbrieven/lettres de gage", and non-Article 129 CRR-compliant (but still UCITS 52(4) compliant) covered bonds, i.e. "Belgian covered bonds". The denomination of both terms is protected by law. These distinct types of covered bonds will appear on two separate lists. Consultation of the NBB's website will hence give an overview of:

> Belgian credit institutions issuing covered bonds

> Belgian pandbrieven programs and its specific issuances

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 covered bonds. Therefore in what follows we will only concentrate on the Belgian pandbrieven.

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 "segregated estate(s)" ("patrimoine special") on the other hand (=balance sheet structure, no use of a special purpose vehicle).

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 segregated estate, that comprises the cover pool that is exclusively reserved for the Belgian pandbrieven investors under the specific program to which the segregated estate is joined and for the claims of other parties that are or can be identified in the issue conditions. 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 segregated estate and are excluded from general bankruptcy clawback risk.

When insolvency proceedings are opened with regard to the issuing credit institution, by operation of law, the assets recorded in the segregated estate do not form part of the insolvent general estate and hence are not affected by the opening of the insolvency proceedings. Upon insolvency of the credit institution, Belgian pandbrieven investors fall back on the cover pool assets (= the segregated 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 segregated 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, and/or senior RMBS

> category 2: commercial mortgage loans, and/or senior CMBS

> category 3: exposure to the public sector, and/or senior public sector ABS

> category 4: exposure on financial institutions

> category 5: derivatives

2 Regulation 575/2013 of 26 June 2013 on prudential requirements for credit institutions and investment firms (the "Capital Requirements Regulation" or "CRR").

These five general categories are subject to further eligibility criteria:

> geographical scope: OECD, except for category 1 and 2 that are further restricted to EEA; for category 3 non-EU public sector exposure will get a zero valuation, unless specified otherwise.

> with respect to the MBS/ABS as mentioned in each of the first three categories: senior ABS/MBS are eligible provided that 90% of the underlying pool is directly eligible and is originated by a group related entity of the issuer of the Belgian pandbrieven. The senior ABS/MBS must qualify for credit quality step 1 (as set out in Article 251 CRR). The securitization vehicle of the ABS/MBS must be located in the EU. At last these securitization tranches only remain eligible as cover asset within the limits imposed by Article 129 CRR;

> 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 or 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 or insured by central governments, central banks, public sector entities, regional governments and local authorities or (ii) exposure to or guaranteed or insured by multilateral development banks or international organizations that qualify as a minimum for a 0% risk weighting as set out in article 117 CRR;

> for category 5: derivatives, of which the counterparty has a low default risk (meaning a counterparty that qualifies for credit quality step 1 or step 2 as set out in Article 120 CRR), are only eligible if related to cover the interest rate/currency risk of the cover assets or Belgian pandbrieven. Moreover, a group related entity of the Belgian pandbrieven issuer is not eligible as derivative counterparty unless (i) it is a credit institution that benefits from a credit quality step 1 (as defined in Article 120 CRR) and forms part of the EEA, and (ii) it has a (unilateral) credit support annex (CSA) in place. Note that assets posted under the CSA would belong to the separate legal estate, but are not considered as cover assets as described in this section III. Finally, the derivative contract needs to stipulate that suspension of payments or bankruptcy of the issuer does not constitute an event of default;

> for all of the categories: assets that are delinquent may not be added to the cover pool.

The cover pool can be composed of assets out of each of the five categories. But for each program that is set up (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[3]]
- 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), except when the counterparties are not part of the EU in which case the value will be zero. There is however an exception to this zero valuation rule for non-EU counterparty exposure:
  - a) in case the non-EU counterparties qualify for credit quality step 1, or
  - b) in case the non-EU counterparties qualify for credit quality step 2 and do not exceed 20% of the nominal amount of Belgian pandbrieven issued in both cases the value is equal to the book value.
- category 4: no value can be given to this category unless:
  - a) the counterparty qualifies for credit quality step 1, or
  - b) in case the counterparty qualifies for a credit quality step 2, the maturity does not exceed 100 days as of the moment of registration in the cover pool in both cases the value is equal to the book value.
- category 5: no value is given to this category.
- 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 (> 90 days), no value can be given anymore.

When it comes to property valuation (applicable to cat 1 and cat 2), in general in Belgium every property is valued during the underwriting process based on either the notarial deed (that includes the property sale price) and/or in case of construction, the financial plan of the architects. It is rather rare in Belgium that the valuation is based on the report of an accredited third party appraiser.

In line with the NBB Covered Bonds Regulation, the market value will have to be justified in a clear and transparent manner on the basis of a document established by a person who is independent from the persons who are in charge of granting the relevant loans. An expert report is required for real estate which has a value of more than 3 million euro or 2% of the amount of the relevant covered bonds. Otherwise, the value of the real estate can be determined on the basis of the sales value as established in the notarial deed at the time of sale or the valuation report of the architect in the case of real estate in construction. The credit institution must apply a prudent revaluation procedure to determine the current value.

The value of the real estate has to be tested regularly. A more frequent control shall occur in case of significant changes to the market conditions. For the regular re-appraisal of the value of the real estate, customary methods and benchmarks (such as third party indices) may be used.

Note that assets can be part of the cover pool without necessarily having a value attached to it, like is the case for the derivatives category, but as well for example for exposure on financial institutions with a maturity above 100 days and a rating below AA-.

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3 This 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.

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% overcollateralization) (the "**overcollateralization 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 liquidity need within the next 180 days (the "**liquidity test**"). This amount has to be covered by (sufficient) liquid cover assets. In order to meet the test, a liquidity facility could be used to cover liquidity needs, as long as it is not provided by a group related entity of the issuer. Liquid assets are assets that (i) meet the cover asset eligibility criteria and (ii) qualify as liquid assets under the Regulation of the Banking Finance and Insurance Commission (CBFA) of 27 July 2010 on the liquidity of credit institutions, financial holdings, clearing institutions and institutions assimilated with clearing institutions.

If an issuing credit institution fails to meet the requirements of the liquidity test, it has 14 days to take the necessary redress measures to meet the relevant requirements. 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 & averse interest/exchange rate movements. Although it is the issuer's sole discretion to determine how this will be managed (e.g. adding derivatives to the cover pool is a possibility (subject to eligibility criteria) but not an obligation), the policy needs to be documented in the license application.

At last 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 if the issuer is compliant with all the tests.

Other safeguard mechanism that are foreseen:

- Issuer will have the possibility to retain its own Belgian pandbrieven for liquidity purposes
- Commingling risk:
  - 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 separate estate and legally protected via the right of 'revindication'. This is a special mechanism that has been created to protect cash held by the issuer for the account of the segregated estate. Pursuant to this mechanism, the ownership rights of the special estate as regards cash that cannot be identified in the general estate, will be transferred to unencumbered assets in the general estate that 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.

VI. COVER POOL MONITOR AND BANKING SUPERVISION

In its capacity as a Belgian credit institution licensed to issue Belgian pandbrieven, the issuer is subject to special supervision by the NBB as well as the supervision 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 on-going basis, but also prior to the first issuance of Belgian pandbrieven by the credit institution. The on-going 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 overcollateralization 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.

VII. 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 type 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 separate 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.

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 (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.

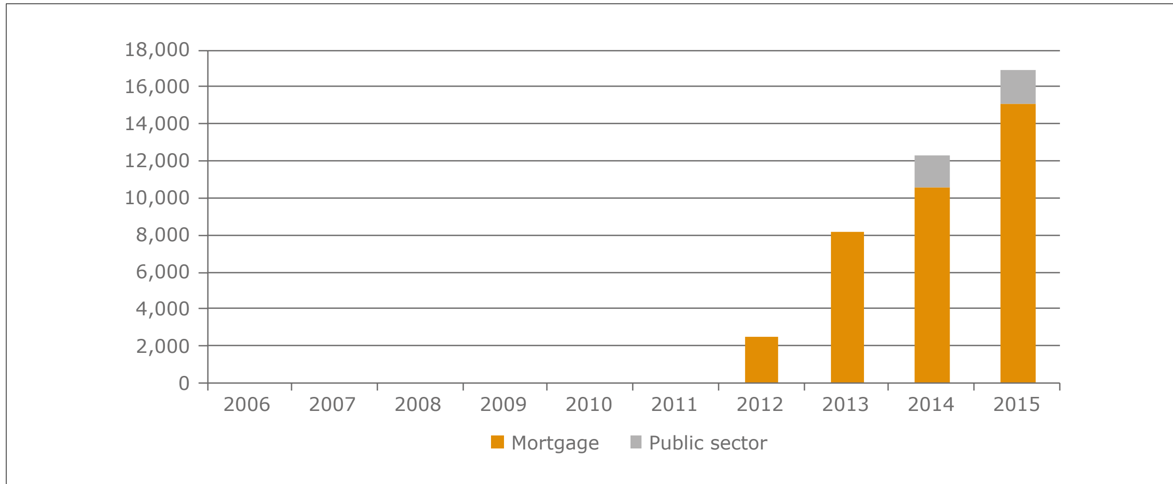
The Cover Pool Administrator Royal Decree specifies the tasks of the cover pool administrator. These include, amongst other things, to procure the payment of interest and principal on the Belgian covered bonds, collection of moneys from the cover assets (including any enforcement), entering into relevant 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.

VIII. 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.[4] Belgian pandbrieven comply with the requirements of Article 52(4) UCITS and Article 129 CRR if and to the extent they are listed by the NBB as such.

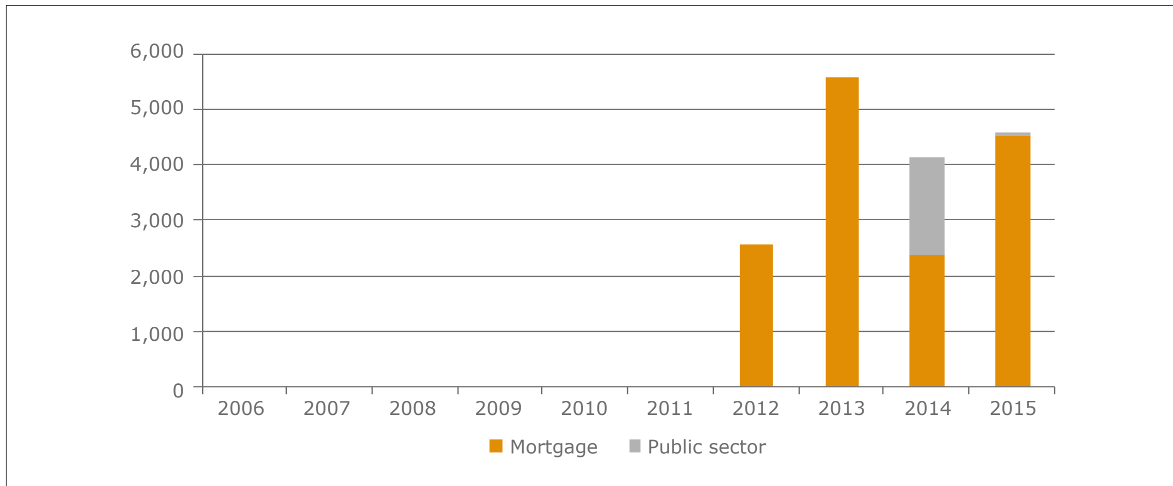
4 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> Figure 1: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 2: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: Belfius, KBC and ING Belgium.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/100/Belgium_Covered_Bonds.

3.4 BULGARIA

By Yolanda Hristova, UniCredit Bulbank AD and Franz Rudolf, UniCredit

I. FRAMEWORK

In Bulgaria, the legal basis for the issue of covered bonds is the Mortgage-backed Bonds Law issued by 38th National Assembly on 27 September 2000, published in the State Gazette *(Darzhaven vestnik)* issue 83 of 10 October 2000[1].

II. STRUCTURE OF THE ISSUER

Pursuant to the Mortgage-backed Bonds Law, the mortgage-backed bonds shall be securities issued by banks on the basis of their loan portfolio and secured by one or more first in rank mortgages on real estate in favour of banks (mortgage loans). Only banks may issue bonds called mortgage-backed bonds.

The real estate under the previous paragraph shall be insured against destruction and shall be of the following type:

> Housing units, including leased out;

> Villas, seasonal and holiday housing;

> Commercial and administrative office spaces, hotels, restaurants and other similar real estate; and

> Industrial and warehousing premises.

The issuing bank shall adopt internal rules on conducting and documenting mortgage appraisals of real estate which shall comply with the requirements of Article 73, paragraph 4 of the Bulgarian Law on Credit Institutions.

Securities issued under procedures other than the one laid down by the Mortgage-backed Bonds Law may not referred to with, or include in their appellation, the extension "mortgage-backed bond", or any combination of these words.

III. COVER ASSETS

The outstanding mortgage–backed bonds shall be covered by mortgage loans of the issuing bank (principal cover). To substitute loans from the principal cover that have been repaid in full or in part, the issuing bank may include the following of its assets in the cover of mortgage-backed bonds (substitution cover):

> Cash or funds on account with the Bulgarian National Bank (BNB) and/or commercial banks;

> Claims on the Government of the Republic of Bulgaria or the Bulgarian National Bank, and claims fully secured by them;

> Claims on governments or central banks of states as determined by the Bulgarian National Bank;

> Claims on international institutions as determined by the Bulgarian National Bank;

> Claims fully backed by government securities issued by the Government of the Republic of Bulgaria, the Bulgarian National Bank, the Governments, Central Banks or international institutions;

> Claims secured by gold; and

> Claims fully backed by bank deposits denominated in Bulgarian levs or in a foreign currency for which the BNB quotes daily a central exchange rate.

1 Amended; issue 59 of 2006; in force on the date of entry into force of the Treaty of Accession of the Republic of Bulgaria to the European Union; amended; issues 52 and 59 of 2007; amended; issue 24 of 2009; effective as of 31 March 2009.

The substitution cover of mortgage-backed securities shall not exceed 30% of the total amount of liabilities of the issuing bank under that issue. Mortgage-backed Bonds cover from any issue (the sum total of the principal cover and the substitution cover) may not be less than the total amount of liabilities towards the principals of mortgage-backed bonds from that issue which are outstanding and in circulation outside the issuing bank.

The claims of the bondholders under mortgage-backed bonds from each issue shall be secured by a first pledge on the assets of the issuing bank included in the cover of that issue. The pledge is a subject of entrance in the Central Registers of Special Pledges, with the respective issue of mortgage-backed bonds being indicated as a pledge creditor.

The issuing bank shall request an entry and submit to the Central Register of Special Pledges all data required for the entry of the pledge within one month after executing a mortgage-backed bonds issue and shall update that data at least once every six months thereafter. The pledge shall remain in force until the full redemption of the liabilities of the issuing bank under the respective issue of mortgage-backed bonds without the need for any renewal. Deletion of the pledge entry shall be made upon the full redemption of the issuing bank's liabilities under the respective issue of mortgage-backed bonds on the basis of a document issued by the bank's auditors.

IV. VALUATION AND LTV CRITERIA

Valuation

Mortgage appraisals of property shall be performed by officers of the issuing bank or by physical persons designated by it having the relevant qualifications and experience.

For appraisals of the property the comparative method, the revenue method and the cost-to-make method shall be used for the purposes of the law.

The mortgage appraisal shall explicitly specify the method or combination of the above methods used with the relative weight of each method in the appraisal, as well as the sources of data used in the analysis and calculations.

Subsequent mortgage appraisals of property used as collateral on the loans recorded in the register of mortgage-backed bonds cover shall be made at least once every twelve months for loans which:

- Have outstanding liabilities exceeding 1% of the issuing bank's own funds; or
- Have not been consistently classified as standard risk exposures throughout that period.

LTV criteria

LTV criteria are generally defined in the banks own lending policies depending on their risk appetite and other internal rules. No specific legal requirements are imposed by the local banking law.

V. ASSET – LIABILITY MANAGEMENT

Article 6 of the Law on Mortgage-backed Bonds stipulates that mortgage loans shall be included into the calculation of the principal cover at the value of their outstanding principal but at no more than 80% of the mortgage appraisal value of the real estate as housing units, including leased ones, and at no more than 60% of the mortgage appraisal value of the real estate as villas, seasonal and holiday housing units used as collateral on mortgage loans.

Substitution cover of mortgage-backed bonds from any issue may not exceed 30% of the total amount of liabilities of the issuing bank under that issue.

Mortgage-backed bonds cover from any issue (the sum total of the principal cover and the substitution cover) may not be less than the total amount of liabilities towards the principals of mortgage-backed bonds from that issue which are outstanding and in circulation outside the issuing bank.

In making calculations under the previous paragraph for mortgage-backed bonds and assets constituting their cover denominated in different currencies, the official foreign exchange rate for the Bulgarian lev to the respective currency quoted by the Bulgarian National Bank of the day of the calculation shall apply.

A loan recorded in the register of the cover of mortgage-backed bonds from a particular issue may be repaid at any time by bonds of the same issue at their face value.

VI. TRANSPARENCY

Banks (the only eligible issuers of mortgage bonds) produce regular reporting to Banking Supervision authority – Bulgarian National Bank (BNB), and provide and publish financial information on a monthly basis. The public banks are reporting issuers and submit all required information to the regulated market – Bulgarian Stock Exchange – Sofia (BSE), as well as to the Bulgarian Financial Supervision Commission (FSC). No additional specific measures in respect to the mortgage bonds are currently announced.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Cover pool is managed by the issuing bank which should have adopted internal rules for maintaining the cover pool, the rules for access to the cover pool data base and the regularity of the update of the cover.

Bulgarian National Bank carries out general assessment of the banks, including issued mortgage bonds as part of general banking supervision.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

After the record of the assets in the register as a cover of mortgage-backed bonds of a particular issue may be used as collateral solely for the liabilities of the issuing bank on that issue. The issuing bank may not allow any encumbrances on its assets constituting the cover of outstanding mortgage-backed bonds. The issuing bank accounts assets recorded in the register of mortgage-backed bonds cover separately from the rest of its assets.

The issuing bank shall keep a public register of the cover of mortgage-backed bonds issued by it as the register is kept separately by mortgage-backed bonds issue.

In case of declaring the issuing bank bankrupt, the assets recorded as of the date of declaring the bank bankrupt in the register of the mortgage-backed bonds cover shall not be included in the bankruptcy estate. Proceeds from the liquidation of assets recorded in the register as a cover on a particular issue of mortgage-backed bonds are distributed among the bondholders from that issue in proportion to the rights under their bond holdings. Any funds remaining after settling the claims under mortgage-backed bonds from a particular issue is included in the bankruptcy estate.

The asset pool under the above mentioned paragraphs are managed by a holders' trustee of mortgage-backed bonds which is appointed by the bankruptcy court when it has been established that the bank has outstanding liabilities under mortgage-backed bonds. The trustee is managing the assets by individual mortgage-backed bonds issue.

The Trustee shall have the powers of an assignee in bankruptcy in respect of the asset pool described above, as well as in respect of any outstanding liabilities of the issuing bank under mortgage-backed bonds.

The Trustee shall manage the above mentioned assets separately for any mortgage-backed bond issue. The Trustee shall sell the above described assets under the procedure set forth in Articles 486-501 of the Civil Procedure Code and shall account any proceeds to an escrow account opened for each issue with commercial banks as determined by the Bulgarian National Bank. The Trustee shall publish in the State Gazette *(Darzhaven vestnik)* and in at least two national daily newspapers the place and time for the tender for the sale of assets under the procedures of previous sentence not later than one month prior to the date of the tender.

The bondholders of any issue of mortgage-backed bonds of a bank which has been declared bankrupt shall have the right to obligate the Trustee to sell loans included in the issue cover to a buyer specified by them and the Trustee shall follow precisely the decision of the Bondholders' General Meeting under the previous sentence.

The liabilities of the issuing bank under a mortgage-backed bonds issue shall be deemed repaid when the amount of outstanding principals of the sold loans becomes equal to the total amount of liabilities on principals and interest accrued on the bonds prior to the sales.

Under Article 66, paragraph 2 of the Law on the Recovery and Resolution of Credit Institutions and Investment Firms[2] is stipulated that the resolution authority, the Bulgarian National Bank (BNB), shall not exercise its powers for a write-down or conversion in relation to the secured liabilities, including mortgage-backed bonds within the meaning of the Law on Mortgage-Backed Bonds, covered bonds and liabilities in the form of financial instruments used for hedging purposes, which form an integral part of the coverage pool, and which according to the applicable law are secured in a way similar to covered bonds, whether the liabilities are governed by the legislation of the Republic of Bulgaria, by the law of another Member State or a third country.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Risk weighting

Criteria for exposures secured by mortgages on immovable property are treated in Article 27 of Ordinance No. 7 of 24 April 2014 on organisation and risk management of banks[3], adopted by the Bulgarian National Bank ("Ordinance 7"). This Ordinance shall put into force the provisions of 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 Ordinance contains provisions related to the exercise of national discretions by the Republic of Bulgaria under 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 ("Regulation (EU) No 575/2013")[4]. Article 27(1) of Ordinance 7 states as regards the application of Article 124, paragraph 2 of Regulation (EU) No 575/2013:

1. 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 purposes of updating the ratios under paragraph 1 above, 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 paragraph 1 above.

According to Article 29. (1) of Ordinance 7 which refers to Article 400, paragraph 2 of Regulation (EU) No 575/2013 in calculation of large exposures under Article 395 of Regulation (EU) No 575/2013, banks shall exempt the exposures in covered bonds falling within the scope of Article 129, paragraphs 1, 3 and 5 of Regulation (EU) No 575/2013.

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2 Adopted by the 43rd National Assembly on 30 July 2015; published in the Darjaven Vestnik, issue 62 of 14 August 2015. The Law on the Recovery and Resolution of Credit Institutions and Investment Firms transposes Directive 2014/59/EC 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.

3 Published in the Darjaven Vestnik (State Gazette), Issue 40 of 13 May 2014; http://www.bnb.bg/bnbweb/groups/public/documents/bnb_law/regulations_risk_management_en.pdf.

4 Amending Regulation (EU) No 648/2012 (OJ, L 176/1 of 27 June 2013), including the transitional provisions under Part Ten, Title I of Regulation (EU) No 575/2013 and supplemented by Commission Delegated Regulation (EU) No 523/2014 of 12 March 2014.

Compliance with European Legislation

Mortgage-backed Bonds Law is compliant with the requirements of Article 52(4) of 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 Capital Requirements Regulation (CRR).[5]

X. ADDITIONAL INFORMATION

Minimum information requirements for issuance prospectuses

The offering or the draft prospectus for an issue of mortgage-backed bonds consists of data valid at the time of their preparation, such as:

> The Rules of the issuing bank concerning the contents, the entry and deletion procedures as well as the terms and procedures authorizing access to the register and its internal rules of conducting and documenting mortgage appraisals;

> Data on mortgage loans held in the issuing bank's portfolio on the basis of which an issue is being made, including for each loan:

a) The size of the outstanding principal at the time of extending the loan and by the end of the most recent full quarter;

b) Loan life at the time of extending the loan and the remaining term to maturity;

c) Interest rates, fees and commissions on the loan;

d) Risk classification of the loan by the end of each calendar year from the time it was extended and by the end of the most recent full quarter;

e) Type of real estate mortgaged as collateral, their mortgage appraisal value and the ratio between the outstanding principal and the mortgage appraisal value at the time of extending the loan and by the end of the most recent full quarter;

> Characteristics of the mortgage loan portfolio on the basis of which the issue is made, including a distribution of loans by:

a) The size of the outstanding principal;

b) The residual term to the final repayment of the loan;

c) Interest rate level;

d) Their risk classification by the end of the most recent full quarter; and

e) The ratio between the outstanding principal and the most recent mortgage appraisal value of the real estate pledged as collateral.

In public offerings of mortgage-backed bonds the provisions of the Public Offering of Securities Act (POSA) and the Ordinances on its enactment shall apply. In non-public offerings of mortgage-backed bonds the provisions of Commerce Law shall apply.

Bulgarian mortgage bond market information

Since the adoption of the Bulgarian Law on Mortgage-backed Bonds in 2000 the mortgage bond issues in Bulgaria total 29. The last issued mortgage bond was in 2014. The volume of issued mortgage-backed bonds totals EUR 273.3 m originated by 11 issuing banks (currently 10 banks after the merger of MKB Unionbank and First Investment Bank). As of 31 December 2015 the outstanding mortgage bonds amounted to EUR 5.0 m.

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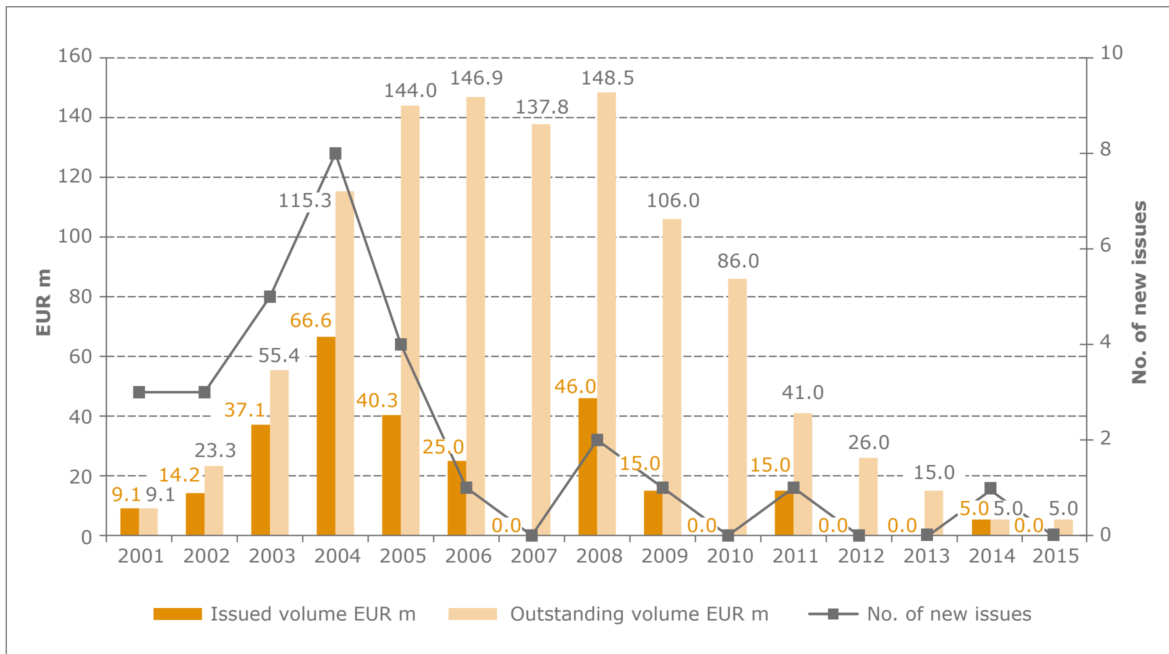
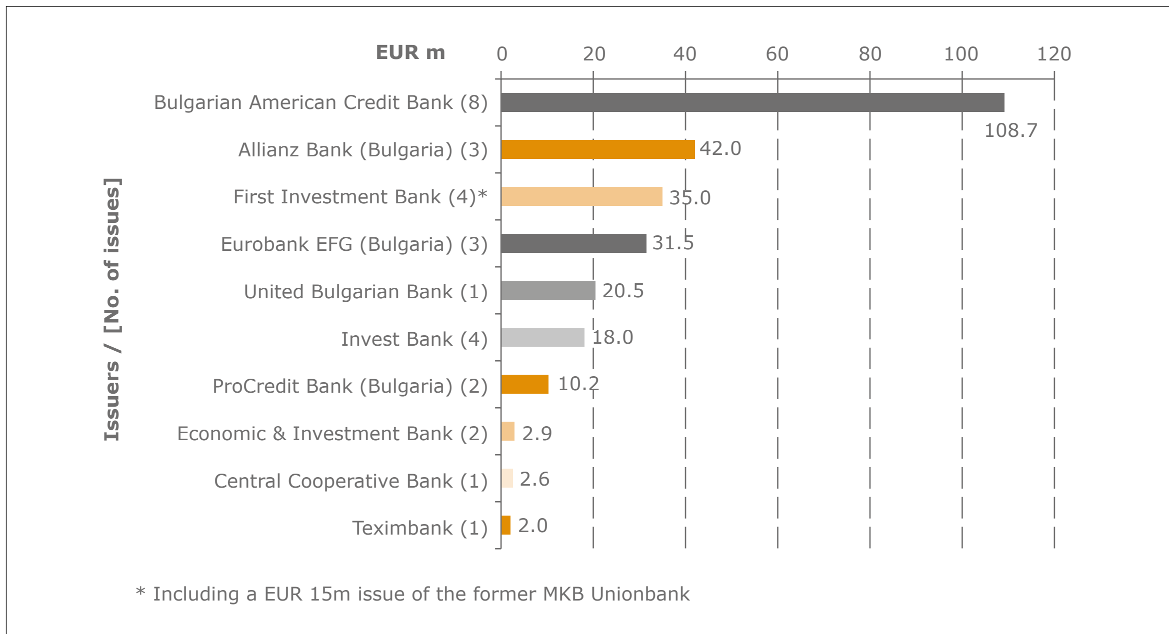
5 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> Figure 1: Mortgage Bond Issues in Bulgaria, 2001-2015



Source: Bulgarian Central Depository

> Figure 2: Mortgage Bond Issuers in Bulgaria, 2001-2015



Source: Bulgarian Central Depository

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/72/Bulgaria.

3.5 CANADA

Prepared by Canada Mortgage and Housing Corporation

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[1], 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 Programmes Guide (CMHC Guide) which prescribes detailed requirements for registered issuers and programmes.[2] 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, prescribes eligible issuers, programmes and cover pool collateral, and establishes a high standard of disclosure.

Since 2013, new covered bond issuance is restricted to "registered" covered bonds issued under the legal framework. To be able to issue 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.

Contractual or non-registered covered bonds issued between 2007 and 2012 ("Historical Bonds" in the CMHC guide) that are not registered under the legal framework will remain managed in separate programmes and amortise gradually until February 2019. For information on Canadian "contractual" covered bonds please see the 2012 ECBC European Covered Bond Fact Book.

Under the new legal framework, eligible collateral consists of Canadian residential mortgage loans that are not insured against borrower default. Mortgages which are insured against borrower default are not permitted to be held as collateral. The Government of Canada and CMHC do not provide any guarantees or backing for covered bond issues.

The covered bond issuance limit of 4% of total assets, which was put in place in June 2007 by the Office of the Superintendent of Financial Institutions (OSFI), is unchanged. OSFI regulates Canadian federally incorporated financial institutions (including all of the current Canadian covered bond issuers except for one provincial issuer which is regulated by the Autorité des marchés financiers (AMF)). Details below are related to Canadian registered covered bonds issued by registered issuers under the legal framework.

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 with the approval of CMHC. CMHC's approval is contingent upon fulfilment of minimum legal requirements set out in the CMHC Covered Bonds Guide. The framework requires that at least two rating agencies provide current ratings at all times for at least one series or tranche of covered bonds outstanding, based on their assessment of the issuer and the covered bond transaction. CMHC may suspend the right of issuing "registered" covered bonds in case of a breach of legal requirements that are not remedied. The seven covered bond "registered" programmes are: Canadian Imperial Bank of Commerce, Royal Bank of Canada, Bank of Nova Scotia, National Bank of Canada, La Caisse centrale Desjardins du Quebec, Bank of Montreal and Toronto Dominion Bank.

1 See National Housing Act R.S.C., 1985, c. N-11.

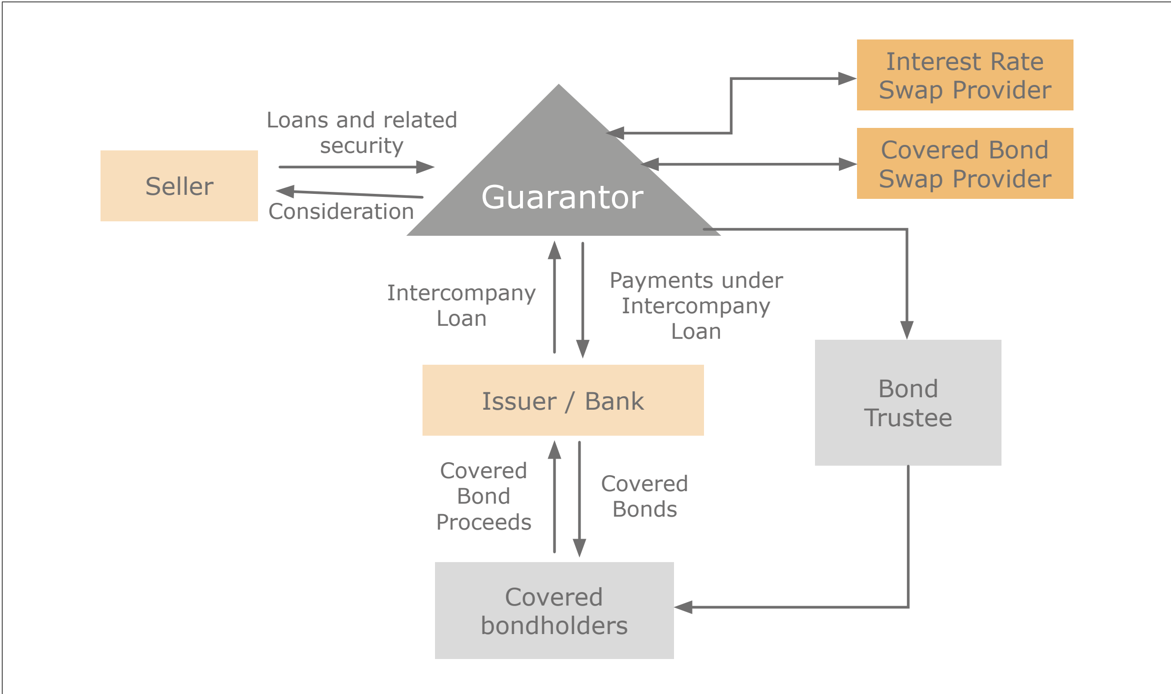
2 See CMHC's Canadian Registered Covered Bond Programs Guide (www.cmhc-schl.gc.ca).

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 entity, the guarantor, 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. 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 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 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 Guarantors use the proceeds from the intercompany loan to acquire all rights, title, interests in and certain records related to a specified 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 over-collateralisation 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 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
  - 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.

The Government of Canada and CMHC do not provide any guarantees or backing for covered bond issues.

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.

Under the covered bonds legal framework, loans are included in the cover pool coverage calculations up to the 80% LTV cap. Effective July 1, 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

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 contractual minimum and maximum over-collateralisation (OC) amounts to be specified in the transaction documents. Registered issuers must establish a minimum and maximum OC level in their respective covered bond programmes. The minimum OC will be one of the key factors considered by rating agencies and varies from 3.1% to 7.5% for the Canadian programmes. The maximum OC limit eliminates uncertainty regarding

available OC to covered bond holders. As with market practice in other jurisdictions, issuers tend to maintain an OC level higher than the minimum OC level established in the program.

Furthermore, the issuer is required to put in place covered bond collateral hedges (if not there already) 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 below). 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 ratings 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.

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 cover pool 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 program`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.

VI. TRANSPARENCY

The Canadian covered bond legal framework is prescriptive in terms of information disclosure and reporting. The requirements are comprehensive and include the following:

> All material information 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. All transaction documents must be available on the website.

> A monthly report must be prepared within 15 business days of the end of each month and include detailed information on the covered bond programme (e.g. key parties/counterparties, ratings, event of default occurrence, credit enhancement and rating triggers, statistics related to cover asset and covered bonds, material issues and deficiencies).

VII. COVER POOL MONITOR AND BANKING SUPERVISION

CMHC is responsible for administering the Canadian covered bonds legal framework. Only eligible federally and provincially regulated financial institutions that meet the requirements of the legal framework can issue registered covered bonds. In Canada, federal financial institutions are prudentially regulated by OSFI. Provincial financial institutions are subject to prudential regulation by the respective provincial entity.

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 the adequacy of the required tests. Results should be reported to the CMHC and the bond trustee annually or whenever deemed reasonable. Issuers should make available all information needed by the CPM. Following issuer insolvency, the CPM remains in place for the benefit of the guarantor. "Registered" issuers must 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.

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.

> 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, although, if cover assets are insufficient, covered bond holders have recourse to the assets of the issuing entity ranking pari passu with ordinary depositors and unsecured debt holders. 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.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Canadian covered bonds are eligible to be used as liquid assets (Level 2A) under the European Union's Liquidity Coverage Requirement Delegated Act, the implementation of the Basel liquidity coverage ratio requirements. Canadian covered bonds are not UCITS 52(4)-compliant because Canadian issuers do not have their registered head office in an EU state. Therefore, they do not benefit from the more preferential risk weighting under article 129 of CRR.[3] However, Canadian covered bonds are eligible for the same risk weighting as unsecured bank debt for purposes of calculating regulatory capital ratios under article 120 of the European Union's Capital Requirements Regulation (CRR). If denominated in EUR, Canadian covered bonds are eligible for European Central Bank repo operations as a haircut category III asset pursuant to European Central Bank Guidelines 2015/510 and

3 Please click on the following link for further information on the UCITS Directive and the CRR: http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

2016/65 on the implementation of the Eurosystem monetary policy framework. Specific haircuts are determined based on the rating, residual maturity and coupon structure of the covered bond.

X. ADDITIONAL INFORMATION

X.1. Eligible for Level 2A assets of Basel's Liquidity Coverage Ratio (LCR)

In November 2014, OSFI reconfirmed the eligibility of covered bonds for the LCR as part of the Level 2A high quality assets. Eligible covered bonds must meet the following criteria:

- Not issued by the institution itself or any of its affiliated entities;
- With a minimum AA- rating and 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%;
- Traded in large, deep and active repo or cash markets characterised by a low level of concentration.

"Historical" covered bonds issued by Canadian institutions prior to the Canadian covered bond legislation coming into force on July 6, 2012 may be included as Level 2A assets if they meet the above requirements non-related to the law.

X.2. Canadian banks issuance capacity after re-start

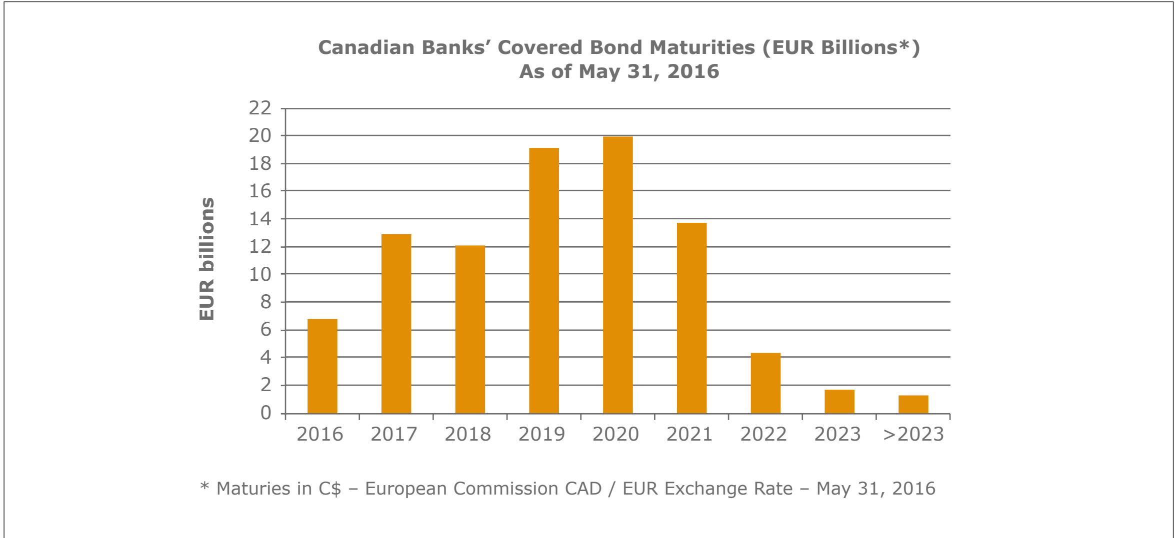
In 2012-2013, covered bond issuance by Canadian banks decreased as they could no longer issue under their "historical" programmes and had to set up new "registered" ones. Issuance resumed during the summer 2013 and has been rather active since, with all seven covered bond issuers having issued under their programmes. Canadian banks remain key participants in international covered bond markets, issuing in the CAN$, €, US$, GDP£, CHF, and AU$ markets due to favourable basis swaps and strong market technicals (see "Other currencies in the Generic Section for more details). Canadian banks' constraint in terms of future issuance is the 4% limit of total assets and not the amount of eligible collateral. Based on recent data, Canadian banks have enough un-insured mortgages on their balance sheets to issue further covered bonds. The remaining capacity for the banks is about C$65 billion (gross) as of May 31, 2016 (see Figure 1 below). Redemptions especially of "historical" covered bonds, which are spread over the next few years, should also support new issuance (see Figure 2 below).

FIGURE 2: CANADIAN BANKS' COVERED BOND ISSUANCE

At 31 May 2016 (C$ bn)	BMO	BNS	CCDJ	CIBC	NBC	RBC	TD	Total
OSFI covered bond issuance limit	26.7	36,1	7.3	19.1	8.5	43.1	45.1	186.0
Outstanding covered bonds	14.5	27.0	5.9	11.2	7.3	40.0	27.7	133.7
- non-registered	2.0	6.4	1.5	0.7	2.0	0.0	5.9	18.5
- registered	12.5	20.6	4.4	10.5	5.3	40.0	21.7	115.2
Remaining issuance capacity	**12.2**	**9.0**	**1.4**	**7.9**	**1.2**	**3.1**	**17.5**	**52.3**

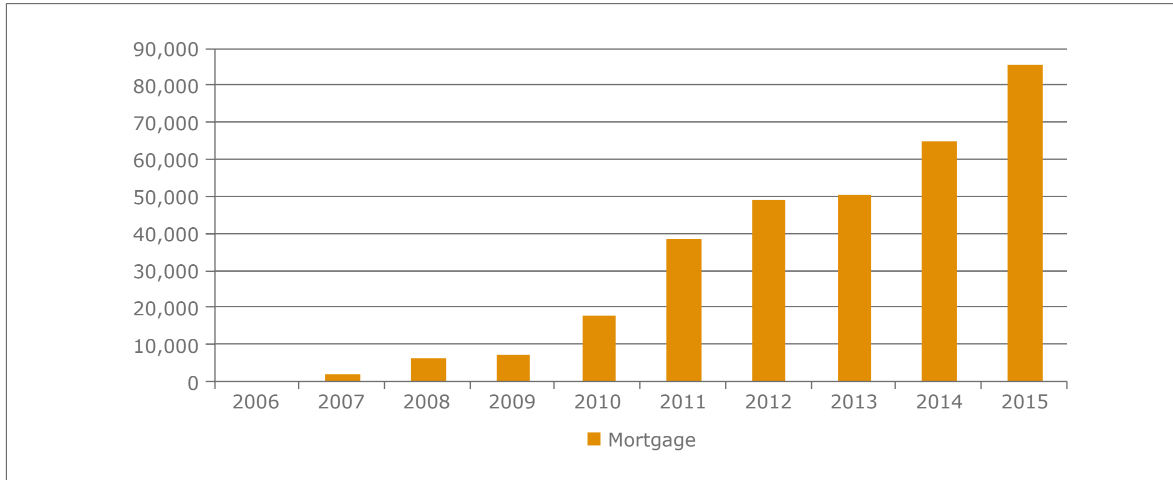
Source: CMHC

> Figure 3: Canadian Banks' Covered Bond Redemptions (as of 31 May 2016, EUR bn)



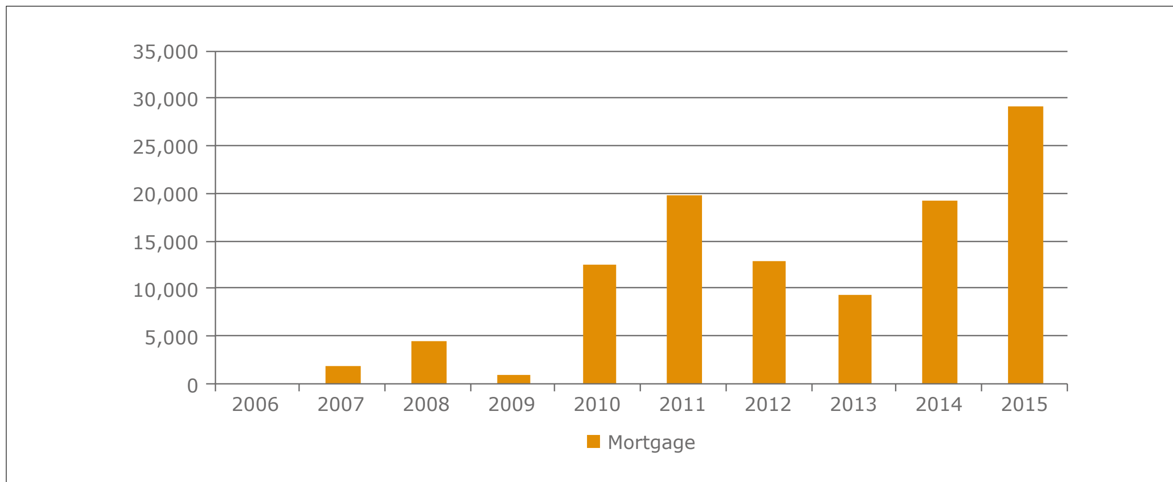
Source: CMHC

> Figure 4: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 5: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: Royal Bank of Canada (RBC), Bank of Montreal (BMO), Bank of Nova Scotia (BNS), Canadian Imperial Bank of Commerce (CIBC), Caisse centrale Desjardins du Quebec (CCDQ), National Bank of Canada (NBC), Toronto Dominion Bank (TD).

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/12/Canadian_Covered_Bonds.

3.6 CHILE

By Danilo Castañeda, Miguel Royo and Antonio Procopio, 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): *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, financial innovation and integration of the capital markets. Among them was the amendment of Article 69, n°2 of the LGB which enabled banks to issue bonds with no special guarantees, called BHs. These securities are specifically aimed to raise funds for the origination of mortgage loans (*mutuos hipotecarios*) used to finance the acquisition, construction, repair 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 define 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 flexibility 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 this 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, the final 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 incorporated 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.

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 establishment 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 program was for a total amount of UF 3 Million (aprox. USD 134 million), the first issuance out of the program was in August 1st, 2013 for a total amount of UF 1.5 MM (aprox. USD 68 million) and then the second one was in November 20th, 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 program for a total amount of UF 5 million and issued an amount of UF 1.5 million in September 2014.

As of the 31st of December 2015, Santander Chile is still the only active issuer of covered bonds in the Chilean market.

III. COVER ASSETS

Regulation states that issuers have 18 months since 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 high rated corporate bonds. Sub limit 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, 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 Raices*) – 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 over-collateralization 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 program bond was a 15 year amortizing structure reflecting the expected amortization schedule of the underlying loan portfolio adjusted by the empirical loan prepayment rate. The second registered bond program was a 18 years amortizing structure reflecting the expected amortization 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, the same as for Letras de Crédito Hipotecarias (LH) is thoroughly covered in the LGB.

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 28 March 2013 a special Repo program ("Repo BH") which will accept exclusively BHs as collateral. The Repo BH will be 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.

Furthermore, it is important to highlight that starting from the 1st of January 2016 a new regulation will be in place regarding credit risk provisions. This regulation will substantially increase the required provisions for mortgages with a LTV above 80%, which would probably increase the volume of loans that would be eligible as collateral for BHs.

On top of this, in July 2015 the Superintendencia de Bancos e Instituciones Financieras 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.

In 2015 there have not been BHs issuances in the Chilean market. 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.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/113/Chilean_Covered_Bonds.

3.7 CYPRUS

By Ioannis Tirkides, Bank of Cyprus

I. FRAMEWORK

Following on to an extensive and fruitful consultation process, which lasted over a year and involved the Central Bank of Cyprus ("CBC"), the Ministry of Finance, the Cooperative Societies Supervision and Development Authority and the banking industry, Cyprus entered the covered bond universe in December 2010.

The primary legislation governing the issuance of covered bonds (Kalimmena Axiografa) is 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).

II. STRUCTURE OF THE ISSUER

Under the Cypriot Legal Framework, Credit Institutions which have been approved by the Competent Authority (i.e. the CBC or the CSSDA), are only allowed to issue covered bonds using the direct issuance route.

Credit Institutions are defined, under the Law, to be:

- Banks (as defined in the Banking Laws);
- Cooperative Credit Institutions (as defined in the Cooperative Societies Law); and
- The Housing Finance Corporation (established under the Housing Finance Corporation Laws).

In accordance with Parts II and III of the Law, only Approved Institutions are eligible to issue covered bonds. Approved Institutions, are those Cypriot Credit Institutions which have been registered in the Register of Approved Institutions, (publicly available at the following link:
http://www.centralbank.gov.cy/media/xls/ENG_2_Register_of_Approved_Inst.xls)
following a relevant application to the Competent Authority.

Approval of such application is granted within 1 month from submission, and only after the Credit Institution has successfully demonstrated its ability to carry out the legal obligations of an Approved Institution, and that it fulfills the criteria and conditions determined by the Competent Authority.

Indicative minimum requirements set out in the Directive, for the registration of a Credit Institution in the Register of Approved Institutions, are:

- Core Tier 1 capital of at least EUR 50 million and capital adequacy ratio as required by the CBC under Pillar I and Pillar II of Regulation 575/2013 (Capital Requirements Regulation);
- Establishment of an automated system for the support of the covered bonds business;
- Established risk management procedures for the recognition, management, monitoring and control of risks that may arise during the conduct of the covered bonds business;

> Procedures, policies and systems in place for the support of the covered bonds business; and

> Compliance with the provisions of the Law and the Directive, to be represented by a written confirmation by the Board of Directors of the Credit Institution.

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). Approval of such application is granted within 10 days from submission, and it is only following such approval that a newly issued bond becomes a covered bond.

III. COVER ASSETS

Primary cover assets are:

> Residential property backed loans (i.e. any kind of credit facility, secured on immovable property, provided that the property is used or intended to be used for residential purposes);

> Commercial property backed loans;

> Public claims;

> Maritime loans; and

> Any other type that may be determined by the Competent Authority.

The criteria, terms and conditions in relation to cover assets are determined by the regulator in Articles 13, 14 and 15 of the Directive. The main criteria indicatively include:

> Residential and commercial loans should be secured by a mortgage (or an equivalent security over a property if the property is not located in Cyprus) created in accordance with the Laws of Cyprus or the law of other Member States[1];

> The mortgage or the equivalent charge on immovable property, securing the credit facility, is created for an amount, at least, equal to the value of the loan;

> The immovable property securing the credit facility must be situated on the territory of the Republic or on the territory of other Member States;

> A residential or commercial loan secured by buildings under construction may be included in the cover pool, provided that the total value in each cover pool of the loans secured by buildings under construction does not exceed 10% of the cover pool value;

> Rescheduled loans may be included in the cover pool, only after the lapse of six months from the payment date of the first rescheduled loan instalment;

> 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.

a) It is noted, that in accordance with Article 33(b) of the Directive, the counterparty in a hedging contract must "*have a credit rating assigned to the first credit quality step as determined in Annex VI of the Directive 2006/48/EC or a guarantee by a connected entity of the counterparty whose credit rating is assigned to the first credit quality step*". The latest version of Annex VI is now incorporated in Article 129 of the Capital Requirements Regulation (CRR).

1 Member State means a member state of the European Union or other state which is party to the Agreement for the European Economic Area, which was signed in Oporto on 2 May 1992, and adapted by the Protocol signed in Brussels on 17 May 1993.

Finally, apart for the Primary Cover Assets, Complementary Assets may also be included in the cover pool, as prescribed under Articles 16, 17 and 18 of the Directive (e.g. deposits with central banks and other highly rated institutions, traded debt securities, etc.).

Limitations and guidelines on the above are specified in the Directive (e.g. total value of Complementary 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, etc.).

IV. VALUATION AND LTV CRITERIA

For **residential loans**, the LTV is not allowed to exceed 75%, provided that if the LTV is above 75% but below 100%, such loans may be included in the cover pool on the condition that:

> They do not exceed 25% of the value of the covered bonds secured by the cover pool; and

> Such inclusion would not cause the weighted LTV of the cover pool to exceed 80%.

For **commercial loans**, the LTV is not allowed to exceed 60%, provided that if the LTV is above 60% but below 80%, such loans may be included in the cover pool on the condition that:

> They do not exceed 25% of the value of the covered bonds secured by the cover pool, and

> Such inclusion would not cause the weighted LTV of the cover pool to exceed 65%.

For **maritime loans**, the LTV is not allowed to exceed 60%, provided that if the LTV is above 60% but below 70%, such loans may be included in the cover pool on the condition that:

> They do not exceed 25% of the value of the covered bonds secured by the cover pool, and

> Such inclusion would not cause the weighted LTV of the cover pool to exceed 65%.

In accordance with Article 13(10) and Article 15(10) of the Directive, the valuation of residential and commercial properties and the valuation of ships (Article 15(10) of the Directive) should be carried out by an independent valuer; i.e. a person who possesses the necessary qualifications, ability and experience to produce a valuation and is independent from the credit decision process.

For the monitoring and review of the value of the residential and commercial properties, the provisions of paragraph 8 (b) of Part 2 of Appendix VIII of the Directive of the Central Bank to banks for the Calculation of the Capital Requirements and Large Exposures shall apply. The provisions of the Directive dictate the following:

> The revaluations of the properties may be carried out by applying statistical methodologies.

a) For commercial properties, according to the aforementioned Directive, the value of the property is reviewed regularly and at least once a year;

b) For residential properties, according to the aforementioned Directive, the value of the property is reviewed regularly and at least once every three years; and

c) In situations where the market is subject to significant changes in conditions, a more frequent review of the property value is required.

> When information indicates that the value of the property may have declined materially relative to general market prices, the property valuation must be reviewed by an independent valuer.

> Also when the balance of the financing exceeds €3million or 5% of the own funds of the credit institution, the valuation of the property will be reviewed by an independent valuer at least every 3 years.

Additionally, and pursuant to Article 46(b) of the Directive, the Covered Bond Monitor ("CBM"), appointed in accordance with Article 49 of the Law, has a duty to examine the valuation process in relation to the valuation of the cover assets.

V. ASSETS – LIABILITY MANAGEMENT

The Directive provides for the following statutory tests:

> **Nominal Value Test**

The adjusted[2] nominal value[3] of the Basic Cover (i.e. the Basic Collateralisation as defined under Article 24 of the Directive) must be at least equal to the total value of covered bonds issued under the programme.

> **Net Present Value Test**

The adjusted net present value of the Basic Cover must be at least equal to 105% of the total net present value of covered bonds issued under the programme. All cover pool assets, including loans, Complementary Assets and hedging instruments must be included in the calculation of net present value of the Basic Cover.

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 Cover and Supervisory Overcollateralisation (as defined under Article 25 of the Directive), must be longer than the weighted average life of the covered bonds.

> **Interest Cover Test**

Interest inflows from cover pool assets in the Basic Cover and Supervisory Overcollateralisation for the next 180 days must be reconciled with interest due on the covered bonds for the next 180 days and the highest net interest shortfall must be covered by the Complementary Assets contained in the Basic Cover and Supervisory Overcollateralisation.

> **Prematurity Test**

In relation to the repayment of the principal amount of the covered bonds, liquidity must be maintained, in the form of Complementary Assets or outside the cover pool in the form of liquid assets, as follows:

a) For the period between 180 days to 30 days before the maturity date of the covered bonds, at least 50% of the principal amount due for repayment;

b) For the period between 30 days before the maturity date and the maturity date of the covered bonds, 100% of the principal amount due for repayment.

Liquidity maintained for the purpose of meeting the prematurity test is not subject to the 15% limit of Complementary Assets in the cover pool (set in Article 20 of the Directive).

2 Adjusted, refers to the set-off and LTV adjustments, as outlined under Article 24 of the Directive.

3 "Value" is defined under the Directive to mean nominal value plus accrued interest.

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, in the Cypriot Legal Framework, 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.

In accordance with Article 23 of the Law, covered 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 Articles 34-38 of 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, Articles 39-42 of 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. The above information is also submitted to the Competent Authority and the CBM on a quarterly basis, in the form of Appendix 5 of the Directive.

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 (Article 5 of the Law) as a well as a Covered Bonds Register (Article 12 Law) 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 Article 49 of the Law, each institution applying for registration in the Register of Approved Institutions, is required to appoint a qualified entity (e.g. an audit firm 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 Article 44 of 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.

The main responsibilities of the CBM under the Cypriot Legal Framework include:

> Overseeing the compliance of the Issuer with its obligations under the Cypriot covered bond Legislation;

> Prior to an application for the registration of any covered bonds in the Covered Bonds Register, verifying that the Issuer fulfils the conditions for registration as an approved institution and complies with the provisions of the Law in relation to every previous issue of covered bonds that are outstanding;

> Where hedging contracts are included in a cover pool, verifying that these contracts fulfil the criteria set out in Article 26 of the Cypriot covered bond Legislation;

> Monitoring the cover pool assets included in a cover pool, including:

(a) Verifying the accuracy and completeness of the information provided for the cover pool Assets included in the Cover Pool Register;

(b) Examining the valuation process in relation to the valuation of the cover pool assets;

(c) Monitoring compliance, on an on-going basis, with the Statutory Tests; and

(d) Examining the entries in and removals from the Cover Pool Register and confirming the correct recording of the necessary information in the Cover Pool Register.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Following the registration of the covered bonds in the Covered Bonds Register, and in accordance with Article 16 of the Law, the cover pool is segregated from the covered bond issuer's insolvency estate, securing the claims of the Cover Pool Creditors[4] and constituting a form of charge over the cover pool assets.

In accordance with the provisions of Article 28 of the Law and Article 21 of the Directive, covered bond issuers are required to maintain a Special Transaction Account, recording all inflows from the cover assets and the outflows from the account together with the details of such outflow. The balance of such Special Transaction Account is to be used solely for the servicing of the covered bonds as well as for the creation or acquisition of cover assets to be included in the cover pool, to ensure fulfillment of the cover pool adequacy criteria.

Furthermore, pursuant to Article 21(3) of the Directive, the covered bond issuer must have procedures in place which ensure, at any time, the ability to trace and calculate the cash inflows from the cover assets that have not been used. The operation of the Special Transaction Account is subject to the supervision of the CBM, in order to ensure that the covered bond issuer complies with the provisions of the Cypriot Legal Framework at all times.

In case of dissolution of the covered bond issuer, and until all legal claims of the Cover Pool Creditors are fully satisfied, the cover pool assets are not available to satisfy the claims of any other creditors of the Issuer in accordance with Article 40(5) of the Law.

By virtue of Article 40(7), 41 and 42 of the Law, the Covered Bond Business Administrator (the "CBBA") is empowered to dispose of the Cover Pool Assets, and use the proceeds of such disposal in order to satisfy the claims of the Cover Pool Creditors in priority over the claims of all other creditors.

To the extent that a covered bond issuer is subject to dissolution proceedings, in accordance with Article 40(5) and Article 40(6) of the Law, until the claims of the Cover Pool Creditors are satisfied in full, the cover pool assets will not be available to satisfy the claims of other creditors. Any surplus from the disposal of the cover pool, and only once the claims of the Cover Pool Creditors have been satisfied in full, shall be returned to the credit institution (Article 44(1) of the Law).

Cover Pool Creditors enjoy a dual recourse, safeguarded under the Law. In accordance with Article 43(5) of the Law, to the extent that the claims of the Cover Pool Creditors are not fully satisfied from the disposal of the cover pool, then these creditors are, with respect to the unsatisfied part of their claims, unsecured creditors of the covered bond issuer.

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

4 Cover Pool Creditors are defined in Article 2 of the Law to include, inter alia, the Covered Bond holders, the hedge counterparties, the Covered Bond Monitor and the Covered Bond Business Administrator.

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).[5] This results in a 10% risk weighting assigned by the CBC. 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, in accordance with Article 20 of the Law, 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 (Articles 22, 24 and 25 of the Directive).

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.

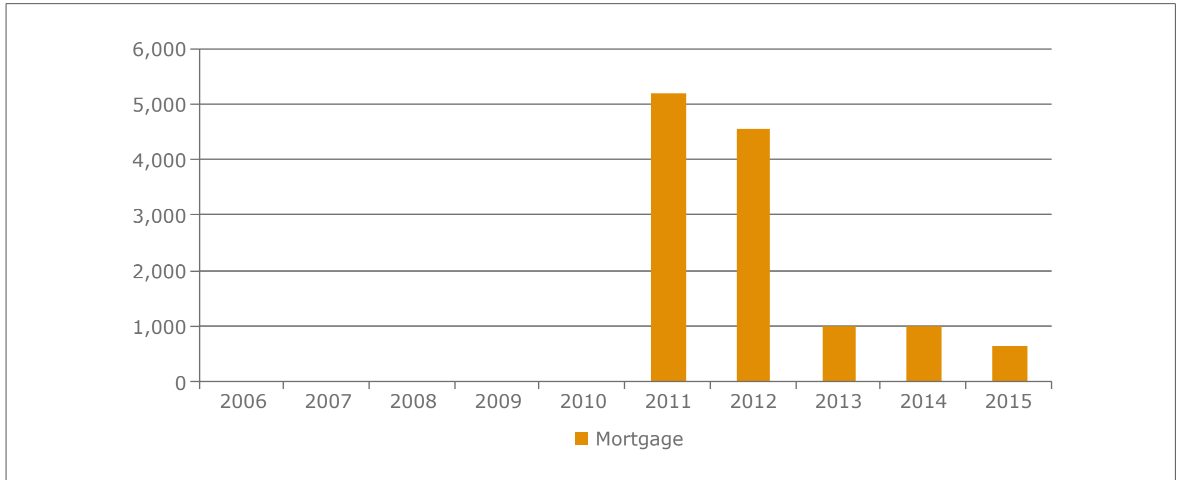
5 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

Conditional pass-through structures

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.

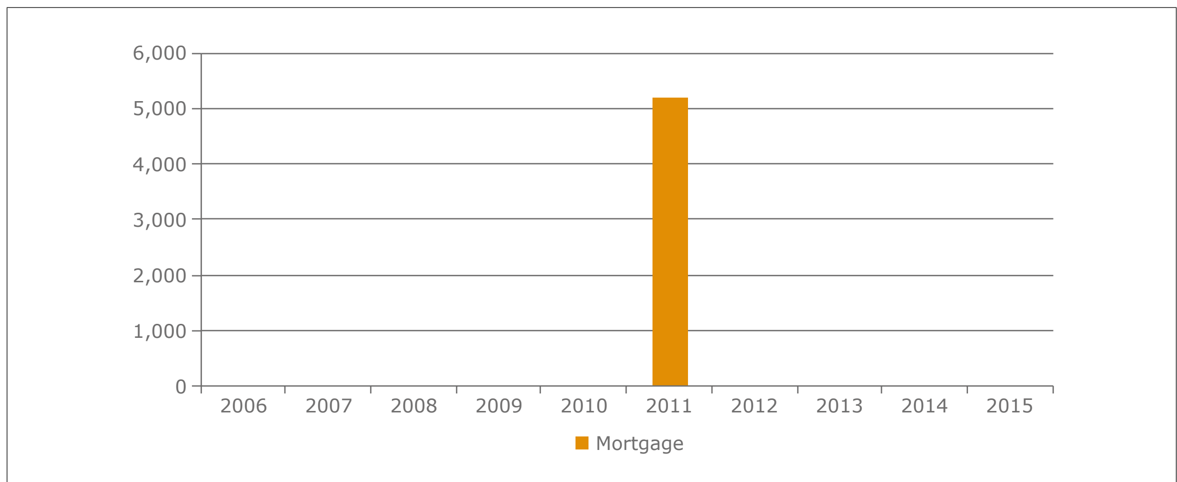
As such, upon the occurrence of a failure by the issuer to pay the final redemption amount on the final maturity date, the cover bond will convert into pass-through and the maturity of the bond will be extended. Once the covered bond converts into pass-through, an appointed portfolio manager may try to sell portfolio loans and any such proceeds from the sale of cover assets would be used for the repayment of the covered bond.

> FIGURE 1: COVERED BONDS OUTSTANDING, 2006-2015, EUR M



Source: EMF-ECBC

> FIGURE 2: COVERED BONDS ISSUANCE, 2006-2015, EUR M



Source: EMF-ECBC

Issuers: Bank of Cyprus Public Co Ltd.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/93/Cyprus_CBs.

3.8 CZECH REPUBLIC

By Libor Ondřich, UniCredit Bank Czech Republic and Slovakia

I. FRAMEWORK

It has been possible to issue the mortgage Covered Bonds ("Hypotecni zastavni list" – hereinafter referred to as "MCB") in the Czech Republic from January 1, 1992 on the basis of the general regulation contained in the Commercial Code.

At present, the MCBs, the mortgage loans (hereinafter also referred to as "ML") and the other terms and conditions of mortgage financing are regulated in detail in the Bond Act (hereinafter also referred to as "BA"), which entered into force on April 1, 2004. The latest amendment has been effective since August 1, 2012, which, besides other things, enables issuance of the MCBs under a law different from the Czech law and clarifies the calculation of the minimum LTV required by the law.

Specific provisions treating cover assets and applicable at the opening of the insolvency proceedings or declaration of bankruptcy of the issuing bank are part of the Insolvency Act No. 182/2006 Coll.

II. STRUCTURE OF THE ISSUER

MCBs may only be issued by a bank holding a Czech banking license (i.e., a banking license issued under the Banking Act no. 21/1992) and having its registered office in the Czech Republic (an "Issuing Bank"). An Issuing Bank can generally pursue all business activities that are permitted for credit institutions and need not be a specialized bank. The MCBs constitute direct and unconditional obligations of the Issuing Bank, and the Issuing Bank is fully liable for any payment obligations thereunder. All obligations arising from the MCBs are obligations of the Issuing Bank as a whole to be paid from all the assets of the Issuing Bank, subject to specific provisions applicable to the Issuing Bank's insolvency (dual recourse).

III. COVER ASSETS

Pursuant to the BA, the MCBs are such covered notes where the nominal value of and revenue from which are fully covered with (i) receivables from MLs or parts of these receivables (the so-called "regular coverage") and (ii) by substitute collateral. The text "Mortgage Covered Bond" has to be a part of the name of this covered bond. No other securities and/or covered bonds are allowed to use this name.

ML is such loan that is secured with a mortgage to a real estate (residential mortgages, commercial mortgages, land, buildings under construction). The amount of receivables from ML must not exceed double the collateral value of the mortgaged real estate. The real estate under the mortgage right has to be located on the territory of the Czech Republic, a member state of the European Union or another country making a part of the European Economic Area. The loan is considered to be the mortgage loan on the day of origin of legal effects of the mortgage right registration.

The mortgage right securing the ML used to cover the MCBs has to be in the first position in the Real Estate Register. There are two exceptions to this rule: the real estate under mortgage may have a priority mortgage right securing a loan which:

> Is extended by a building society or a loan extended for a cooperative housing construction supported by the State. The precondition for this is that the building society or the creditor of the cooperative housing construction loan that have the priority sequence of the mortgage right have given a written consent to the issuer of MCBs to establish the mortgage right in a lower ranking. The receivable from the ML secured with a mortgage right not in the first position may not be used to cover the MCBs without such consent.

> Will be repaid so that the mortgage right related to the ML will move from the second position to the first position of registration in the Real Estate Register.

Substitutive Coverage

Substitute collateral is restricted to 10% of the nominal amount of MCBs outstanding. The following substitute assets are eligible:

> Cash;

> Deposits of the issuer at the Czech National Bank (hereinafter referred to as "CNB");

> Deposits at the Central Bank (National Bank) of a member state of the European Union or another country making a part of the European Economic Area or at the European Central Bank;

> Government bonds and/or securities issued by the CNB;

> Government bonds and/or securities issued by the member states of the European Union or by other countries making a part of the European Economic Area, their Central (National) Banks and the European Central Bank; and

> Government bonds issued by the financial institutions established with an international agreement the contracting party of which is the Czech Republic, or the financial institutions with which the Czech Republic entered into an international agreement.

IV. VALUATION AND LTV CRITERIA

Only the issuer's receivables arising from mortgage loans or parts thereof may be used for the proper coverage of the total obligations arising from all the mortgage bonds in circulation issued by one issuer. Such receivables or parts thereof may not, during the period when they are used for such coverage, exceed 70% of the aggregate mortgage lending value of the mortgaged property securing such receivables (70% portfolio LTV limit).

If any mortgage rights in priority sequence are attached at the same time to any real estate that serves to secure the construction savings credit or the cooperative housing construction loan, only the receivable from the mortgage loan or its part in the maximum amount of the difference between 70% of the mortgage lending value of the real estate under mortgage and the sum of the receivables from the loan extended by the building society and the cooperative housing construction credit may be used for the purposes of coverage of the MCBs.

The issuer of the MCBs determines the *mortgage lending value* of the real estate under mortgage, and namely as the *prudent market value*, taking into consideration:

> The permanent and long-term sustainable characteristics of the real estate under mortgage;

> The revenues attainable by a third party at regular management of the real estate;

> The rights and defects associated with the real estate; and

> The local real estate market conditions and impacts and presumed development of this market.

The *prudent market value* is considered to be such price that could be achieved in the event of the sale of the same or similar real estate as at the valuation date and in dependence on its condition and quality. The prudent market value should not reflect the extraordinary market circumstances, the personal relations between the participants and the subjective assessment of the interest of one of the parties. The *mortgage lending value* shall not exceed the *prudent market value* of the real estates.

The conditions allowing the use of the receivable from the ML to cover the MCBs have to be complied with throughout the period for which the receivable from the ML is included in the MCB coverage.

V. ASSET – LIABILITY MANAGEMENT

The sum of all the liabilities from all the MCBs in circulation issued by one issuer has to be fully covered with the receivables or their parts from the ML (regular coverage) or possibly in a substitutive manner (substitutive coverage). No other test is required by the law. Derivatives are not eligible cover assets.

VI. TRANSPARENCY

An initiative sponsored and coordinated by the Czech Banking Association aiming for the improvement of the covered bond legislation was launched in December 2012. The initiative prepares proposals for legislative changes, which should help to further promote soundness of the Czech covered bond market. The Bond Act and Insolvency Act are within the scope of this initiative.

VII. COVER POOL MONITORING AND BANKING SUPERVISION

The issuer of the MCBs is obligated to keep separate and conclusive records on the summary of all of its liabilities from the MCBs in circulation issued by it and on its coverage. The content of the records is defined in an obligatory regulation by the CNB (Czech National Bank). Pursuant to this regulation, the issuer of the MCBs shall keep the Coverage Register and the Coverage Ledger.

The Coverage Register contains a summary of how the liabilities of the issuer of MCBs are covered – with both the regular coverage (i.e. the list of the receivables from the MLs used to cover the MCBs) and with the substitute collateral, if applicable. The records in the Coverage Register shall be updated by the issuer continuously as the changes occur.

The Coverage Ledger contains the full summary of the liabilities of the issuer from its MCBs in circulation and the valuation of the assets of the Coverage Register.

The records shall be kept in CZK in paper form or in electronic form. The recordkeeping including the insertion of the MLs for coverage and elimination of the MLs from the coverage shall be made by the departments independent of the departments responsible both for the extension of MLs and for issuance of the MCBs and namely up to the managing Board member.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

In the event of bankruptcy or bankruptcy proceedings of the issuer of the MCBs, the receivables from the MCBs in circulation issued by it have a priority rank for satisfaction. The assets (the receivables from the ML) serving to cover the MCBs of the bankrupt issuer constitute the mortgage estate (cover pool). A special administrator may be appointed to administer the mortgage estate and to satisfy the claims resulting from the MCBs in circulation. The yield from the encashment of the mortgage estate shall be first used to satisfy the costs of administration and encashment of the mortgage estate and then immediately to satisfy the receivables of the MCBs without limitation of their amount. Only the rest shall be used to satisfy the other receivables from the bankrupt issuer. Otherwise there is no specific provision regarding the treatment of cash flows generally, including those received prior to opening of the insolvency proceedings or declaration of bankruptcy and those received afterwards. The current automatic acceleration of covered bonds is intended to be removed in the planned update of the legal framework for Czech 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)[1].

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

The risk-weighting of MCBs is regulated by the Czech National Bank decree no. 123/2007 Coll. transposing EU's Capital Requirements Directive into the Czech law. Risk-weight of 10% (under the standardized approach) is assigned provided that the MCB complies with the requirements of the Annex 4 of the aforementioned decree.

Czech investment legislation allows investment funds to invest up to 25% of the fund's assets in MCBs complying with the requirements of Article 52(4) UCITS Directive (Art. 28(2)(c) of the Czech Collective Investment Act).

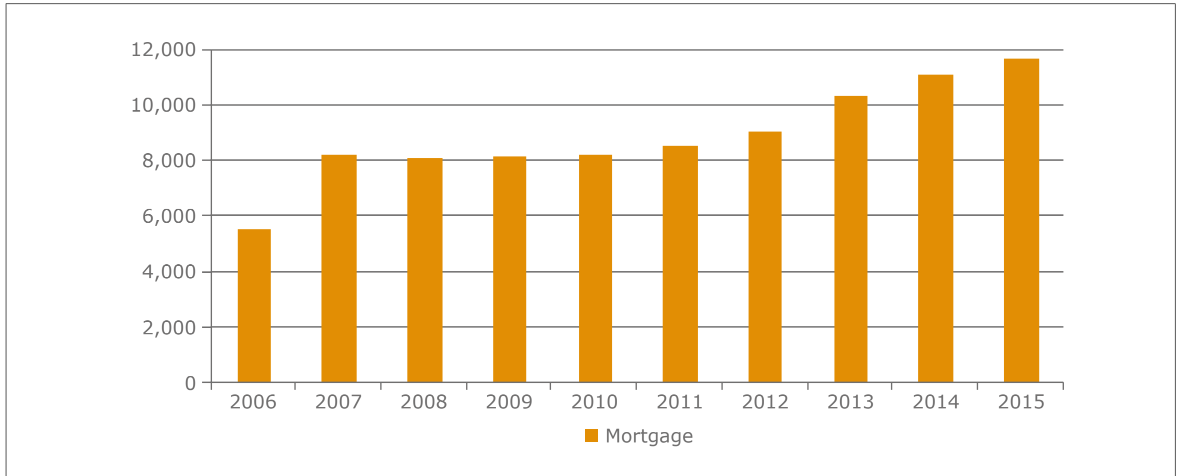
X. ADDITIONAL INFORMATION

State Incentives

The debtor from the ML may reduce his income tax base with the interests he has paid to the issuer from the ML used to finance his housing needs.

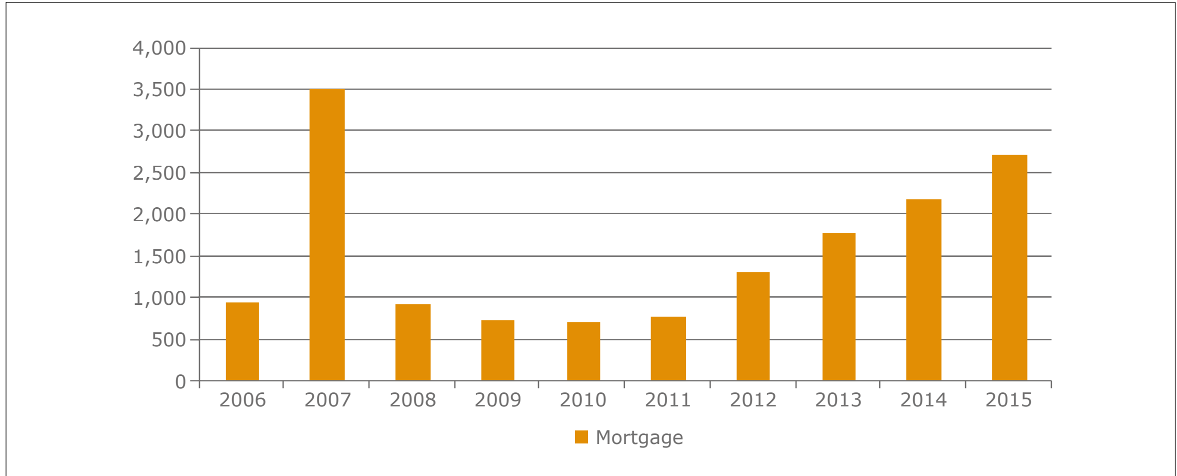
The interest revenues from MCBs are exempt from the income tax, provided that such MCBs were issued before the 1st of January, 2008 and are covered by receivables from MLs for housing investments.

> Figure 1: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 2: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: There are eight issuers in the Czech Republic – Česká spořitelna, Československá obchodní banka, Hypoteční banka, Komerční banka, Raiffeisenbank, Sberbank CZ, Wüstenrot hypoteční banka, UniCredit Bank Czech Republic and Slovakia.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/112/Czech_Republic_Covered_Bonds.

3.9 DENMARK

By Mette Saaby Pedersen, Association of Danish Mortgage Banks, 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.

This leads to the existence of three types of Danish covered bonds:

> Særligt Dækkede Obligationer (SDOs) issued by either commercial or mortgage banks. SDOs are both UCITS (Article 52(4)) and CRR compliant (Article 129).

> Særligt Dækkede Realkreditobligationer (SDROs) issued exclusively by mortgage banks, fulfilling the former as well as the new legal requirements. SDROs are both UCITS (Article 52(4)) and CRR compliant (Article 129).

> Realkreditobligationer (ROs) issued exclusively by mortgage banks. ROs are UCITS compliant (Article 52(4)).

In addition, all ROs issued before 1 January 2008 have maintained their covered bond status in accordance with the grandfathering option under the CRR. The grandfathered bonds are both UCITS (Article 52(4)) and CRR (Article 129) compliant.

The covered bond legislation in Denmark allows for joint funding, i.e. two or more institutions joining forces to issue covered bonds in order to achieve larger issues. The first issue of joint funding between non-affiliated institutions took place in 2012.

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 not 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 centres 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 851-25 June 2014).

Issuers have their own employees. Outsourcing of activities is allowed if control measures are deemed satisfactory by the FSA, and consumer protection regulations are observed.

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 %) > 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, 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.

The difference between funding and lending may be hedged through derivatives, which are included in the cover pool assets.

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 centres 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 transferred from the capital centre. Each mortgage loan (cover asset) refers to specific ISIN codes and both cover assets and ISIN codes are assigned to specific capital centres. 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. Such cover pools are thus less dynamic than cover pools where existing mortgages can be transferred into and out of the cover pools. Cover assets must be identifiable, and the FSA supervises cover asset identification.

IV. VALUATION AND LTV CRITERIA

The financial legislation contain provisions on property valuation. Valuations are based on the open 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	60%	60%	60%
Agricultural property	60%[2)]	60%[2)]	70%
Commercial property	60%[2)]	60%[2)]	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) The LTV can be raised to 70% if the bank adds additional collateral.

In connection with the issuance of SDOs and SDROs, mortgage banks and commercial banks must ensure continuous LTV compliance – ie 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 centre/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. The detailed conditions 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 Executive Order provides limits to the scope of differences allowed between 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 centres and the banks in general.

For each register/capital centre, mortgage banks and commercial banks must choose whether to comply with either the *specific balance principle* or the *general balance principle*. The choice of balance principle does not depend on the choice of bond type (RO, SDRO or SDO) issued out of the register/capital centre. The differences between the two balance principles are as follows:

Types of risk	Specific balance principle	General balance principle
Interest rate risk	Stress test on level and structure + Loss limit of 1% of capital base + Risks in different currencies cannot be set off	Stress test on level and structure Loss limit for **mortgage banks** dependent of stress test: 1%/5% of capital adequacy requirement + 2%/10% of the additional excess cover Loss limit for **commercial banks** dependent of stress test: 10%/100% of excess cover
Currency risk	Exchange rate indicator 2 (few currencies) + Loss limit of 0.1% of capital base	Simple stress test Loss limit for **mortgage banks**: 10% of capital adequacy requirement + 10% of the additional excess cover for EUR and 1% of capital adequacy requirement + 1% of additional excess cover of other currencies Loss limit for **commercial banks**: 10% of excess cover

Types of risk	Specific balance principle	General balance principle
Option risk	Maximum term of 4 year + Structural limits on call options and index-linking	Stress test on volatility Loss limit for **mortgage banks**: 0,5% of capital adequacy requirement + 1% of the additional excess cover No maturity or structural limits Loss limit for **commercial banks**: 5% of excess cover No maturity or structural limits
Liquidity risk	Limitations on temporary liquidity deficits 25% (years 1-3) 50% (years 4-10) 100% (from year 11)	Limitations on interest payments: Interest (in) > Interest (out) (over a current period of 12 months) + Present value PV (in) > PV (out) (always)
Repayment of loans by bonds other than the underlying bonds	Max. 15%. Both own issued bonds and bonds from other credit institutions + Approximately same cash flow	Max. 15% from other credit institutions – Own issued bonds unlimited

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 minimizes 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.

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 bullet bonds and floating-rate 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, either of which may extend the bond maturity by 1 year. 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. The legislation provides clarity for the position of borrowers, investors and mortgage banks in an extreme crisis where a mortgage bank is unable to complete the refinancing by sale of bonds at market terms, or interest rates suddenly rise very sharply.

According to the legislation, the capital base must represent at least 8% of risk-exposure amount (REA). Mortgage banks must observe the capital adequacy requirement both at individual capital centre level and at the level of the institution. Overcollateralisation forms part of the cover pool. Furthermore there is an internal capital adequacy requirement of around 2% of REA.

There are also requirements of regulatory capital buffers calculated on the basis of REA:

> A capital conservation buffer of 2.5 % applicable at any time.
> A countercyclical capital buffer which varies between 0% and 2.5% depending on the economic climate. The buffer is currently set at 0%.
> A systemic risk buffer the size of which depends on the systemic importance of the institution. The buffer is currently up to 2% for mortgage banks and 3% for commercial banks. The buffer requirements will be phased in gradually towards 2019.

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 and issuers' investor relations web sites.

Information is thus easily accessible. Previously the information has been somewhat fragmented, requiring investors to seek and collect information from different sources and in different formats.

As part of the Label Initiative, the ECBC has developed the Harmonised Transparency Template (HTT). The HTT is expected to be implemented by the Danish issuers in 2016. 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. The Danish issuers report data uniformly cell by cell in Excel format as specified in the transparency template. The uniform reporting makes it easy for investors to compare data across issuers' cover pools and to extract data for further analysis.

The establishment of the national transparency templates provides investors a single point of entry for the extensive information available on covered bond issues – be it SDO, SDRO or RO with means to compare key information across an array of issuers. The template is a valuable tool that supports covered bond investors' investment decisions by comprehensive overview of covered bond issues and making comparison of key information easier.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

General banking supervision 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 without delay. If the capital requirement is not observed, the FSA must be informed without delay.

The FSA has the authority to issue an order with which the issuer must comply. In case of severe or multiple breaches of Danish law or of such orders, the FSA may revoke the operating licence and dismiss the management of the issuer, cf sections 373-374 of the Financial Business Act.

In 2014 a new set of macro-prudential tools were introduced for Danish mortgage banks – known as the Supervisory Diamond for mortgage banks. The Supervisory Diamond is soft law based on quarterly reports submitted by the mortgage banks to the Danish FSA. The values reported are compared with a number of predefined limit values for five selected indicators. The indicators are interest-only loans, loans with short-term funding, borrower's interest rate risk, lending growth and concentration risk. If the limit values are breached, the Danish FSA opens a dialogue with the bank concerned. Upon individual and concrete assessment, the Danish FSA may take action, for instance in the form of increased supervision, risk disclosure requirements or orders.

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/junior covered 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 looks after the interests of the estate in bankruptcy, i.e. the interests of the creditors and particularly the covered bond investors in relation to the individual capital centres. Today, the creditors of a mortgage bank are almost exclusively covered bond investors. 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 statutory 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.

The practical duty of a trustee is to simulate a going concern. Borrowers' rights in respect of prepayment are unchanged. The trustee must, as far as possible, continue to make payments to bond investors and to look after the interests of existing borrowers. The trustee may not issue new loans or otherwise expand business, as the mortgage lender's licence to carry on mortgage banking has been withdrawn.

The trustee may issue bonds to refinance bonds which have matured (adjustable-rate mortgages). But such issuance may only take place if the trustee deems that there are "sufficient funds" to satisfy the claims of creditors. The bonds may also be extended by 12 months at a time, if there is an insufficient number of buyers for the bonds.

The trustee may also raise other loans for the purpose of paying bond investors. Such loans cannot be secured against existing mortgages, as these already serve as security for the issued covered bonds.

The trustee may transfer a total capital centre to another mortgage lender as an independent asset. A full transfer must be authorised by the Danish Minister for Economic and Business Affairs. Bondholders do not have a right of early redemption as a result of such transfer. Transfer in cases other than bankruptcy/suspension of payments requires the consent of creditors in accordance with the general rules of Danish legislation on the change of debtors as well as prior public authority approval.

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/junior covered 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/junior covered bonds. While exempt from bail-in, the Danish mortgage banks is subject to a 2% debt buffer of unweighted loans. The debt buffer is phased in by 2020.

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 above mentioned 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 junior covered 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 of register audits.

Where the FSA suspends the licence 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, but – contrary to the proceedings related to mortgage banks – exclusively as ordinary claims. Residual claims from junior covered bonds or senior secured bonds may also be proved as ordinary claims against the assets available for distribution.

The register is – contrary to the capital centres of mortgage banks – not subject to any specific statutory minimum requirement as to capital adequacy. The 8% capital adequacy requirement must only be fulfilled at the level of the commercial bank.

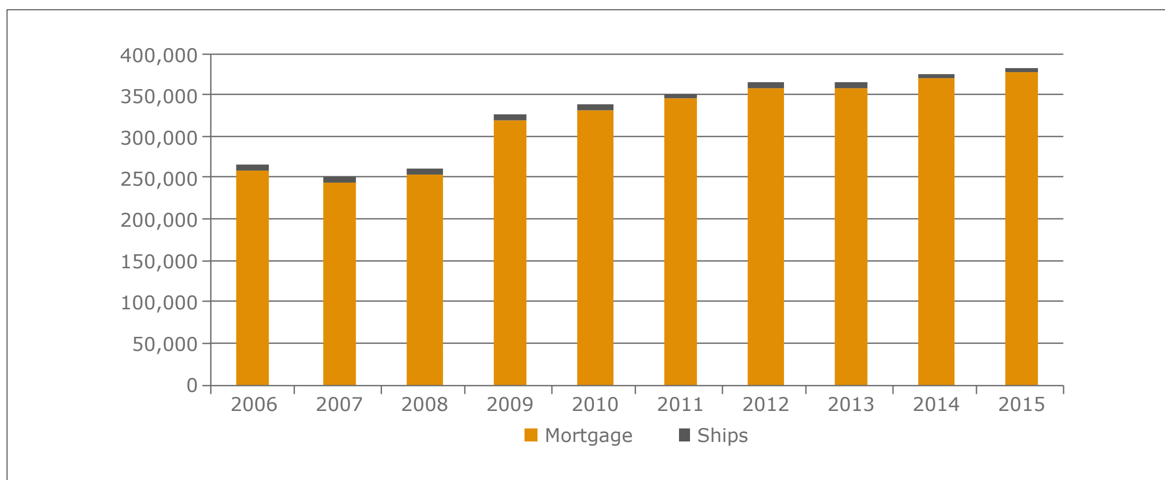
IX. RISK-WEIGHTING AND COMPLIANCE WITH EUROPEAN LEGISLATION

SDOs, SDROs and ROs fulfil the criteria of Article 52(4) UCITS. SDOs and SDROs also fulfil the requirements of Article 129 CRR.[2] 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 UCITSc., to exceed the usual limits on exposures to a single issuer. Thus, acknowledging the reduced risk associated with covered bond assets (cf the Act on Investment Associations and Special-Purpose Associations as well as other Collective Investment Schemes etc.).

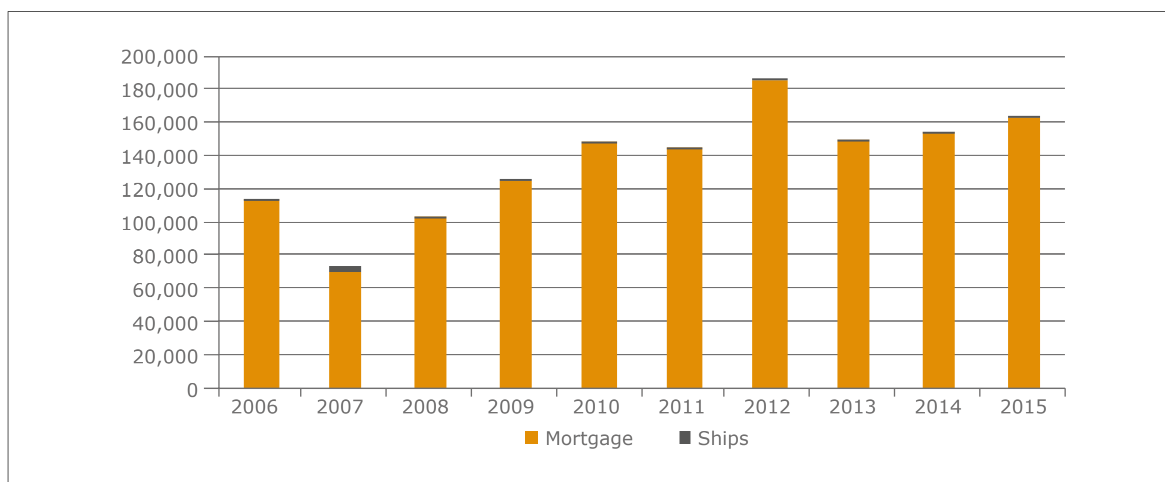
2 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> FIGURE 1: COVERED BONDS OUTSTANDING, 2006-2015, EUR M



Source: EMF-ECBC

> FIGURE 2: COVERED BONDS ISSUANCE, 2006-2015, EUR M



Source: EMF-ECBC

Issuers: Covered bonds backed by real estate collateral are primarily issued by the specialised mortgage banks: BRFkredit a/s, DLR Kredit A/S, LR Realkredit A/S, Nordea Kredit Realkreditaktieselskab, Nykredit Realkredit A/S (incl. Totalkredit A/S), Realkredit Danmark A/S. At the end of 2015 the mortgage banks' outstanding volume of covered bonds was EUR 378 bn. Since the current Danish regulation on covered bonds entered into force on 1 July 2007, only one commercial bank, Danske Bank A/S, has utilised the possibility to issue covered bonds. Danske Bank has issued non-pass-through (euro-style) covered bonds of a value of around EUR 25 bn. Danish Ship Finance is the only Danish issuer of covered bonds backed by ship loans.

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/87/S%C3%A6rligt_D%C3%A6kkede_Obligationer_-_SDO, http://ecbc.eu/framework/88/S%C3%A6rligt_D%C3%A6kkede_Realkreditobligationer_-_SDRO and http://www.ecbc.eu/framework/89/Realkreditobligationer_-_RO.

COVERED BOND · LABEL · : BRFkredit a/s Capital Center E; Danish Ship Finance General Capital Center; 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 Center B; Nordea Kredit Capital Center 1; Nordea Kredit Capital Center 2; Nykredit Capital Center E; Nykredit Capital Center H; Realkredit Danmark A/S Capital Center S; Realkredit Danmark A/S Capital Center T.

3.10 FINLAND

By Timo Ruotsalainen, Aktia Bank plc and Bernd Volk, Deutsche Bank

I. FRAMEWORK

There are currently six active issuers of Finnish covered bonds. In Finland, the legal basis for covered bond issuance is the Act on Mortgage Credit Bank Operations (HE 42/2010). The new legal framework replaced the old Act on Mortgage Credit Bank (1999) and entered into force on 1 August 2010. The new law overruled the special banking principle and gathered all Mortgage Credit Bank related legislation under the same act. Besides, other technical changes, e.g. mixed pools, have been allowed.

The provisions of the new legal framework do not apply to covered bonds issued or derivatives contracts registered before the entering into force of the new act. No counterparty restrictions apply and derivative counterparties are typically internal.

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. The issuer of Finnish Covered Bonds can still be a specialised bank, but deposit banks or credit entities are entitled to apply for a licence to issue covered bonds. The existing specialised banks tend to stay in business in the way they have been operating since being established. Unless it is a mortgage credit bank, the issuer must obtain a license to engage in mortgage credit bank operations (i.e., issue covered bonds).

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 financial 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. 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.

Under the previous legal framework, only bonds covered by mortgages were issued by Finnish mortgage banks. A separate cover pool was to be established if these banks were to start the issuance of public-sector backed Finnish Covered Bonds. Under the new law, mixed pools comprising mortgage loans as well as eligible public sector assets are allowed.

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 and substitution assets. At least 90% of the cover pool loans must consist of residential mortgage loans, public-sector loans or substitution assets. Cover pool assets can be within European Economic Area countries.

Enforcement of non-Finnish cover pool assets would usually be determined by the laws of the jurisdiction in which the assets. Due to European law, inside the EU, enforcement is safeguarded anyway. However, Finnish issuers have so far only Finnish assets in the covered bond pools.

Derivatives may also be registered in the cover pool. The geographical scope of cover assets is restricted to the European Economic Area (EEA). Residential mortgage loans, shares in housing companies as well as commercial mortgage loans up to 10% of the total pool are eligible as cover assets.

Public sector loans in accordance with Article 129(1) CRR are also eligible.

A new feature in the law is that a 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 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.

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 OC 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 OC.

VI. TRANSPARENCY

The annual and interim reports of the issuer indicates, 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, Finnish covered bond issuers have adopted the ECBC Label initiative for Covered Bonds and created Finnish National Transparency Template: 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 website information at section X, Additional information.

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 licence 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.

Following issuer default, the regulator is not a manager or servicer of last resort. However, a cover pool supervisor is appointed to supervise the interests of covered bondholders, with powers to direct the issuer's general administrator.

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.

The satisfaction of the covered bond holders is not limited to the cover assets in the Finnish system. On the contrary, those 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 over-collateralisation.

Some Finnish covered bonds mitigate liquidity risk via contractual 12 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.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

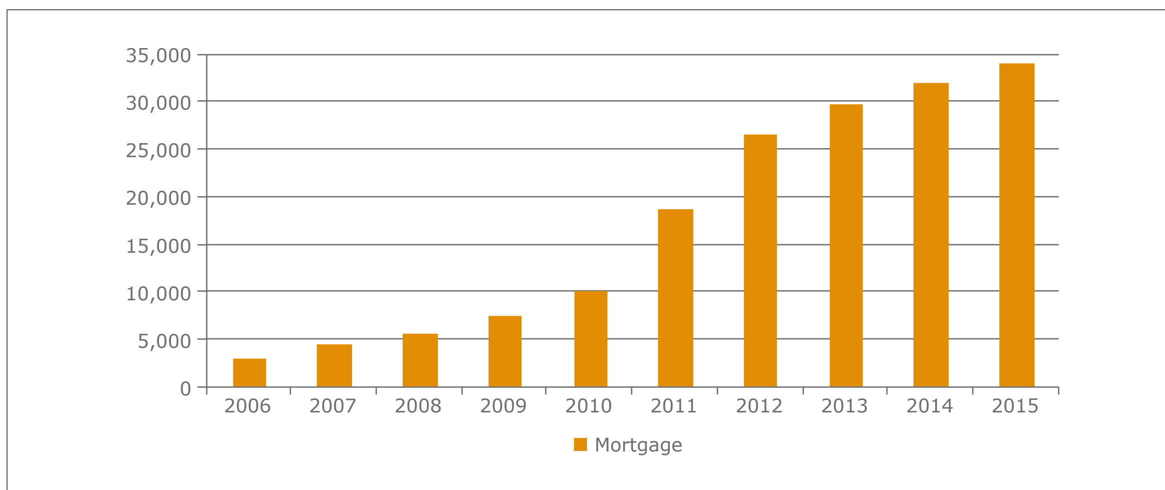
Finnish Covered Bonds comply with the requirements of Art. 52(4) UCITS Directive. The legislation when taken together with the practices, processes and procedures across the industry should fall within the criteria of Article 129 of the Capital Requirements Regulation (CRR)[1]. Therefore, these bonds are 10% risk weighted in Finland. Following the common practice in Europe, they accordingly enjoy a 10% risk weighting in most European countries.

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.

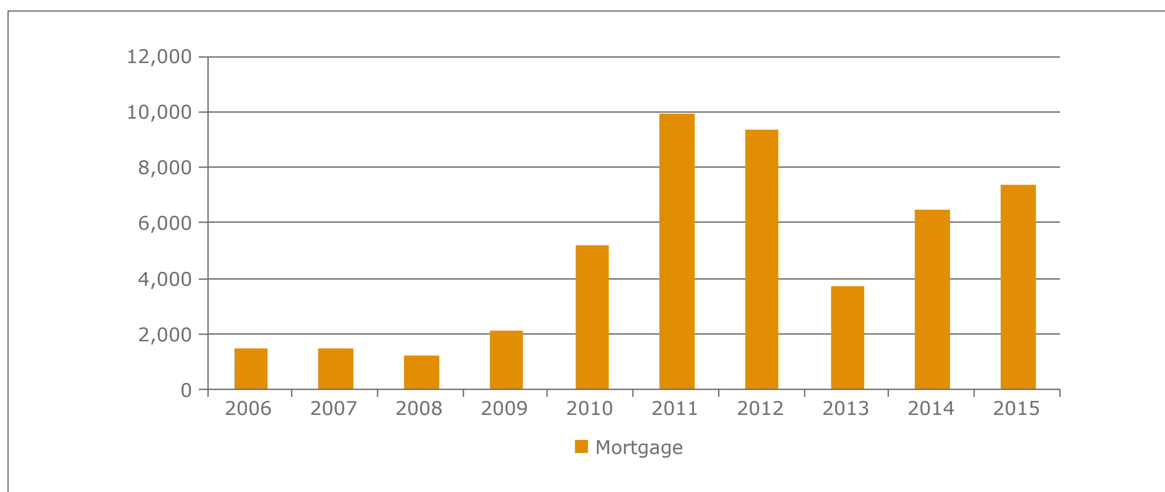
1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> FIGURE 1: COVERED BONDS OUTSTANDING, 2006-2015, EUR M



Source: EMF-ECBC

> FIGURE 2: COVERED BONDS ISSUANCE, 2006-2015, EUR M



Source: EMF-ECBC

Issuers: Aktia Bank, Aktia Real Estate Mortgage Bank, Danske Bank, Nordea Bank Finland, OP Mortgage Bank, Alandsbanken.

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/19/Finland.

COVERED BOND · LABEL · : Op Mortgage Bank, Pool B; Danske Bank Plc Pool 1; Nordea Bank Finland Cover Pool.

3.11 FRANCE

Three main covered bond issuing structures exist in France today:

> *Sociétés de crédit foncier;*

> *Sociétés de financement de l'habitat; and*

> *Caisse de Refinancement de l'Habitat*.

Previously registered French structured covered bond issuers that had not applied for their conversion into *société de financement de l'habitat* can also continue their activities.

Regulation of *société de crédit foncier* ("SCF") and *sociétés de financement de l'habitat* ("SFH") was substantially strengthened in 2014 by Decree n° 2014-526 dated 23 May 2014 and *Arrêté* dated 26 May 2014.

A – SOCIETE DE CREDIT FONCIER (SCF)

By Alcyme Delannoy, Crédit Foncier de France

I. FRAMEWORK

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 credit institution- the *SCF* – totally distinct from the other companies of the group to which it belongs and exclusively dedicated to the issuance of covered bonds named *obligations foncières* (OFs) and the management of the assets backing those issues (the "cover pool").

The *SCF* is 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 specially designed to protect the holders of the *OFs*.

As a credit institution, the *SCF* is also governed by French general banking regulations (notably Arrêté of the 3rd of November 2014).

The legal convergence of *société de credit foncier* and *société de financement de l'habitat* and permission for SCFs to conclude secured loans through changes in French law is currently included in the project of Sapin 2 Law n°3623 (registered the 30 March 2016 at the clerck's office of the French National Assembly) on "transparence, à la lutte contre la corruption et à la modernisation de la vie économique". It includes an amendment (article 53 amending current provisions of article L.513-6 of the French Financial & Monetary Code) of the current SCF legislation in order to allow them to grant secured loans benefiting from collateral arrangement constituted of home loans receivables (transposition under French Law of the so-called "Collateral Directive"). The debates began at the French National Assembly (6th June). In principle, this new legislation should be enacted in September 2016.

Therefore, if enacted, as it is currently the case for the SFH, the SCF structure should be soon in a position to make use of the implementation of the EU Collateral Directive 2002/47/EC, as amended, under French law (implemented into the Code under articles L. 211-36 and seq.), which allows for a segregation through a specific pledge or the assignment by way of a security of the assets without an actual transfer (true sale) of assets to the issuer. Pursuant to article L.211-38 of the Code, the pledge or the assignment by way of a security shall be enforceable even when the relevant collateral provider is subject to an insolvency proceeding (please revert to paragraph "Framework" concerning the Obligations de Financement de l'Habitat).

By replacing the RMBS by the secured loans, it will allow the SCF which are currently holding RMBS on their assets side to be compliant with the provisions of article 496 of Regulation (EU) N° 575/2013 of 26 June 2013 on "*prudential requirements for credit institutions and investment firms and amending Regulation (EU)*

No 648/2012" which will take effect from 1st January 2018 onwards and will have a negative impact on the current prudential preferential treatment on the obligations foncières issued by these SCF.

II. STRUCTURE OF THE ISSUER

The *SCF* 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 *OFs*, 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* operates 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.

Furthermore, and in addition to the nomination of two external statutory auditors as all French credit institutions, the *SCF* is also required to appoint an independent controller, registered as a statutory auditor, (the "Specific Controller") whose mission, beyond the single monitoring of the cover pool, is more globally to ensure that the *SCF* complies with the regulations and especially with the coverage ratio requirement and the assets/liabilities matching.

III. COVER ASSETS

Only eligible assets, restrictively defined by law, are authorized on the balance sheet of the *SCF*. All assets on the balance sheet are part of the cover pool.

Assets eligible to the cover pool are:

- loans guaranteed by a first-ranking mortgage or by an equivalent guarantee;
- loans granted to finance real estate and guaranteed by a credit institution or an insurance company with shareholders' equity of at least EUR 12 m and that is not a member of the group to which belongs the *SCF*. The amount of these loans cannot exceed 35% of the assets of the *SCF*;
- public exposures that are totally guaranteed by:
  - a) Central administrations, central banks, public local entities and their grouping, belonging to a Member State of the European Union (EU) or a country of the European Economic Area (EEA), or under rating conditions – central administrations and central banks belonging to a non-EU/EEA country;
  - b) European Union, International Monetary Fund, Bank for international Settlements and multilateral developments banks registered by the French Ministry of Finance;
  - c) Other public sector entities and multilateral development banks as described in Article L.513-4 of the Code;
- mortgage promissory notes representing loans that would be otherwise directly eligible to the cover pool and issued in accordance with Articles L.313-42 et seq. of the Code. The mortgage notes cannot represent more than 10% of the assets of the *SCF*;
- senior securities issued by French securitisation vehicles or equivalent entities subject to the law of an EU/EEA country, USA, Switzerland, Japan, Canada, Australia and New Zealand whose assets are composed, at a level of at least 90%, of loans and exposures directly eligible to the cover pool. The assets of the securitisation vehicles or equivalent entities can only consist of mortgage loans or public sector exposures, and cannot be backed by assets created by consolidating or repackaging multiple securitisations. To be eligible to the cover pool, the senior securities issued by the securitisation vehicles or similar entity must qualify as a minimum for the credit quality assessment step 1 by a rating agency recognised by the Banque de France.

Such senior securities cannot exceed 10 % of the nominal amount of the outstanding issue. However, until 31 December 2017, the 10 % limit shall not apply, provided that:

> the loans carried by the securitisation vehicles were originated by a member of the same consolidated group of which the issuer of the covered bonds is also a member or by an entity affiliated to the same central body to which the issuer of the covered bonds is also affiliated (that common group membership or affiliation to be determined at the time the senior securities are made as collateral for covered bonds); and

> a member of the same consolidated group, of which the issuer of the covered bonds is also a member or an entity affiliated to the same central body to which the issuer of the covered bonds is also affiliated, retains the whole first loss tranches supporting those senior securities.

> liquid and secured assets (the "substitution assets") up to 15 % of the amount of the outstanding covered bonds issued by the *SCF*. Substitution assets are: securities, assets and deposits for which the debtor is a credit institution or an investment company qualifying for the step 1 credit quality assessment (with a maturity up to 100 days for a credit institution or an investment company subject to the law of an EU/EEA country and qualifying for the step 2 credit quality assessment).

Loans guaranteed by a first-ranking mortgage or by an equivalent guarantee and loans guaranteed by a credit institution or an insurance company are eligible for privileged debt financing up to a part of the financed or pledged real estate value. Senior securities of securitisation vehicles are subject to similar rules.

IV. VALUATION AND LTV CRITERIA

Loans in the cover pool can be financed by OFs and other privileged debt up to the amount of:

> the remaining principal balance of the loan; or

> the value of the real estate financed or given as collateral multiplied by the financing coefficient,

whichever is lower.

This financing coefficient is equal to:

> 60% of the value of the financed real estate for guaranteed loans, or of the assets given as collateral for residential mortgages;

> 80% of the value of the real estate in the case of loans that were granted to individuals either to finance the construction or purchase of a home, or to finance both the acquisition of the undeveloped land and the cost of building the home;

> 100% of the value of the real estate financed, in the case of loans guaranteed by the *Fonds de garantie à l'accession sociale* (Guaranty Fund for Social Home Accession).

The real estates financed by the loans are 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 sociétés de crédit foncier. The valuations are made by independent experts in compliance with banking regulation.

Regarding valuations methods, different options are available (full valuation, use of statistic methods) that depend on the property use (residential or professional), the loan size and the property value. For statistical methods, the real estates 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* must comply with asset/liabilities rules as required by banking regulations and, in particular, it has to ensure the matching of its assets and liabilities in terms of interest rates and maturities.

Market risks

The *SCF* must manage and hedge market risks on its 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 – overcollateralization

At all times, the total value of the assets of the *SCF* must be, at least, after weighting, equal to 105% of the liabilities benefiting from the Privilege.

From a regulatory standpoint, the coverage ratio is calculated on the basis of the *SCF* accounting data by applying different weights to classes of assets:

> loans secured by a first-ranking mortgage or by an equivalent guarantee are weighted 100% up to their part eligible for privileged debt financing;

> Residential loans guaranteed by a credit institution or an insurance company are weighted 100% if the guarantor qualifies, at least, for the step 2 credit quality assessment, weighted 80% if it qualifies for the step 3 credit quality assessment, and weighted 0% in any other case;

> public exposures and replacement assets are weighted 100%; and

> senior securities of securitisation vehicles are weighted 100%, 80%, 50% or 0% subject to different criteria (essentially their rating).

The coverage ratio is reported and published at regular intervals, in accordance with the applicable laws and regulations.

Maturity mismatch

The remaining weighted average life of the assets of the *SCF* should not exceed that of the covered bonds by more than 18 months. Cover pool assets taken into account are only those that are strictly necessary to satisfy the minimum legal overcollateralisation requirement of 105%. In addition, new issuers and structures in run off might be exempted of this requirement.

Liquidity risk

The *SCF* is required to ensure that its cash needs are constantly covered over a moving period of 180 days. The scope of this obligation will extend to forecasted principal and interest flows involving the *SCF*'s assets, as well as to flows related to its derivative instruments. Cash needs may be covered, if necessary, by replacement securities, assets eligible for Bank of France refinancing, and repurchase agreements with credit institutions that have the highest short-term credit ratings or whose creditworthiness is guarantied by other credit institutions that have the highest short-term credit ratings.

The *SCF* is authorized to subscribe to its own *OFs* up to 10% of total privileged liabilities provided that these *OFs* are only used as collateral with the central bank or cancels them within 8 days.

Exposure on the group to which belongs the SCF

Decree N° 2014-526 and *Arrêté* dated 26 May 2014 limits the ability of the *SCF* to hold assets in the form of exposures on entities of the group to which it belongs. In this aim, when these assets exceed 25% of the non-privileged assets of the *SCF*, 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.

General risks

As credit institution on general, the *SCF* is subject to the banking regulation as defined by the Arrêté of the 3rd of November 2014 on banks internal control (formerly regulation *CRBF* 97-02). Accordingly, it must in particular set up a system for monitoring transactions and internal procedures, a system for handling accounting processes and data processing, as well as risk management and monitoring systems.

VI. TRANSPARENCY

As credit institution and listed company, the *SCF* must publish periodic financial information. It also has, in accordance with Arrêté of the 3rd of November, send a detailed annual report on risk management to the *ACPR*.

Moreover, the *SCF* is also required to publish:

> A quarterly report relating to the nature and the quality of their assets. This report must be published either on the SCF website, in the *Bulletin des Annonces Légales Obligatoires*, or in any newspaper enable to publish legal announcements;

> An annual report describing:

(i) the nature and the quality of their assets, the characteristics and breakdown of loans and guaranties, the amount of defaults, the breakdown of receivables by amount and by class of debtors, the proportion of early redemptions, the list and characteristics of senior securitisation securities and RMBSs they hold, the volume and breakdown of replacement securities they hold, and

(ii) the extent and sensitivity of their interest-rate exposure. This report is published in the *Bulletin des Annonces Légales Obligatoires* after the annual shareholders' general meeting;

> 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.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The Specific Controller is appointed by the *SCF* with the agreement of the ACPR. To ensure his independence, the Specific Controller cannot be an employee of either of the *SCF*'s statutory auditors, of the company that controls the *SCF*, or of any company directly or indirectly controlled by a company that controls the *SCF*.

The mission of the Specific Controller includes the following verifications:

> that all assets granted or acquired by the *SCF* 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* 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. He checks the different quarterly indicators before sending to ACPR, and

> that, in general, the *SCF* complies with the law and regulations.

The Specific Controller certifies that the *SCF* 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. He attends shareholders' meetings, and may attend Board meetings.

Pursuant to Article L.513-23, the Specific Controller is liable towards both the *SCF* and third parties for the prejudicial consequences of any breach or negligence he may have committed in the course of his duties.

The *SCF* operates 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.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Cover assets are segregated in the issuing specialised credit institution. Pursuant to Article L.513-11 of the Code, holders of *OFs* 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* until the claims of preferred creditors have been fully satisfied.

This Privilege which supersedes the ordinary French bankruptcy law, has the following characteristics:

> The sums deriving from the loans, exposures, similar debts, securities, financial instruments after settlement if applicable, and debts resulting from deposits made with credit institutions by the *SCF* are allocated in priority to servicing payment of the covered bonds and other privileged debt;

> The judicial reorganisation or liquidation or amicable settlement of a *SCF* does not accelerate the reimbursement of *OFs* and other debt benefiting from the Privilege which continue to be paid at their contractual due dates and with priority over all other debts. Until the holders of privileged debts are fully paid off, no other creditor of the *SCF* may avail itself of any right over that company's property and rights;

> The common provisions of French bankruptcy law affecting certain transactions, which entered into force during the months prior the insolvency proceedings (the *période suspecte*), are not applicable to *sociétés de crédit foncier*.

As an exception to the general French bankruptcy law, bankruptcy proceedings or liquidation of a company holding share capital in a *SCF* cannot be extended to the *SCF*. As a result, the *SCF* is totally bankruptcy remote and enjoy 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 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).

OFs comply with the requirements of Article 52(4) of the UCITS Directive and Article 129(1) CRR.[1]

OFs have a 10% risk-weighting according to the Standardised Approach in the CRR.

OF can be eligible to liquidity buffer under LCR regulation provided they respect specific criteria.

X. ADDITIONAL INFORMATION

Covered bonds liquidity

The French *sociétés de crédit foncier* which issue jumbo *OFs* have together signed with more than 20 banks a specific standardised market-making agreement, which has become a national agreement.

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

B – CAISSE DE REFINANCEMENT DE L'HABITAT (CRH)

By Henry Raymond, Caisse de Refinancement de l'Habitat

I. FRAMEWORK

CRH was created in 1985 by French Government with State explicit guarantee as a central agency in order to refinance French banks in the specific legal framework of art 13 of law 85-685 of July 1985.

Up to the creation of SFEF (*Société de financement de l'économie française*) in October 2008, no other agency of that type was created in France. Since 1 January 2010 up to 31 December 2014, CRH has been appointed to control debt' service and collateral administration of the SFEF.

Today, instead of State guarantee, the French law gives to CRH's bondholders a very strong privilege on CRH's secured loans to banks.

The *Caisse de Refinancement de l'Habitat* (previously *Caisse de Refinancement Hypothécaire*) is a specialised credit institution of which the sole function is to fund French banks housing loans to individuals granted by French banking system.

CRH issues bonds and lends the borrowed amount to banks in the same conditions of rate and duration.

CRH loans take the form of promissory notes issued by the borrowing banks and held by CRH.

CRH's bonds are strictly regulated in order to offer bondholders a very high credit quality and benefit from a legal privilege.

They are governed by the Article 13 of act 1985-695 of 11 July 1985 as complemented by Article 36 of act 2006-872 of 13 July 2006.

CRH received approval to issue bonds under Article 13 of act 1985-695 by letter of 17 September 1985 from the Minister for the Economy, Finance and Budget.

CRH's operations are governed by the provisions of art L. 313-42 to L. 313-49 of Monetary and Financial Code. CRH's loans to banks, i.e. notes held by CRH, are covered by the pledge of housing loans to individuals. In the case of a borrowing bank default, CRH becomes owner of the portfolio of housing loans without any formality notwithstanding any provision to the contrary.

II. STRUCTURE OF THE ISSUER

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*).

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:

> Crédit Mutuel – CIC	36.8 %
> Crédit Agricole SA – Crédit Lyonnais	34.7 %
> Société Générale – CDN	16.0 %
> BNP Paribas	6.3 %
> BPCE	6.2 %

Every borrower is committed to become a shareholder of CRH with a part in CRH's equity related to the part of its borrowings in CRH's global loans amount. Furthermore, every borrower is committed to supply back up lines to CRH if CRH calls them.

These shareholders-borrowers are among the best European names. Their global market share is roughly 80% of the French Mortgage Market.

III. COVER ASSETS

CRH's loans to banks (represented by promissory notes) are covered by the pledge of eligible loans kept in balance sheets of borrowing banks.

Eligible loans are only home loans to individuals defined by law: first-ranking mortgages or guaranteed loans.

The cover pool which include exclusively residential loans are compliant with the Capital Requirements Regulation (CRR) and secured by first rank mortgages (81 % area of the pool) or, under certain conditions by guarantees (de facto 19 % of the pool).

Guaranteed loans are loans with the guarantee of a credit institution or an insurance company (the total amount of these loans cannot exceed 35% of the covering portfolio).

CRH's internal rules only allow French residential loans with maturity under 25 years and size under EUR 1 million.

The total value of the cover pool must equal at least 125% of the total amount of CRH loans (equal to the total amount of CRH bonds) – 150% if floating rate loans.

The geographical area for eligible loans is the European Economic Area (EEA) in the law but CRH's by-laws restrict that area to France and overseas territories only. Public sector assets are not eligible.

No replacement assets are allowed. RMBS and other loans are not eligible.

IV. VALUATION AND LTV CRITERIA

The rules for real estate valuations are the same as those of *sociétés de credit foncier*.

All buildings financed by eligible loans are the subject of a prudent evaluation that excludes all speculative aspects. It is carried out by the borrowing bank.

This valuation must be performed by an independent expert, i.e. a person who is not part of the lending decision-making process.

The valuation is performed taking into account the building's long-term characteristics, normal and local market conditions, the current use made of the asset and all other uses that might be made.

The valuation of the buildings is re-examined as part of the risk measurement system required of borrowing credit institutions by CRBF Regulation no. 97-02. This examination is performed annually using statistical methods.

Loan to value must not exceed 80% (de facto 90% because of the over-sizing of the covering portfolio by 25%).

V. ASSET – LIABILITY MANAGEMENT

CRH's debts and loans (represented by notes) have exactly the same characteristics. CRH is not submitted to an interest rate risk. CRH is not affected by early repayment of loans included in the portfolio.

According to CRH internal regulation, the cover pool must be congruent with rate and duration of CRH's debt to protect CRH in the case where it becomes owner of the cover pool.

VI. TRANSPARENCY

Every year, the annual report publishes the size of the cover pool. This report confirms the characteristics (nature and quality) of home loans pledged and that CRH is not exposed to interest rate risk.

For being compliant with the ECBC Label, CRH releases on a quarterly basis data information on its cover pool required by the National Transparency Template.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

CRH is an independent credit institution that doesn't borrow for its own account but for the account of banks and doesn't charge any fee or interest margin on its refinancing transactions.

CRH regularly achieves, based on sampling, audits on the cover pool, carried out at the borrowing banks. If necessary, CRH asks borrowing banks to increase the cover pool to compensate for the shortfall identified or to pay back CRH by delivering CRH's bonds.

As a credit institution, CRH operates under the general supervision of the French banking authority *l'Autorité de contrôle prudentiel et de résolution* and since November 2014 under direct ECB's supervision. Furthermore, its operations are under a specific supervision of *l'Autorité de contrôle prudentiel et de résolution* because of the provisions of the article L.313-49 of Monetary and Financial Code.

CRH is also subject to audit by its shareholder banks.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

In the case of a borrowing bank default, CRH becomes owner of the portfolio of housing loans without any formality notwithstanding any provision to the contrary.

CRH is a company independent from borrowing banks. Bankruptcy proceedings or liquidation of a borrowing bank, holding CRH's equity, cannot be extended to CRH.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

CRH's debt is Aaa rated by Moody's. CRH's covered bonds are AAA rated by Fitch.

CRH's bonds are compliant with the criteria of Article 129(1) CRR and Article 52(4) of the UCITS Directive.[1] They are 10% weighted in standard approach.

They are included in securities accepted for the European Central Bank (ECB) open market operations.

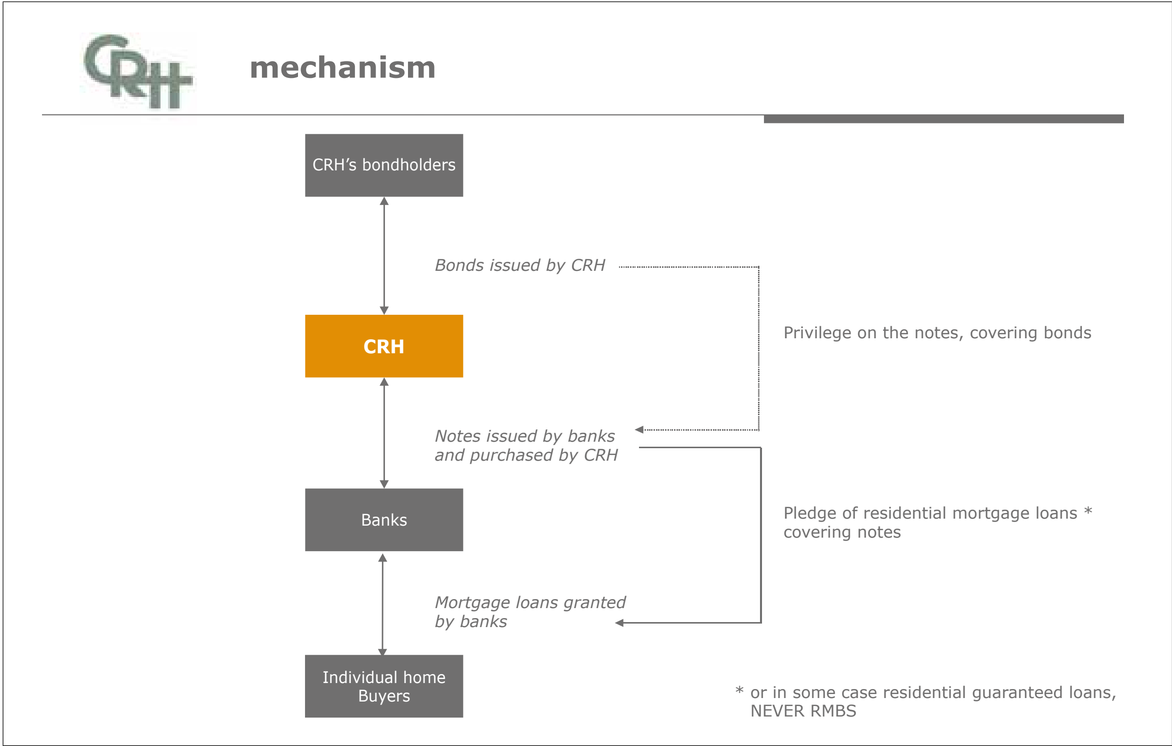
X. ADDITIONAL INFORMATION

CRH belongs to covered bonds world but is very different from other issuers:

- > CRH is a former agency created by French government,
- > CRH is regulated by specific legal framework dedicated to it,
- > CRH is not borrowing for itself but for the account of French Banking system,
- > CRH is a credit institution of full exercise able to refuse to fund a shareholder,
- > CRH benefits from cross commitments of French's banks to supply cash advances and capital contributions.

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

FIGURE 1: CRH MECHANISM



Source: Caisse de Refinancement de l'Habitat

C – OBLIGATIONS DE FINANCEMENT DE L'HABITAT

By Cristina Costa, Société Générale, Alexis Latour, BNP Paribas and Jennifer Levy, Natixis

The *Société de Financement de l'Habitat* (SFH) and the *Société de Crédit Foncier* (SCF) are subject to the same law and regulations (specific controller, coverage ratio, liquidity ratio, etc.) implemented in the French Monetary and Financial Code (the Code). The segregation of assets is based on the European Collateral Directive which has been transposed into the French Monetary and Financial Code. The SCF/SFH framework was amended on May 2014[1] to increase legal minimum collateralization to 105% (from 102%) and provide further details on exposure to the sponsor bank, maximum asset liability mismatch and liquidity buffer rules.

Under the SFH legislation, the holders of the *Obligations de Financement de l'Habitat* (OH) benefit from a legal privilege granted over the SFH programme's assets (according to article L. 513-11 of the Code). If the issuer becomes insolvent, the OHs and other privileged debts are paid in priority and in accordance with their payment schedule, over any of the programme's other debts or non-privileged creditors in relation to the SFH's assets.

I. FRAMEWORK

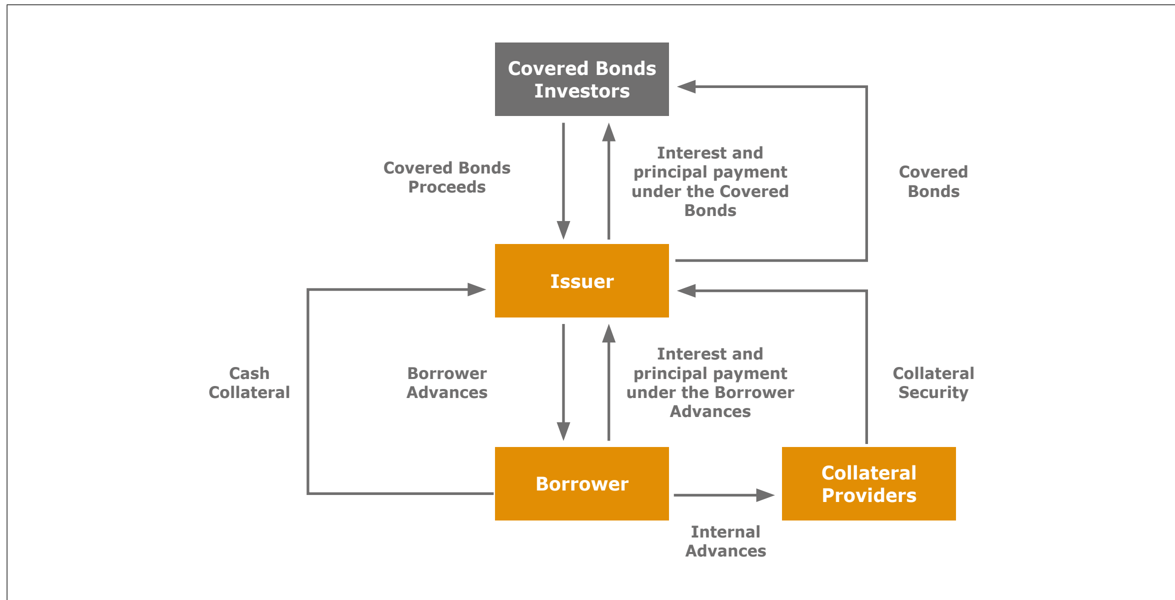
The SFH structure makes use of the implementation of the EU Collateral Directive 2002/47/EC, as amended, under French law (implemented into the Code under articles L. 211-36 and seq.), which allows for a segregation through a specific pledge of the assets without an actual transfer (true sale) of assets to the issuer. Pursuant to article L.211-38 of the Code, the pledge shall be enforceable even when the relevant collateral provider is subject to an insolvency proceeding.

The sponsor bank pledges or assigns collateral to a dedicated subsidiary, which is a regulated French specialised credit institution with limited purpose licensed as a SFH (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), 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.

All the French OH issuers choose the dual structure.

1 http://www.legifrance.gouv.fr/affichTexte.do;jsessionid=?cidTexte=JORFTEXT000028970057&dateTexte=&oldAction=dernierJO&categorieLien=id, JORF n°0121 du 25 mai 2014.
http://www.legifrance.gouv.fr/affichTexte.do;jsessionid=?cidTexte=JORFTEXT000028990539&dateTexte=&oldAction=dernierJO&categorieLien=id, 8551, JORF n°0123 du 28 mai 2014.

Figure 1: Structure of Obligation de Financement de l'Habitat (Dual Structure)



Sources: Moody's, Natixis

II. STRUCTURE OF THE ISSUER

The sole purpose of SFH is to grant or to finance home loans and to hold securities or instruments under the conditions set out by the law and financial regulations. Under a SFH programme (EMTN), the SFH issues *Obligations de Financement de l'Habitat* (OHs) which are unsubordinated senior secured obligations and rank *pari passu* among themselves benefiting from the legal privilege.

These specialised credit institutions are usually an affiliate of the sponsor bank. There are currently eight SFH issuers: BNP Paribas Home Loan SFH (99.9% owned by BNP Paribas), BPCE SFH (99.9% owned by BPCE S.A.), Crédit Mutuel Arkea Home Loans SFH (affiliate of the Crédit Mutuel Arkéa group), Crédit Mutuel-CIC Home Loan SFH (a subsidiary of Banque Fédérative du Crédit Mutuel), Crédit Agricole Home Loan SFH (99.9% owned by Crédit Agricole S.A.), HSBC SFH (France) (a subsidiary of HSBC France), La Banque Postale HL SFH and Société Générale SFH (a subsidiary of Société Génerale).

III. COVER ASSETS

Pursuant to the SFH Law, the eligible assets of a SFH comprise, inter-alia:

> Home loans (*prêts à l'habitat*) which include (i) loans secured by a first-ranking mortgage or other real estate security interests that are equivalent to a first-ranking mortgage (*hypothèque de premier rang ou une sûreté immobiliere conferant une garantie au moins equivalente*[2]) or (ii) loans that are guaranteed by a credit institution or an insurance company (*cautionnement consenti par un établissement de crédit ou une entreprise d'assurance*). The property must be located in France or in any other Member State of the European Union or the European Economic Area (EEA) or in a State benefiting from the highest level of credit assessment;

2 Art. L513-29, II, 2° 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);
- Loans secured by the remittance, the transfer or the pledge of the receivables arising from the home loans referred above;
- Units or notes (other than subordinated units or subordinated notes) issued by French securitisation vehicles, or other similar vehicles governed by the laws of a Member State of the EU or the EEA if (i) their assets comprise at least 90% of secured loans or other receivables benefiting from the same level of guarantees and (ii) such units or notes benefit from the highest level of credit assessment (*meilleur échelon de qualité de credit*) promissory notes (*billets à ordre*); and
- Substitution assets (*valeurs de remplacement*), 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 substitution assets of the SFH may include within the 15% limit debt securities (*titres de créances*) issued or guaranteed by public sector entities referred to in paragraph I, 1 to 5, of Article L. 513-4 of the French Monetary and Financial Code (*Code monétaire et financier*);
- 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.

Under the SFH Law, cover pool assets comprised of units or notes issued by securitisation vehicles (*organismes de titrisation*) are only eligible to support covered bond issuance if they are rated Aa3/AA- or above (100% eligible) or A3/A- or above (50% eligible). ABS/MBS count as collateral within the pool depending on the originator, the rating of the securitisation, and the time at which the securities were acquired by the issuer.

Weightings of ABS/MBS for *Sociétés de Crédit Foncier* and *Sociétés de Financement de l'Habitat*:

If the underlying assets of the ABS/MBS were originated by the group and they were acquired by the issuer after 31 December 2011, the securities count as collateral with the following ratings:

> 100% as long as they are rated Aaa/AAA;
> 80% if the rating is between Aa3/AA- and Aa1/AA+;
> 0% if the rating is below Aa3/AA-.

If the underlying assets of the ABS/MBS were originated by the group and they were acquired by the issuer before 31 December 2011 or after 31 December 2014, the securities count as collateral with the following ratings:

> 100% as long as they are rated Aaa/AAA;
> 50% if the rating is between Aa3/AA- and Aa1/AA+;
> 0% if the rating is below Aa3/AA-.

If the underlying assets of the ABS/MBS were transferred by an institute that is not a member of the same group as the covered bond issuer and they were acquired by the issuer after 31 December 2011 but before 31 December 2017, the securities count as collateral with the following ratings:

> 100% as long as they are rated Aaa/AAA;
> 50% if the rating is between Aa3/AA- and Aa1/AA+;
> 0% if the rating is below Aa3/AA-.

If the underlying assets of the ABS/MBS were transferred by an institute that is not a member of the same group as the covered bond issuer and they were acquired by the issuer before 31 December 2011 but after 31 December 2014, the securities count as collateral with the following ratings:

> 100% as long as they are rated Aaa/AAA;
> 0% if the rating is below Aaa/AAA.

N.B. These weightings are also applicable to *Sociétés de Crédit Foncier*.

The SFH regulation applies a haircut to in-house guarantors: i.e. if the guarantor is a group institution, only 80% of the loan may be included. In additionif the credit rating is in the BBB region (i.e. below A-), the rate of inclusion drops to 80% for external guarantors and 60% for internal guarantors. If the rating of the guarantor is non-investment grade, the guarantee will no longer be recognized and the guaranteed loans may not be included in the cover pool. For more information please refer to the box below.

Weighting of guaranteed home loans for *Sociétés de Financement de l'Habitat*:

When the home loan guarantor is not part of the same consolidation scope as the SFH or the SCF, the weighting is as follows:

- 100% when the home loan guarantor has at least the second highest level awarded by a rating agency (≥A3/A-/A- by Moody's/S&P/Fitch);
- 80% when the home loan guarantor has at least the third highest level of quality awarded by a rating agency (≥Baa3/BBB-/BBB- by Moody's/S&P/Fitch);
- 0% in all other cases.

When the home loan guarantor is part of the same consolidation scope as the SFH, the guaranteed home loans are weighted as follows:

- 80% when the home loan guarantor has at least the second highest level of quality awarded by a rating agency (≥A3/A-/A- by Moody's/S&P/Fitch);
- 60% when the home loan guarantor has at least the third highest level of quality awarded by a rating agency (≥Baa3/BBB-/BBB- by Moody's/S&P/Fitch);
- 0% in all other cases.

IV. VALUATION AND LTV CRITERIA

The properties are valued according to the French mortgage market accepted practice. The property values are indexed to the French INSEE (*Institut National de la Statistique et des Etudes Economiques*) or PERVAL (Notaries) house price index on a quarterly basis. In most programmes, price decreases are fully reflected in the revaluation, while in the case of price increases, a 20% haircut is applied even though this is not required by law. This valuation is assessed in an annual report by the SFH and certified by the specific controller[3].

In order to ensure overcollateralization (far above the 5% minimum required by law), 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 overcollateralization 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.

V. ASSET-LIABILITY MANAGEMEMT

Overcollateralisation: By law, the SFH framework must maintain a nominal overcollateralisation ratio of 5% on the adjusted cover pool balance at all times. When intra-group loans in the cover pool exceed 25% of the issuer's non-privileged liabilities (i.e. typically the issuer's share capital or any subordinated bonds), a portion of such loans will be excluded from the cover pool for the purpose of calculating the over-collateralisation test.

3 Pursuant to the ACPR regulation CRBF 99-10.

This limits the risk that covered bond issuers rely on assets directly exposed to the credit quality of their parent or any of their affiliates. For the calculation of this ratio, the SFH must take into account its risk exposure on its sponsor bank up to a limit of 25% of the non-privileged assets.

Liquidity buffer: Also by law, the SFH framework requires the SFH to cover, at all times, its treasury needs over a period of 180 days, taking into account the forecasted flows of principal and interest on its assets and net flows related to derivative financial instruments. It is no longer possible to cover the existing six-month liquidity gap with intragroup liquidity line.

Liquidity: The SFH framework provides further liquidity means by allowing, as a last-recourse funding option, the SFH to subscribe to its own privileged covered bonds – up to 10% of total privileged liabilities – provided that the SFH uses these OH as collateral with the central bank or cancels them within 8 days.

Maturity mismatch test: The remaining weighted average life (WAL) of assets should not exceed that of the covered bonds by more than 18 months. Cover pool assets included in this test are only those that are strictly necessary to satisfy the minimum legal OC requirement of 105%.

The SFHs must also submit once a year to the regulator a maturity mismatch forecast cover plan, that has to be verified by the specific controller.

The requirements above are also applicable to SCF.

In addition to the requirements specified by the SFH Law, all French OH programmes include a number of safeguards to hedge interest rate and currency risk, refinancing risk, commingling risk, set–off risk, market risk, etc, as follows:

> Interest rate and currency risks need to be neutralised (the hedging strategy[4]); subject to certain rating triggers, swaps with suitable counterparties have to be entered to ensure that exposure to market risk is properly hedged;

> Liquidity is ensured through a pre-maturity test for hard bullet bonds (designed to ensure that sufficient cash is available to repay the covered bonds in full, on the original maturity date in the event of the sponsor bank's insolvency) and possible maturity extension (usually 12m) for soft bullet bonds. Since November 2014, most publicly placed OH have been issued in soft bullet format;

> Cash flow adequacy is secured through the asset-coverage test and the contractual obligation to neutralise any exposure to interest rate and currency risk;

> Commingling risk is mitigated by the hedging strategy and the Collection Loss Reserve Amount;

> Minimum rating requirements in place for the various third parties that support the transaction, including the bank account holder and swap counterparties.

VI. TRANSPARENCY

All French SFH issuers publish information on their cover pools and outstanding covered bonds on their website. French issuers publish two types of reports 1) French Covered Bond Label Reports (national transparency template) and report on the quality of their assets published on a quarterly basis) and 2) Cover pool investor reports (published on a monthly basis). Due to the new regulation, the SFH must disclose (but not publish), on a quarterly basis: i) the overcollateralization ratio, ii) the components of the calculation of the liquidity buffer, iii) the gap between the average life of the assets and liabilities and iv) the forecast cover plan regarding the matching between the assets and the liabilities.

4 Article L. 513-15 of the Code.

VII. COVER POOL MONITORING & BANKING SUPERVISION

The issuing bank is responsible for the monthly pool monitoring, with the asset coverage test calculation being checked by an independent Asset Monitor (and by the specific controller – some SFH do not have both): under the terms of the asset monitor agreement, the asset monitor tests the calculation of the asset coverage test annually. In case of non-compliance with the asset coverage test or in case the senior unsecured rating of the sponsor bank drops below a predefined trigger rating level, the test has to be performed on a monthly basis. In addition, rating agencies are involved in the programme and re-affirm the ratings of the program upon a pre-defined issuance volume. They also monitor the amount of overcollateralisation required to maintain the triple-A ratings.

Under SFH Law, each issuer has to appoint a Specific Controller (*Contrôleur Spécifique*), and a Substitute Specific Controller (*Contrôleur Spécifique Suppléant*), who are selected from an official list of external auditors and are appointed subject to the prior approval of the ACPR. Their role is (i) to ensure that the issuer complies with the SFH Law (in particular, by verifying the quality and the eligibility of the assets and the cover ratios the issuer has to comply with), (ii) monitor the balance between the issuer's assets and liabilities in terms of rates and maturity (cash flow adequacy) and (iii) notify the issuer and the ACPR if he considers such balance to be unsatisfactory. The Specific Controller remains liable, both as regards the issuer and third parties, for any loss suffered by them, which results from any misconduct or negligence arising in the performance of its duties. The Specific Controller verifies key financial aspects of the activities of the issuer, in particular the extent of the collateral for the covered bonds. He is independent from both the issuer and the sponsor bank. Furthermore, for every issuance with an amount exceeding EUR 500 m, the specific controller must attest the compliance of the cover ratio on the basis of the quarterly programme of debt issued benefiting from the privilege.

Regulations[5] published by French regulator ACPR in December 2014 detail further reporting obligations of French covered bond (both SCF and SFH) issuers. The new regulations add detail to the calculation of the maximum 18-month asset-and liability maturity matching tests and the liquidity test. Issuers now have to show how 180-day liquidity needs can be covered bon a daily basis, rather than just globally over a six-month period. On a quarterly basis, each CB issuer must now provide to the asset monitor and regulator a 'literary report' designed to increase the transparency, consistency and stability of assumptions, thereby improving the effectiveness of the following legal tests: the minimum 105% OC ratio, the minimum 180-day liquidity, the maximum 18-month average life maturity mismatch and the coverage level.

VIII. SEGREGATION OF COVER ASSETS & BANKRUPTCY REMOTENESS

Under the SFH legislation, the holders of the OH benefit from the legal privilege over the SFH programme's eligible assets. If the issuer becomes insolvent, the OHs and other privileged debts are paid in accordance with their payment schedule, and have priority over any of the programme's other debts or non-privileged creditors in relation to the programme's assets. All privileged debts rank *pari passu*.

The issuer may be subject to insolvency, but the SFH law provides for a regime which derogates in many ways from the French insolvency provisions (the same applies for the SCF programmes):

> **Legal Privilege / No acceleration of covered bonds as a result of insolvency of SFH:** in the event of an insolvency proceeding of the SFH (safeguard procedure, judicial reorganization or liquidation), all claims benefiting from the Privilège[6] (including interest) must be paid on their due dates and in preference to all other claims. Until payment in full of all such preferred claims, no other creditors may take any action against the assets of the SFH;

5 http://acpr.banque-france.fr/fileadmin/user_upload/acp/publications/registre-officiel/Instruction-2014-I-16-modifiant-2011-I-06-de-l-acpr.pdf and http://acpr.banque-france.fr/fileadmin/user_upload/acp/publications/registre-officiel/Instruction-2014-I-17-de-l-acpr.pdf.

6 Principal and interest of the Covered Bonds benefit from the so called "Privilège" (priority right of payment). As a consequence, and notwithstanding any legal provisions to the contrary, all amounts payable to the issuer in respect of the cover pool and forward financial instruments are allocated in priority to the payments of any sums due in respect of the covered bonds.

> **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 SFH (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 SFH, any contract may be immediately terminated by the SFH notwithstanding any legal provisions to the contrary;

> **No consolidation:** SFH law precludes the extension of any insolvency procedure in respect of the SFH's shareholders to the SFH itself.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The SFH meet the requirements of Article 52(4) of the UCITS directive.

Article 129 of CRR defines which assets are eligible as collateral for covered bonds to ensure a lower risk-weighting.[7] French guaranteed home loans (*prêts cautionnés*) are eligible for preferential treatment subject to a number of conditions:

> the eligible guaranteed home loan provider qualifies for credit quality step 2 or above (i.e. rated minimum A3/A-/A- by Moody's, S&P and Fitch);

> the portion of each of the loans that is used to meet the requirement for collateralization of the covered bonds does not represent more than 80% of the value of the corresponding residential property located in France (i.e. guaranteed home loans comply with the 80% LTV limit); and,

> where a loan-to-income ratio is limited to 33% when the loan has been granted.

As recommended by the EBA, these guaranteed home loans could be subject to an additional requirement that the law governing the covered bonds should not preclude the administrator of the cover pool from creating mortgages over the loans included in the cover pool where the guarantee has ceased to exist following the issuer's default.

In France and abroad, French OH currently have a 10% risk-weighting under the CRD IV Standard Approach. French OH are also eligible as Level 1 assets to the Liquidity Coverage Ratio (LCR).

7 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

Figure 2: Comparison of French covered bonds

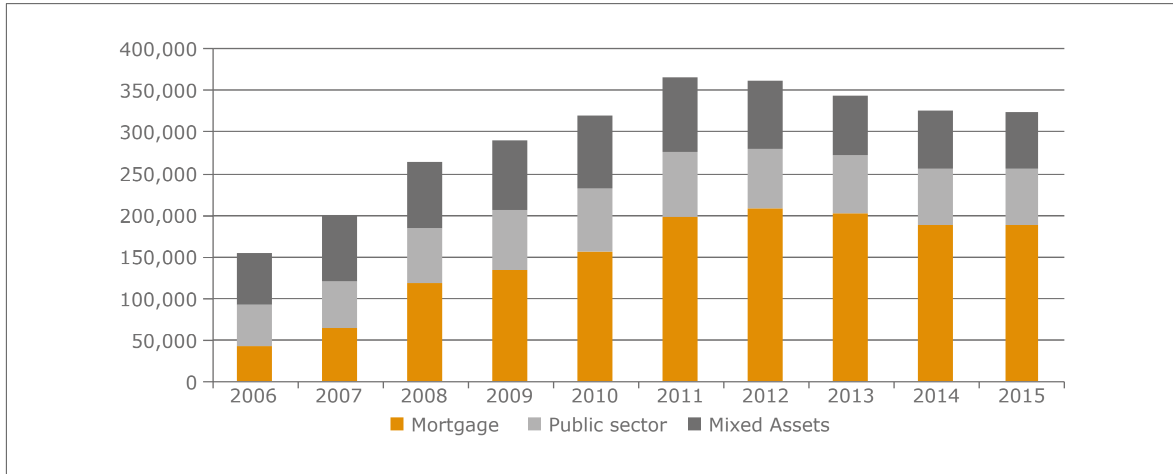
	Obligation de Financement de l'Habitat
Legal Framework	French Monetary and Financial Code, Articles L.513-28 to L.513-33, CRBF regulation no. 99-10 of 9 July 1999 Decree no. 2011-205 of 23 February 2011 and the Banking and Financial Regulation Act no. 2010-1249 of 22 October 2010; amendment in Decree no. 2014-526 of 23 May 2014 and Arrêté of 26 May 2014
Issuer	duly licensed specialized credit institution – Société de Financement de l'Habitat (SFH)
Eligible cover pools	> First rank mortgages and guaranteed home loans (commercial real estate loans are not eligible) > State-guaranteed real estate loans > EEA & outside min A-rated max. 20% > Securitization of the above (subject to specific rules and criteria)
Collateralisation	105%*
Legal Privilege	Yes
LTV ratio	> First-rank residential mortgage loans and guaranteed home loans: max. 80% LTV > State-guaranteed real-estate loans: max. 100% LTV
Substitution assets	Max. 15% of
Liquidity	Requirement to cover all cash flows for a period of 180 days, taking on principal and interests on its assets, and cash flows pertaining to existing six-month liquidity gap with intragroup liquidity line.
Investor protection	Overcollateralisation, 180-day liquidity needs coverage and ability mismatch test (remaining WAL of assets should not exceed WAL
Issue's structure/Transfer of assets	True sale of cover assets or loans secured by financial guarantees (articles L.211-38 and seq French Monetary & Financial Code – transposition of "Collateral" Directives)
Supervision	Autorité de Contrôle Prudentiel et de Résolution (ACPR) – one specific Financiers)
UCITS Compliant	Yes
Risk-weighting according to EU Credit institutions	10%**

* When intra group loans in the cover pool exceed 25% of the issuer's non-privileged liabilities, a portion of such loans will be excluded from the cover pool for the purpose of calculating the overcollateralisation test.

** According to Article 129(1)(e) CRR, guaranteed home loans are eligible for preferential treatment subject to the portion of each of the loans having a maximum LTV of 80%, the eligible guarantor has a rating of maximum Credit Quality Step 2 (equivalent to minimum AA-), and where a loan-to-income ratio respects at most 33% when the loan has been granted.

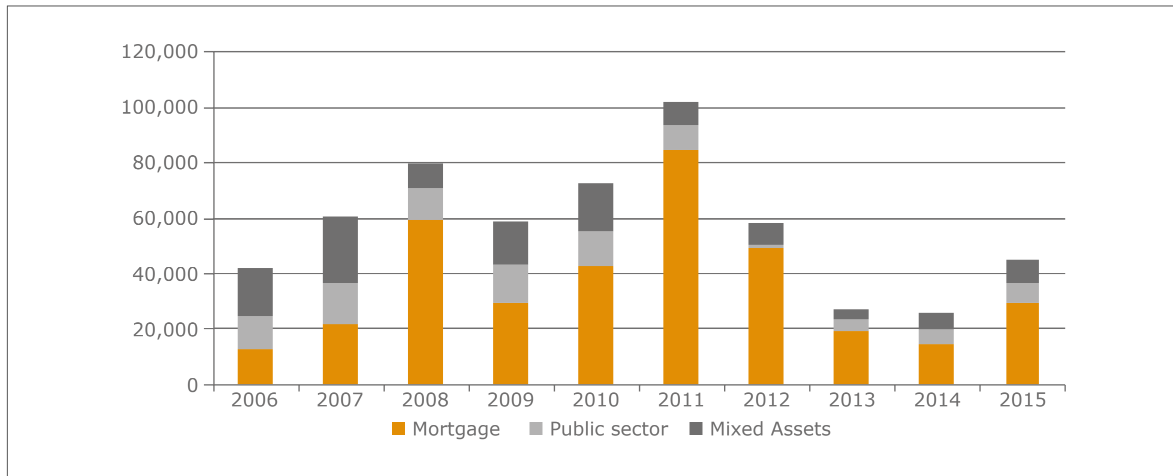
Obligations Foncières	Caisse de Refinancement de l'Habitat
French Monetary and Financial Code, Articles L.513-2 to L.513-27, regulation no. 99-10 of 9 July 1999. Amended by the Decree no. 2011-205 of 23 February 2011, Banking and Financial Regulation Act no. 1249 of 22 October 2010; amendment in Decree no. 2014-526 of 23 May 2014 and Arrêté of 26 May 2014	French Monetary and Financial Code Articles L.313-42 to 313-49 and Art L.515-14-1, article 13 Law n°85-695 of 11 July 1985
duly licensed specialized credit institution – Société de Crédit Foncier (SCF)	duly licensed specialized credit institution – Caisse de Refinancement de l'Habitat
> First-rank residential mortgage loans > First-rank commercial mortgage loans > State-guaranteed real-estate loans > Third party guaranteed real estate loans (max. 35% of total assets) > Public sector loans, bonds and leasing > Securitization of the above (subject to specific rules and criteria)	> First rank residential mortgage loans > State guaranteed mortgage loans > Third party guaranteed real estate loans (max. 35% of total assets) > No securitisation tranches, no RMBS > No loans with duration over 25 years > No loans with unit amount over €1m
105%*	125%
Yes	Yes
> First-rank residential mortgage loans and guaranteed home loans: max. 80% LTV > First-rank commercial mortgage loans: max. 60% LTV > State-guaranteed real-estate loans: max. 100% LTV	> Residential mortgage loans: max 80% LTV, max 90% LTV if overcollateralisation of 25% > State guaranteed mortgage loans: max 100% LTV
total Privileged debts	Not eligible
into account all cash flows resulting of future payments term instruments. It is no longer possible to cover the	
to repo own issuances, controlled ALM, maturity of covered bonds by more than 18 months)	Overcollateralisation, full recourse to the participating banks in case of collateral shortfall
True sale nearly exclusively (but loans secured financial guarantee for "public exposures" legally possible)	ad hoc promissory notes exclusively secured by eligible cover pools
controler – two auditors – AMF (Autorité des Marchés	Autorité de Contrôle Prudentiel et de Résolution (ACPR) – two auditors – AMF (Autorité des Marchés Financiers)
Yes	Yes
10%	10%

> Figure 3: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 4: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

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); GE Money Bank (SCF); HSBC (SFH); La Banque Postale Home Loan (SFH); Société Générale (SCF); Société Générale (SFH).

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/21/Caisse_de_Refinancement_de_l%27Habitat_-_CRH, http://ecbc.eu/framework/71/General_Law_Based_CBs, http://ecbc.eu/framework/73/Obligations_Fonci%C3%A8res_-_OF, http://ecbc.eu/framework/90/Obligations_%C3%A0_l%27Habitat_-_OH.

: AXA Bank Europe SCF; BNP Paribas Home Loan SFH; BNP Paribas Public Sector SCF; BPCE Home Loan SFH; CRH; Caisse Française de Financement Local; Compagnie de Financement Foncier; Credit Agricole Home Loan SFH; Credit Agricole Public Sector SCF; Crédit Mutuel – CIC Home Loan SFH; Crédit Mutuel Arkéa Home Loan SFH; Crédit Mutuel Arkéa Public Sector SCF; HSBC SFH (France); La Banque Postale Home Loan SFH; SG SFH; SG SCF.

3.12 GERMANY

By Wolfgang Kälberer, Association of German Pfandbrief Banks & Chairman of the ECBC Fact Book Working Group
and 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. It supersedes the general bankruptcy regulation (§§ 30-36a of the Pfandbrief Act).

On 26 March 2009 amendments of the PfandBG came in force introducing a new Pfandbrief category, the Aircraft Pfandbrief, and furthermore enhancing the attractiveness of Pfandbriefe for investors. Among many improvements, a further liquidity safeguard has been implemented by introducing a special liquidity buffer of 180 days. Further amendments came into force on 25 November 2010, on 1 January 2011 and 1 January 2014 in order to strengthen the position of the special cover pool administrator. The 2014 amendment of the PfandBG introduced further transparency requirements in favour of Pfandbrief investors.

In the end of 2014, legislation on transposing the BRRD into German law was published; this bill contained further amendments of the Pfandbrief Act. The mayor issue was to provide the BaFin with the competence to order higher minimum OC than the legal 2 % (cover add-on). The most recent amendment came into force on 6 November 2015 in order to adapt the Pfandbrief Act (especially § 36a PfandBG) to the SRM regulation (EU) 806/2014.

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. The minimum requirements to obtain and keep the special licence are as follows:

- Core capital of at least EUR 25 million
- General banking licence which allows the issuer to carry out lending activities
- Suitable risk management procedures and instruments
- Business plan showing regular and sustainable issues as well as necessary organisational structure

Since the German outsourcing guidelines of the BaFin 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 own 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, to be paid from all the cover assets of the issuer, recorded in the cover register. 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.

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). Detailed transparency requirements are regulated in § 28 PfandBG, enhanced by the amendments 2009, 2010 and 2013.

Up to 10% 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 Table 1 of the Annex VI of Directive 2006/48/EC.

The geographical scope of eligible mortgage assets is restricted to EU/EEA countries, to Switzerland, USA, Canada and Japan. 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 I 2 PfandBG) and 20 % for ship and aircraft mortgages (§§ 22 V 2, 26b IV PfandBG).

Derivatives are eligible for cover pools under certain conditions. They must not exceed 12% of the cover assets when calculated on a net present value basis (§ 19 I 4. 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 valuers are regulated in a specific statutory order on the mortgage lending value (Beleihungswertermittlungsverordnung, BelWertV), § 16 IV PfandBG.

Monitoring requirements result from the Capital Requirements Directive (once a year for commercial real estate and once every three years for residential real estate). 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.

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 overcollateralisation of at least 2% after stress tests which have to be carried out weekly. Both the maturity of outstanding Pfandbriefe and the fixed-interest periods of the cover pool are disclosed on a quarterly basis. Details about the calculation are regulated in a special statutory order Net Present Value (Barwertverordnung).

Furthermore, each day Pfandbriefbanks have to calculate the maximum liquidity gap within the next 180 days. This amount has to be covered by liquid assets (§ 4 Ia PfandBG).

Every quarter, the stress-tested NPV of outstanding Pfandbriefe, the cover pool and the over-collateralisation have to be published (§ 28 I PfandBG). The stress tests apply not only to interest rate risks but also to foreign exchange risks.

Cash flow mismatch between cover assets and covered bonds is furthermore reduced by the prepayment rules applicable to fixed interest rate mortgage loans. Prepayments of mortgages during fixed rate periods are only permitted in cases of "legitimate interest" of the borrower or after a period of ten years. If the mortgage is prepaid, the borrower has to compensate the damage of the lender caused by the prepayment (§ 490 II German Civil Code).

VI. TRANSPARENCY

According to § 28 of the Pfandbrief Act (Pfandbriefgesetz, PfandBG), all Pfandbrief Banks are obliged to publish detailed information about their Pfandbrief outstanding and the pertaining cover pools on a quarterly basis. These include:

> The total volume of Pfandbrief outstanding as well as the related cover pools in terms of nominal, net present and stressed net present value;

> The share of derivative financial instruments in the cover assets;

> Information on interest rate and currency risk

> The share of further cover assets, separated between claims against public authorities or claims against credit institutions and separated according to the state in which the debtor is located ;

> The maturity structure of the Pfandbrief and cover assets;

> Information on the size of the cover assets;

> Information on the mortgages by property type/type of use, region and state;

> Information on the average LTV and average seasoning

> Information on the claims against the public sector by state and type of issuer with specific disclosure of exposure guaranteed by Export Credit Agencies;

> Information on the ship mortgages/aircraft registered liens by register country; and

> Information on non-performing cover assets.

The legal transparency requirements are frequently amended in order to increase confidence and security of investors. In 2009, for example, the Pfandbrief Banks pressed for a more detailed disclosure of maturities in order to ensure that investors are better informed about the short and medium-term maturities. The 2010 amendment of the Pfandbrief Act introduced a period of one month after the end of each quarter, in which the quarterly report must be published, except for the fourth quarter, where this period is extended to two months. The 2013 amendment of the PfandBG introduced inter alia further transparency requirements, which have to be applied since spring 2014.

Beside 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 (the vdp's).[1]

Each report is available as a reading version in pdf format and, suitable for further direct processing, in xls (Excel) and csv formats as well. Automatic links to investor data bases are possible. The website offers sorting possibilities for the reports both by reporting date and bank name. All reports are published in English and German language versions. There is a data history available that goes back to 31 December 2008. Hence, the vdp Transparency Initiative provides investors with excellent resources to analyse Pfandbrief cover pools pursuant to their specific needs.

1 http://www.pfandbrief.de/cms/_internet.nsf/tindex/de_pub_pfandbg.htm.

While transparency of cover pools is important for investors, information on covered bonds has to go far beyond cover assets. Another crucial element is transparency regarding the legal structure of covered bonds, which includes information on the legal nature of the cover pool, the segregation of cover assets, the insolvency remoteness of covered bonds, the timely payment in the case of the issuer's insolvency and on the question who actually issues the covered bond. Transparency of these aspects is of utmost importance for investors as covered bonds are designed to survive the issuer's insolvency. The best cover assets will be of no value for the investor if they disappear in the issuer's insolvency estate. The Pfandbrief Act contains detailed regulations of all these aspects, thus ensuring investors a high degree of product transparency.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

BaFin carries out the general banking supervision on German Pfandbrief banks.

In addition, 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 carries out cover pool audits using own staff or external auditors.

Cover audits

The cover pools are subject to a special audit conducted usually every two 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. These audits are made on the basis of suitable samples, which BaFin defines with the help of extensive information about the composition of the cover pools. Moreover, the audit may concentrate on particular areas if BaFin wishes to focus on specific countries, currencies or types of property use. More than 100 individual cases are audited, depending on the size and composition of the cover pool. Where the loan files are not stored at a central location, and given that the documentation for one individual property finance transaction can fill several dozen ring binders, this calls for intensive logistical preparations in order to limit the – in practice – customary length of the audit to two to three months.

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 und 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 a 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 2. HS 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, 6 PfandBG). He is allowed to use premises and staff of the Pfandbriefbank (§31 VIII PfandBG).

The cover pool administrator may even be appointed before the insolvency proceedings have been launched (§ 30 V 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.

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.

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 over-collateralisation (OC). However, the insolvency administrator may only demand that the over-collateralisation 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 satisfaction of 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. Thus, the cover pool administrator could act as head of a bank in respect of transactions with the Deutsche Bundesbank; he would also be entitled to issue Pfandbriefe.

More precisely, § 2 IV PfandBG stipulates that the banking license will be maintained with respect to the cover pools and the liabilities covered there from until the Pfandbrief liabilities have been fulfilled in their entirety and on time.

A revised version of § 30 PfandBG addressing the ring-fencing of the cover assets from the insolvency estate confirms this new approach by introducing the new heading 'segregation principle' and by referring to the cover assets as 'insolvency-free estates'. Consistently, the amended PfandBG incorporates the term 'Pfandbrief bank with limited business activities'.

Thus, the amendments 2010 ensure that the cover pool administrator acts on behalf of a solvent Pfandbrief bank that is in possession of a license to engage in banking business in general and in Pfandbrief business more specifically, even if the bank itself is insolvent and the general banking license withdrawn. Hence, the Pfandbrief bank with limited business activities is treated as a solvent bank in order to comply with the eligibility criterion "counterparty" for central bank open market operation with the perspective to satisfy its liquidity needs.

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.

According to § 35 I PfandBG, the cover pool administrator may also agree with another Pfandbrief bank that the assets recorded in the insolvent Pfandbrief bank's cover register may be managed in a fiduciary capacity by the insolvent Pfandbrief bank's cover pool administrator for the other Pfandbrief bank.

Thus, particular provisions allow for an easy "transfer" of mortgages outside of the common provisions of civil law, e.g. the management in a fiduciary capacity of registered land charges (so called "Buchgrundschulden") and foreign mortgages. Both forms require the written approval of the BaFin.

Since 1 January 2011, § 36a PfandBG stipulates that the specific provisions of the PfandBG have priority during the restructuring of a Pfandbriefe issuing institution according to the new "Restrukturierungsgesetz". The amendments 2013 clarified a few issues regarding the bridge bank solution, those of 2015 adapted § 36a PfandBG to the SRM regulation (EU) 806/2014.

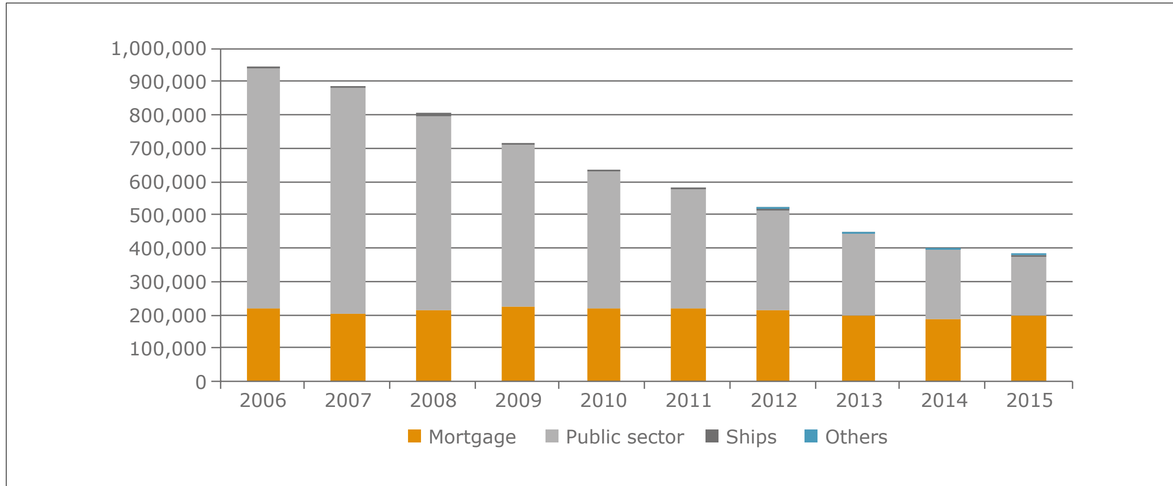
IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The risk-weighting of covered bonds (German Pfandbriefe and foreign covered bonds) is regulated by Art. 129 Capital Requirements Regulation (CRR). Thus, German Pfandbriefe as well as foreign covered bonds complying with the CRR and carrying an external rating of at least AA- will enjoy a 10% risk weight. Cover pool derivatives will not be receiving a preferential treatment under the new framework any more.

Finally, German investment legislation allows investment funds to invest up to 25% of the fund's assets in Pfandbriefe and furthermore in covered bonds issued by credit institutions complying with the requirements of Article 52(4) of the UCITS Directive (Article 60(2) German Investment Act).[2]

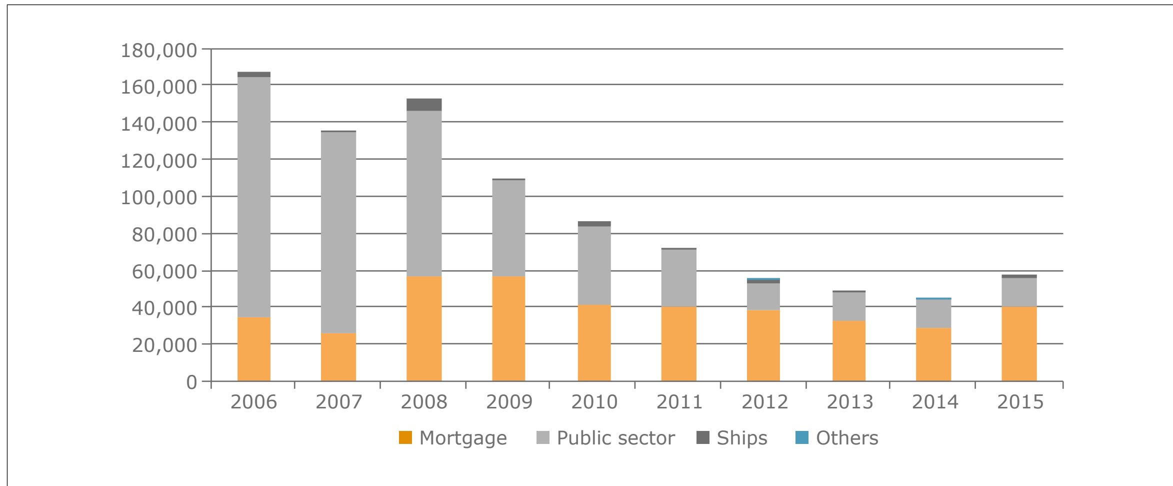
2 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> Figure 1: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 2: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: There are currently about 70 Pfandbrief banks in Germany, including banks from all three pillars of the German banking industry (private banks, public banks and co-operative banks). They include 18 former mortgage banks, 10 Landesbanks and circa 30 savings banks. Also, an increasing number of private universal banks became Pfandbrief banks within the last years.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/23/Pfandbriefe.

: NORD/LB; UniCreditBank AG HVB Mortgage; UniCreditBank AG HVB Public.

3.13 GREECE

By Alexander Metallinos, Karatzas & Partners Law Firm

I. FRAMEWORK

In Greece, the primary legal basis for Covered Bond issuance is Article 152 of Law 4261/2014 "On Access to the Activity of Credit Institutions, Prudential Supervision of Credit Institutions and Investment Firms (transposition of Directive 2013/36/EU), Repeal of Law 3601/2007 and Other Provisions", (the "Primary Legislation"). This provision is identical with the provision of Article 91 of the now repealed Law 3601/2007, which had entered into force on 1 August 2007. Therefore the repeal of Law 3601/2007 had no effect on the regulation of covered bonds. The Primary Legislation supersedes general provisions of law contained in the Civil Code, the Code of Civil Procedure and the Bankruptcy Code. By way of implementation of the Primary Legislation and, pursuant to an authorization provided by the latter, the Governor of the Bank of Greece has issued Act nr. 2598/2.11.2007 which was replaced by the Bank of Greece Act nr. 2620/28.8.2009 (the "Secondary Legislation"). Finally, the legislative framework in Greece is supplemented by Law 3156/2003 "On Bond Loans, Securitization of Claims and of Claims from Real Estate" (the "Bond Loan and Securitization Law"), to the extent that the Primary Legislation cross-refers to it.

II. STRUCTURE OF THE ISSUER

The Greek legislative framework permits the issuance of covered bonds in two ways, either directly by a credit institution, or indirectly by a subsidiary of a credit institution. In the direct issuance structure the covered bonds are issued by a credit institution and the segregation of the cover pool is achieved through a statutory pledge over the cover pool assets.

Paragraph 13 of the Primary Legislation allows for a variation to the direct issuance. Under this structure the covered bonds are issued by the credit institution and are guaranteed by a special purpose entity (SPE), which acquires the cover pool. This structure has not yet been used by any issuer.

In the indirect issuance structure the covered bonds are issued by a special purpose entity being a subsidiary of a credit institution, which purchases the cover assets from the credit institution by virtue of the provisions of the Bond Loan and Securitization Law, and are guaranteed by the credit institution.

The reason for introducing the indirect issuance structure was that historically most Greek banks had issued a significant amount of notes under medium term note (MTN) programmes containing negative pledge covenants, which did not allow the creation of security over the cover pool, as is necessary for the direct issuance of covered bonds. However all Greek banks having MTN programmes have now amended the terms of such programmes to carve out the security provided to holders of covered bonds from the scope of the negative pledge covenants, and therefore the need for the indirect issuance of covered bonds has been removed. In fact, the only indirect issuance of covered bonds has now been fully redeemed and it is to be expected that the regulator will likely not approve any future indirect issue of covered bonds.

III. COVER ASSETS

The type of assets that may form part of the cover pool is regulated by the Secondary Legislation by reference to assets referred to in a section of Act nr. 2588/20.8.2007 regarding the calculation of capital requirements in relation to credit risk according to the standardized approach. Following the entry into force of Regulation 575/2013 (Capital Requirements Regulation), this reference should be read as a reference to Article 129 of the Regulation. Cover assets are primarily residential mortgage loans, loans secured by a mortgage on commercial properties, loans secured by a mortgage on ships and loans to or guaranteed by state entities. Residential and commercial mortgage loans may only be included in the cover pool if the property subject to the mortgage is situated in Greece and hence is governed by Greek law. 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 and invest-

ment services undertakings may be included in the cover pool up to an aggregate limit of 15% of the nominal value of the outstanding covered bonds. Derivatives may also be included in the cover pool to the extent that they are used exclusively for the purpose of hedging the interest rate, FX or liquidity risk. To the extent that the counterparties to such derivatives are credit institutions and investment services undertakings (as opposed to state entities or central counterparties in organized markets), the net present value of derivatives included in the pool is included in the above 15% limit. Finally, the cover assets may be substituted by certain tradable assets but only up to the amount by which the aggregate nominal value of the cover assets including accrued interest exceeds the nominal value of the outstanding covered bonds including accrued interest.

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, by way of example, 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 valuation of properties must be performed by an independent valuer at or below the market value and must be repeated every year in relation to commercial properties and every three years in relation to residential properties (Article 208 of Regulation 575/2013).

V. ASSET-LIABILITY MANAGEMENT

The Secondary Legislation provides for tests that are required to be met for the full duration of the covered bonds.

More particularly, the Secondary Legislation provides for the following statutory tests:

(a) The nominal value of the covered bonds including accrued interest may not exceed at any point in time 95% of the nominal value of the cover assets including accrued interest.

(b) The net present value of obligations to holders of covered bonds and other creditors secured by the cover pool may not exceed the net present value of the cover assets including the derivatives used for hedging. This test must be met even under the hypothesis of a parallel movement of the yield curves by 200 basis points.

(c) The amount of interest payable to holders of covered bonds for the next 12 months must not exceed the amount of interest expected to be received from the cover assets over the same period. For the assessment of the fulfilment of this test derivatives entered into for hedging purposes are taken into account.

Tests (b) and (c) are performed on a quarterly basis. In case any of the tests is not met, the credit institution is obliged to immediately take the necessary measures to remedy the situation.

The results of the tests (a) to (c) above and the procedures used to monitor the compliance with such tests are audited on a yearly basis by an auditor independent of the statutory auditors of the credit institution.

The breach of the above mentioned legislation leads to regulatory sanctions. The parties can also agree that the breach of the statutory tests constitutes an event of default.

Moreover, since the Bank of Greece approves each issuance of covered bonds, it would not approve any issuance in case the statutory tests (including the liquidity test) are not met. Therefore a breach of the statutory (but not of any contractual) liquidity test would in practice lead to a Programme freeze. Also the failure to comply with the requirement to restore the statutory tests may lead to sanctions by the Bank of Greece. Apart from

the sanctions provided by the Primary and the Secondary Legislation, the contracting parties may agree to additional sanctions, in particular, to alternative administration or an event of default.

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 land registry for the establishment 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. 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 with statutory tests, mentioned above, is audited by independent auditors. Such audit reports, as well as the quarterly compliance reports by the issuer shall be submitted with the Bank of Greece as regulator.

Prerequisites for the issuance of covered bonds

According to the Primary Legislation, covered bonds may be issued by credit institutions having Greece as home member state. However, in case of issuance of covered bonds by a credit institution having as home state another member state of the European Economic Area (EEA), and provided that they are characterized as covered bonds in accordance with the law of such member state, the provisions of the Primary Legislation on the creation of a statutory pledge will apply in relation to claims governed by Greek law, as well as the tax exemptions which apply to Greek bonds. Therefore, foreign banks established within the EEA having a significant loan portfolio in Greece may use the loans of such portfolio as part of the cover pool.

The Secondary Legislation sets additional prerequisites for the issuance of covered bonds. Specifically the credit institutions issuing covered bonds:

- must have certain minimum risk management and internal control requirements including suitable policies and procedures for the issuance of covered bonds, organizational requirements, IT infrastructure and a policy for the reduction and management of risks deriving from the issuance of covered bonds, such as interest rate risk, counterparty risk, operational risk, FX risk and liquidity risk; and
- must have aggregate regulatory capital of at least 500 million Euros and a capital adequacy ratio of at least 9%.

Reporting duties of the issuer to the supervisor concerning covered bonds and cover pool

Credit institutions that issue (directly or indirectly) covered bonds shall provide in their financial statements and on their websites information on such covered bonds including on the nominal value and net present value of the bonds and the cover pool and the net present value of derivatives used for hedging.

More particularly, pursuant the Secondary Legislation there are the following disclosure requirements to the Bank of Greece until the end of March of each year in relation to data as of end of December of the year preceding:

- The results of an audit conducted pursuant to the provisions of the Secondary Legislation and following the processes and restrictions as set by the Secondary legislation, certified by an auditor.
- Detailed data of the cover pool assets that would confirm that the limits set under the Secondary Legislation are met, along with the information related to the revaluation of the real estate securing the mortgage and other loans.

- > The following data and information:
  - a) weighted average interest-rate per category of assets and weighted average interest-rate of all cover pool assets;
  - b) the real estate values of the mortgages and of the other loans;
  - c) validation of the selected policy of risk hedging with detailed analysis of the degree of effectiveness of this; and
  - d) table of corresponding maturities of the covered bonds and corresponding assets of the cover pool and the derivatives.
- > Finally all the credit institutions have to communicate to the Bank of Greece, within 30 days from the end of each quarter, concise information regarding the results from the tests provided under the Secondary Legislation as of the end of the 1st, 2nd and 3rd quarter.

Banking supervision in crisis

As described in detail under section VIII of this article, the Primary Legislation provides that in case of insolvency of the issuer, the Bank of Greece may appoint an administrator, regardless of the powers it may assign to a special liquidator pursuant to the generally applicable banking special liquidation provisions, if the trustee does not do so.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Segregation of cover assets

In case of a direct issuance 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 is held by a trustee 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 trustee. A summary of such document is registered in the land 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.

The Primary Legislation creates an absolute priority of holders of covered bonds and other secured parties over the cover pool. The statutory pledge supersedes the general privileges in favour of certain preferred claims (such as claims of employees, the Greek state and social security organizations) provided for by the Code of Civil Procedure. Furthermore, 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.

In case of an indirect issuance or a direct issuance guaranteed by an SPE the cover pool assets are segregated from the estate of the credit institution by virtue of their sale to the special purpose entity. For such transfer, the provisions of the Bond Loan and Securitization Law apply, which provide equivalent protection from third party creditors and insolvency to the one the Primary Legislation provides in case of direct issuance.

It is worth noting that according to the Primary Legislation both in case of direct and of indirect issuance 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 Greek 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 the Secondary Legislation covered bonds do not automatically accelerate upon insolvency of the credit institution having issued (in a direct issuance structure) or guaranteed (in an indirect one) the covered bonds.

Pursuant to the Primary Legislation, as amended, the bond loan programme may provide that either from the outset or following the occurrence of certain events, as, indicatively, initiation of insolvency proceedings against the issuer, the trustee will be entitled to assign or undertake the collection and management, in general, of the cover assets by application *mutatis mutandis* of the Bond Loan and Securitization Law.

Additionally, the Primary Legislation provides that in case of insolvency of the issuer, the Bank of Greece may appoint an administrator, regardless of the powers they may assign to a supervisor or liquidator pursuant to Articles 137 and 145 of the Primary Legislation, if the trustee does not do so. The proceeds coming both from the collections of the claims that are included in the legal pledge and from the realization of the rest of the assets which are subject to the legal pledge are applied towards the repayment/redemption of the bonds and of the other claims, which are secured by the legal pledge, pursuant to the terms of the bond loan.

The provisions of the Bond Loan and Securitization Law are respectively applied in the sale, transfer, collection and administration, in general, of the assets comprising the cover.

In case of an indirect issuance the obligations of the credit institution under the Guarantee are automatically accelerated in case of bankruptcy by virtue of the generally applicable provisions of bankruptcy law, but this does not lead to automatic prepayment of the covered bonds. To the contrary, the terms of the covered bonds may provide that the proceeds of the Guarantee will be placed in a special account to be used for the servicing of the covered bonds.

Access to liquidity in case of insolvency

The Primary legislation provides that the trustee can be entitled, pursuant to the terms of the programme and the legal relationship connecting the trustee with the bondholders, to sell and transfer the cover assets, and to use the net proceeds of such sale in order to redeem the bonds which are secured by the legal pledge, by way of derogation from Articles 1239 and 1254 of the Civil Code.

The above-mentioned sale may occur by virtue of the Bond Loan and Securitization Law or the application of the generally applicable provisions.

Exercise of the claims of covered bondholders against the remaining assets of the credit institution

The purpose of the Primary Legislation, as was expressly stated in the introductory note to the law, was to ensure that holders of covered bonds would 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. This was also expressly stated in the Secondary Legislation.

The programme of the covered bonds may provide that more than one series or issues of bonds may be secured through a single statutory pledge.

The programme may also provide on any other issue related to the priority in satisfaction of the Covered Bondholders and the way they are organized in a group and they are represented, by derogation from the Bond Loan and Securitization Law. Furthermore, the parties may agree to apply a foreign law on these matters.

Protection of depositors

In order to not jeopardize the interests of depositors in case of insolvency of a credit institution due to the segregation (discussed above) of high quality assets in favour of the holders of covered bonds, the Secondary Legislation provides that, in case the cover assets exceed significantly the amount of 20% of the available assets of the credit institution on an unconsolidated basis, the Bank of Greece may impose additional capital adequacy requirements. For the purposes of this calculation available assets are considered to be all assets of the credit institution excluding (i) assets subject to securitization, (ii) assets subject to reverse repo agreements and (iii) assets encumbered in favour of third parties. In exercising its discretion to impose additional capital adequacy requirements the Bank of Greece will take into account qualitative considerations such as (i) any deterioration of the average quality of the remaining available assets after the issuance of covered bonds, (ii) the increase of the liquidity of the credit institution combined and any positive effects it may have on its credit rating and prospects and (iii) the results of additional stress tests. As of November 2014 the authority to impose additional capital requirements was conferred to the European Central Bank subject to and in accordance with the provisions of Regulation 1024/2013.

After the entry into force of Regulation 575/2013 it should be deemed that provisions of national law on capital requirements have been tacitly abolished. This would apply to the above provision of the Secondary Legislation. The purpose of protecting depositors from an excessive encumbrance of assets is served indirectly by Article 45 of Directive 2014/59 (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.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

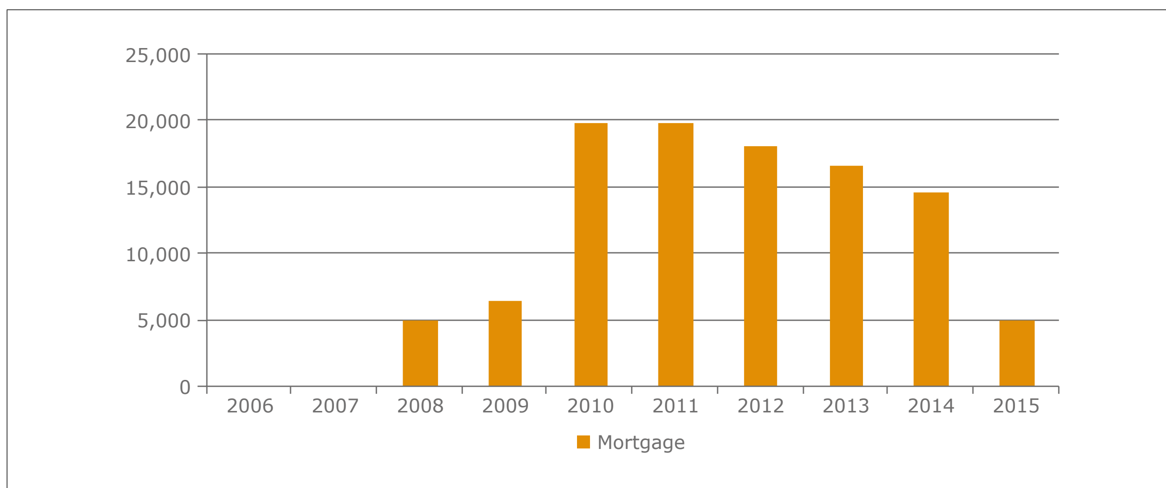
The risk-weighting of covered bonds (both Greek and foreign) is regulated by Article 129 of Regulation 575/2013. According to this bonds falling within the provisions of Article 52(4) of the UCITS Directive are eligible for preferential treatment, provided that the cover pool consists of the assets enumerated in paragraph 1 of Article 129 of Regulation 575/2013 and the provisions of paragraph 7 of the same article regarding the information provided to holders of covered bonds are met. By way of exception, bonds issued before the 31st December 2007 and falling within the provisions of Article 52(4) of the UCITS Directive are considered as covered bonds, even if the cover assets do not comply with the provisions of Regulation 575/2013[2].

Directly issued Greek covered bonds comply with both the UCITS Directive and Regulation 575/2013 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, because they are not issued by a credit institution.

1 Greece transposed the BRRD through law 4335/2015.

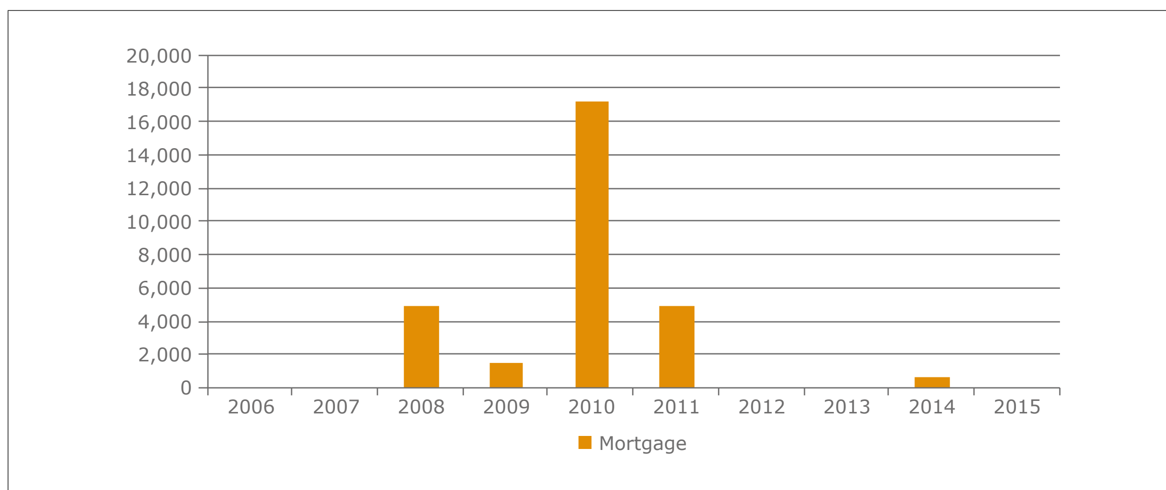
2 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> Figure 1: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 2: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: There are four issuers in Greece: Alpha Bank; National Bank of Greece; Eurobank Ergasias and Pireus Bank.

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/66/Greece.

3.14 HUNGARY

By András Gábor Botos, Association of Hungarian Mortgage Banks

I. FRAMEWORK

Act No. XXX of 1997 on Mortgage Banks and Mortgage Bonds (Mortgage Bank Act) contains the specific rules applicable to mortgage banks 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 banks, unless otherwise provided by the Mortgage Bank Act.

II. STRUCTURE OF THE ISSUER

Mortgage banks are specialised credit institutions in Hungary whose business activity is restricted, in principle, to mortgage lending and auxiliary financial services: mortgage banks grant financial loans secured by mortgages on real estate property located on the territory of the Republic 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 banks are entitled to issue mortgage bonds (*"jelzáloglevél"*). Cover assets will be held on the balance sheet of the mortgage bank. All the mortgage bonds of a single mortgage bank are covered by the same coverage pool which is only open to changes with the prior permission of the coverage supervisor, acting in the interest of mortgage bond holders.

III. COVER ASSETS

The Mortgage Bank Act provides that mortgage banks shall always possess cover surpassing the principal of outstanding mortgage bonds and the interest thereon 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 banks shall prepare a manual of keeping the register of cover assets (*"fedezet-nyilvántartás"*), which also needs the approval of the Hungarian National Bank (HNB) in its capacity as financial supervisory authority and the coverage supervisor.

Loans secured by a residential real estate can be taken in cover up to 70% of the mortgage lending value of the property. In case of loans secured by commercial real estate the limit is 60%.

Mortgage bonds are covered by loans secured by mortgages (*"jelzálogjog"*), independent mortgage liens (*"önálló zálogjog"*), separated mortgages (*"különvált zálogjog"*) or by joint and several surety assumed by the Hungarian State (*"állami készfizető kezességvállalás"*). Supplementary coverage may exclusively consist of liquid assets listed in the Mortgage Bank Act and may not exceed 20% of the coverage. Pursuant to the Mortgage Bank Act, cover assets must be entered into the register of cover. The availability and quality of cover assets is 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 bank is obligated to hedge the currency exchange risk by entering into derivative transactions. Section 3 (10) of the Mortgage Bank Act provides that mortgage banks are entitled to conclude such transactions exclusively for hedging purposes, i.e. risk management and liquidity. The Mortgage Bank Act entitles mortgage banks to include derivatives in the ordinary coverage as well.

IV. VALUATION AND LTV CRITERIA

The rules of calculation of the mortgage lending value (*"hitelbiztosítéki érték"*) 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 banks 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 bank'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 HNB.

V. ASSET – LIABILITY MANAGEMENT

As indicated above, the Mortgage Bank Act provides that mortgage banks shall always possess cover surpassing the principal of outstanding mortgage bonds and the interest thereon. Mortgage banks 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 their present value as well.

Cash flow mismatch between cover assets and cover bonds is furthermore reduced by special prepayment restrictions on the borrowers' side.

VI. TRANSPARENCY

Mortgage banks 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 HNB as well.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The coverage supervisor (cover pool monitor) shall be appointed by the mortgage bank and approved by HNB. 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 bank.

As a matter of fact, Hungarian mortgage banks 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:

> 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 bank and the coverage

supervisor is governed by civil law, it may not be lawfully terminated without the approval of the HNB. Within the scope of his coverage supervision activities, the coverage supervisor may not be instructed by the mortgage bank.

The HNB is responsible for verifying the compliance of the credit institutions, including the mortgage banks, with the Credit Institutions Act and other acts e.g. the Mortgage Banks Act, and applicable banking regulations. The HNB is entitled to impose various sanctions on credit institutions, including warnings of non-compliance, withdrawing licences 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 banks 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, HNB shall draw up an analysis schedule and conduct on site audits of mortgage banks 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 bank to safeguard the interests of bondholders and derivative partners. The cover pool administrator cannot be identical with the insolvency administrator of the mortgage bank. 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 bank may grant for liquidity, however, the transfer of the portfolio or parts of it requires the prior written consent of the HNB.

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 bank 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. 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 HNB or the only competent Metropolitan Court Budapest on issuer default, after proving all relevant circumstances, it is only the HNB who is entitled to initiate an insolvency proceeding against the mortgage bank.

Hungarian legal provisions also provide for a wide-range of measurements, including extraordinary measurements, to be taken by the HNB prior to any insolvency situation.

For example, the HNB is entitled to delegate a supervisory commissioner to the mortgage bank. This extraordinary measurement may be taken by the HNB 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 bank and the rights of the management of the mortgage bank will be restricted in order to guarantee the satisfaction of the claims of the mortgage bank's creditors, e. g. bondholders' and derivative partners' claims.

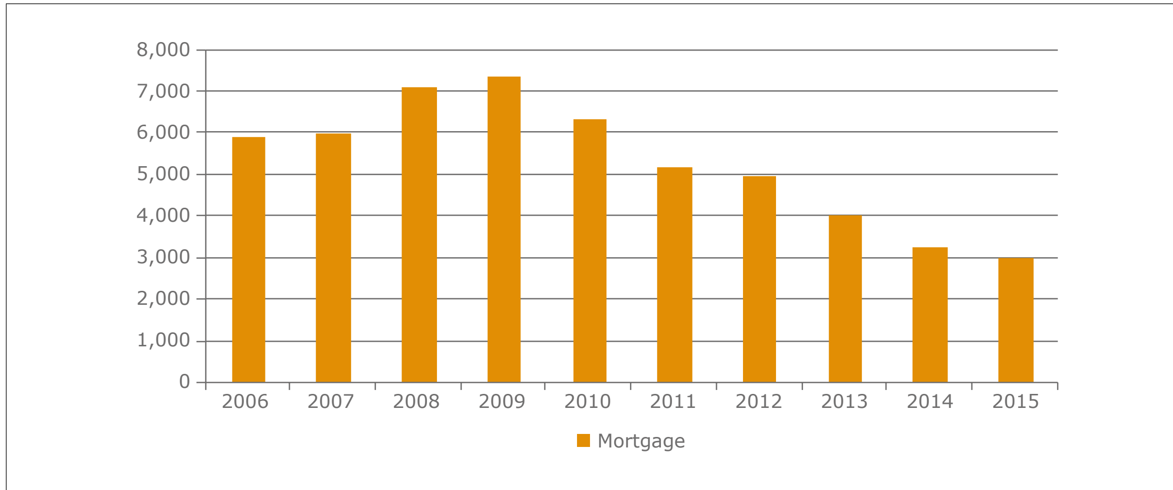
IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

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]

Hungarian covered bonds issued in euro zone countries qualify as European Central Bank (ECB) eligible. Furthermore, already in February 2008 one of the Hungarian mortgage banks successfully closed its debut transaction in the "Jumbo" covered bond market.

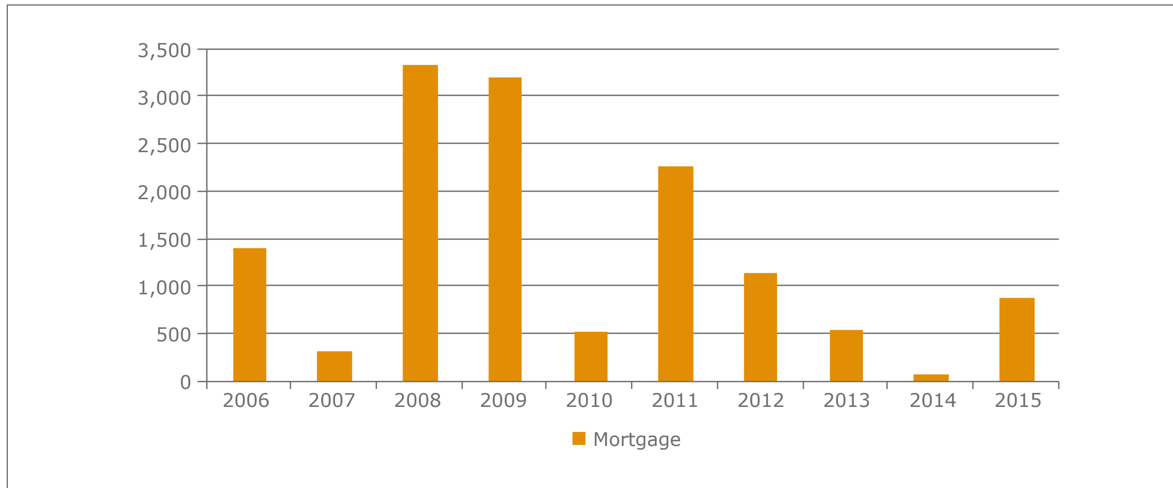
1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> Figure 1: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 2: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: OTP Jelzálogbank Zrt. (OTP Mortgage Bank Ltd.), FHB Jelzálogbank Nyrt. (FHB Mortgage Bank Ltd.) and UniCredit Jelzálogbank Zrt. (UniCredit Mortgage Bank Ltd). Under establishment: Erste Jelzálogbank Zrt. (Erste Mortgage Bank Ltd.), K&H Jelzálogbank Zrt. (K&H Mortgage Bank Ltd.), MKB Jelzálogbank Zrt. (MKB Mortgage Bank Ltd.).

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/27/Hungarian_Covered_Bonds.

3.15 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 14 March 2008 (Lög nr. 11/2008 um sértryggð skuldabréf, hereinafter the "ICBA"). The ICBA supersedes the general bankruptcy law and grants covered bond investors a priority claim on eligible cover assets (ICBA: Chapter VII, Article 14). Regulatory provisions 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 regulations define in more detail the criteria for obtaining a covered bond issuance licence, 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 licences for the issuance of covered bonds. Licences to issue covered bonds can only be granted to commercial banks, savings banks and credit undertakings. The issuer must meet certain criteria to qualify for the license. These criteria include the submission of a financial 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 FME has the right to withdraw the licence 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 licence (Figure 1).

> Figure 1: Licence needed to issue covered bonds

Requirements for issuance licence

- > Issuer must supply the FME with a board resolution that the board approves the application for a covered bond licence.
- > 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 must submit a financial 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 of covered bond investors. It should also be noted that 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 specify 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 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, municipality in Iceland or in another member state, or guaranteed by such member state.

Derivative contracts

The ICBA provides for 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 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 bond can:

> Request additional collateral;

> Terminate the derivative contract and open a new contract with a counterparty that meets the minimum rating requirement, or;

> Request that the counterparty provide a guarantee from a third party that meets the minimum rating requirement.

Substitute assets

The ICBA allows for the inclusion of the following substitute assets:

> Demand deposits with a regulated financial firm;

> Deposits with or claims against a member state or central bank in a member state;

> Claims against other legal entities which, in FME's estimation, do not involve greater risk than those referred to in the two points above of this paragraph.

1 Member state: a state which is a party to the Agreement on the European Economic Area or the European Free Trade Association Treaty, or the Faroe Islands.

FME may approve as substitute collateral the following claims:

- Claims against municipalities in member states;
- Claims against a regulated financial firm other than those referred to the point above (of the first paragraph), provided the final maturity is within one year of their issuance;
- Claims against foreign development banks listed in rules adopted by FME;
- Claims against other legal entities which do not involve greater risk than the substitute collateral referred to the three points above of this paragraph.

Substitute collateral may not comprise more than 20% of the value of the cover pool. The FME may 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 properties that act as a collateral for mortgages in the cover pool (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. Data on real estate price developments from the Land Registry of Iceland of Iceland, for instance, may be used as a basis, together with other systematic collection of real estate price data.

If an issuer assesses the market value of real estate, the independent inspector provided for must verify that the appraisal is based on accepted methodology. The 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 what methodology is used, who has carried out the appraisal and when it was made.

For the various mortgage types eligible as cover, the maximum LTV ratios apply (ICBA: Chapter III, Article 7):

- 80% of the value for real estate, side-leasehold rights and tenant-owner rights where the property is intended for residential use.
- 70% of the value for real estate intended for agricultural use.
- 60% of the value for real estate, site-leasehold rights and tenant-owner rights 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 overcollateralization (OC). However, the issuer can adhere the 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 issuing institution shall ensure that the cash flow with respect to the assets in the cover pool, derivatives agreements and the covered bonds are such that the institution is always able to meet its payment obligations towards holders of covered bonds and counterparties in derivatives agreements (ICBA: Chapter V, Article 11). The issuer should be able to account for these funds separately.

VI. TRANSPARENCY

The issuers are already presenting information regarding their cover pool and outstanding covered bonds on a monthly or at least on quarterly basis. This information is today on the issuer's website.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The covered bond issuers fall under the special supervision of the FME. The financial regulator monitors the institutions' compliance with the ICBA and other related regulatory provisions (e.g. ICBR). If the covered bond issuer is in material breach of its obligation under the legal framework, the FME can issue a warning or revoke the issue license altogether. The FME may also revoke a license if the institution has declared that it waives the license 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).

For each issuing institution, the FME must appoint an independent and suitably qualified cover pool inspector, who is paid by the covered bond issuer. The duties of the cover pool inspector are to monitor the register and verify that covered bonds, derivatives agreements and the cover assets are correctly recorded. The inspector also ensures compliance with matching and market risk limits in accordance with ICBA. The institution is obliged to provide the covered bond inspector with any information requested relating to its covered bond operations. The cover pool monitor 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 register of eligible cover assets, substitute assets, derivative contracts and outstanding covered bonds (ICBA: Chapter 6, Section 13). The law specifies the form and content of such a register, which must be easily accessible to the FME and the cover pool 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 14). 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 after issuer insolvency must be registered in the cover pool.

Issuer insolvency

In the event of issuer insolvency, the registered cover assets and the respective covered bonds are segregated from the general insolvency estate. 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. However, 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 out-

standing 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 overcollateralization (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. 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 pool 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). Icelandic covered bonds comply with the criteria of Article 52(4) UCITS and with the covered bond criteria defined in Article 129(1) CRR.[2] 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 Sedlabanki (the Icelandic Central Bank).

X. ADDITIONAL INFORMATION

Legislative covered bonds in Iceland

Arion Bank and Íslandsbanki were both granted a licence to issue covered bonds under ICBA in the fall of 2011 and both followed up by issuing covered bonds denominated in Icelandic krona to domestic investors. Landsbankinn was granted a licence to issue covered bonds in April 2013 and issued their first covered bonds in June 2013. The banks use their covered bond programs to fund their residential mortgage portfolios.

A specific attribute of the Icelandic mortgage market is that the largest majority of Icelandic mortgages are inflation linked. This means that the principal of each mortgage follows the changes in consumer prices in Iceland. This has changed since 2011 when the banks started to offer fixed rate loans that were not tied to inflation. Normally, the bonds are registered at the Nasdaq OMX Iceland (NASDAQ OMX Group) or another European stock exchange.

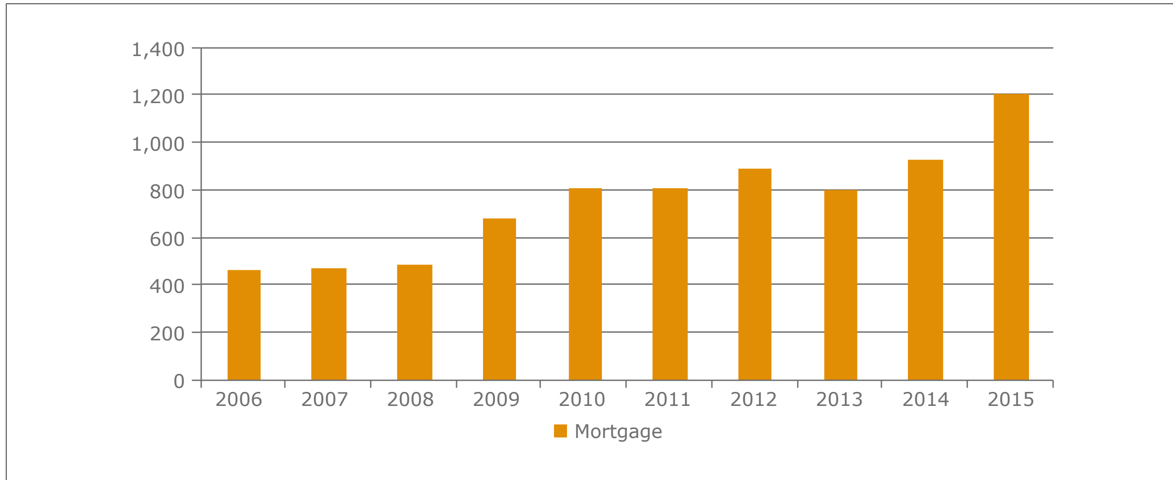
Covered bonds in Iceland prior to the financial crisis of 2008

The legislation on covered bonds (ICBA) came into force in March 2008 only a few months before the collapse of the Icelandic financial system in October month of the same year. Covered bonds based on the legislation had not been issued prior to the crisis of 2008 although one bank had been granted a licence from the FME to issue covered bonds without ever issuing bonds.

Both Glitnir and Kaupthing bank and other smaller financial institutions set up structured covered bond programs in 2006 and 2007. The bonds issued of these programs were mainly used as collateral in repo transactions with the Central bank of Iceland and/or other counterparties. A small minority of these bonds was sold to other investors. The holders of the structured covered bonds did not take a loss on their holding despite the bankruptcy proceedings of the issuers. The largest of these structured covered bond programs was the Kaupthing ISK 200 bn covered bond program that was restructured in late 2011 when Arion bank took over as issuer and acquired the mortgages under the program. Total outstanding Arion Bank structured covered bonds is EUR 421 million as of 31 December 2015.

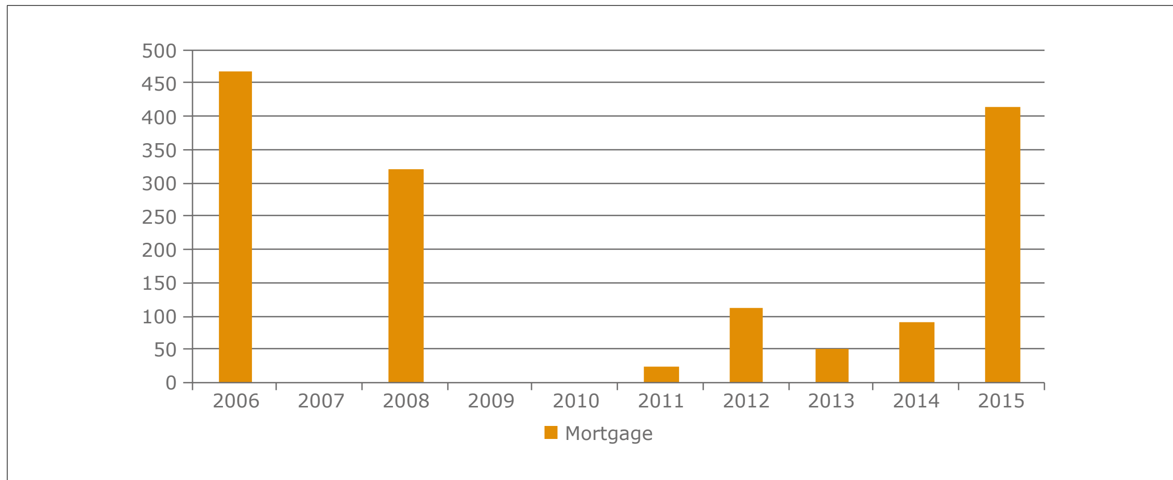
2 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> Figure 2: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 3: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: There are currently three issuers in Iceland – Arion Bank, Íslandsbanki and Landsbankinn.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/108/Icelandic_Covered_Bonds.

3.16 IRELAND

By Sinéad Gormley, Bank of Ireland and Nick Pheifer, DEPFA BANK

I. FRAMEWORK

Irish covered bonds benefit from the protection of specialist 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.

II. STRUCTURE OF THE ISSUER

An issuer of ACS (an "ACS Issuer") must be authorised, or be deemed to be authorised, as a credit institution under Council Regulation (EU) No 1024/2013 (the "SSMR") and also be registered under the ACS Acts as a designated credit institution. It is required to limit the scope of its banking activities to certain permitted business activities. An ACS Issuer is therefore subject to supervision by the European Central Bank and by the Central Bank of Ireland (the "CBI") in its capacity as a credit institution and separately by the CBI in its capacity as an ACS Issuer. Each ACS Issuer will be registered as a designated public credit institution (authorised to issue public credit covered securities) and/or a designated mortgage credit institution (authorised to issue mortgage credit covered securities).

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 described as dynamic or open 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. One such control is that 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 over-collateralisation) 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 other than the super-preferred creditors (i.e. the CAM and NTMA – see further section VIII below) 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 type of designation of ACS Issuer) 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. There is also a similar 10% limit imposed on the volume of non-cover

pool-eligible OECD assets that an ACS Issuer can acquire. In addition, designated mortgage credit institutions must maintain the aggregate prudent loan to value ("LTV") of their overall mortgage books at or below 100%.

III. COVER ASSETS

The classes of assets which are eligible for inclusion in a cover pool are determined by whether the ACS Issuer is a designated public credit institution or a designated mortgage credit institution.

Designated public credit institutions

The classes of asset eligible for inclusion in the cover pool of a designated public credit institution ("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 (whether in the form of a security that represents other public credit that is securitised or not) 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, in each case which qualify as such for the purposes 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.

Designated mortgage credit institutions

Those assets eligible for inclusion in the cover pool of a designated mortgage credit institution ("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 (whether in the form of a security that represents other mortgage credit that is securitised or not) 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 included in 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. To date, designated mortgage credit institutions have not included securitised mortgage credit assets in their cover pools.

Substitution assets

Substitution assets can be included in any cover pool provided that they comply with applicable CRR requirements and certain other restrictions. These are deposits having a minimum credit rating of Step 2 and a maximum maturity of 100 days with eligible financial institutions.

IV. VALUATION AND LTV CRITERIA

Designated public credit institution

Public credit assets maintained in the cover pool of a designated public credit institution are ascribed a prudent market value equal to 100% of the amount of the related public credit outstanding on the date of valuation.

Designated mortgage credit institution

The maximum prudent 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. As noted in Section III, the inclusion in the cover pool of mortgage credit assets secured on commercial property is restricted to 10% of the prudent market value of all mortgage credit assets and substitution assets included in the cover pool at any time. Cover pool data indicates however, that designated mortgage credit institutions have not included assets secured on commercial property in their cover pools to date.

A designated mortgage credit institution is first required to determine the market value of a property asset at the time of origination of the mortgage credit asset secured on it. It is market practice for such property valuations to be conducted by independent valuers. The designated mortgage credit institution is then required to calculate the prudent market value of such property asset at the time of inclusion of the related mortgage credit asset in the cover pool and also at such intervals (at least once per year) as may be specified by the CBI. In addition, a designated mortgage credit institution 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 over-collateralisation 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 designated mortgage credit institution 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.

Over-collateralisation: 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 *Over-collateralisation* 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.

Hedge contracts

Hedge contracts 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. Once so entered, 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 counterparty must be recorded on a separate register maintained by the ACS Issuer.

Over-collateralisation

The ACS Acts prescribe a minimum over-collateralisation of ACS for designated mortgage credit institutions and designated public credit institutions of 3% calculated on a present value basis. It is also possible for ACS Issuers to commit by contract to higher minimum levels of over-collateralisation and the market practice has been for ACS Issuers to contractually commit to higher levels. The CAM is responsible for monitoring the levels of legislative and contractual over-collateralisation. Upon an ACS Issuer insolvency, ACS holders will benefit from any cover assets which make up the over-collateralisation to the extent of their claims.

VI. TRANSPARENCY

Disclosure in financial statements

All ACS Issuers are required to make specific disclosures in relation to cover assets included in their cover pools in their annual financial statements.

Designated public credit institutions

A designated public credit institution 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.

Designated mortgage credit institutions

A mortgage credit institution 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.

Covered Bond Label and Harmonised Transparency Template

Designated mortgage credit institutions have adopted the ECBC's Harmonised Transparency Template ("HTT") for the purposes of the ECBC's Covered Bond Label (the "Label") with effect from 1 January 2016. The HTT is published in addition to the mortgage credit National Transparency Template, which will continue to be used during the HTT's one-year phase-in period. The HTT and NTT are completed and published on a quarterly basis together with access to archive data going back for a period of at least 8 years.

To date, two designated mortgage credit institutions have applied for and obtained the Label in respect of their ACS issuance programmes.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

One of the key features of the ACS legislation is the rigorous monitoring role undertaken by the CAM. The CAM is appointed by the ACS Issuer with such appointment being approved by the CBI.

There are strict eligibility requirements for CAMs. A CAM must be a body corporate or partnership, comprising personnel or partners who are members of a professional representative body. 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 of same 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 over-collateralisation are maintained.

The CBI is given statutory responsibility for supervising ACS Issuers. 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. 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 management 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 in 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 insolvency proceedings on ACS and hedge contracts

Upon 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.

The role of the manager and access to liquidity in case of insolvency

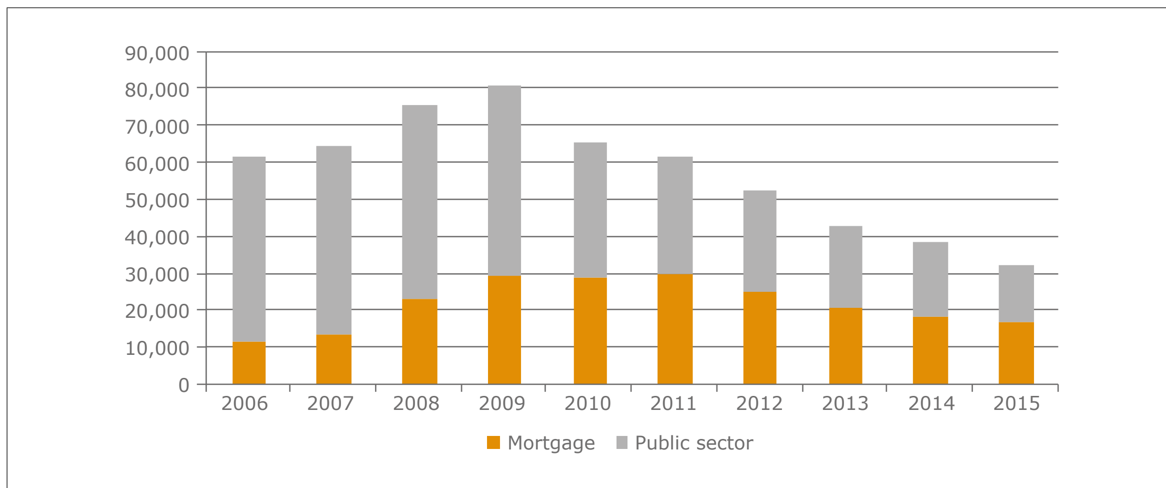
The ACS Acts makes provision for the management of the asset covered securities business of an ACS Issuer upon an ACS Issuer insolvency through the services of the Irish National Treasury Management Agency ("NTMA"). If no suitable manager can be found by the CBI or the NTMA, the NTMA will attempt to 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. It is possible for a manager to obtain a liquidity facility through the use of a hedge contract, such hedge contract if recorded in the cover register would constitute a cover assets hedge contract for the purposes of the ACS Acts and the pool hedge counterparty would rank pari passu with ACS holders and any other pool hedge counterparties.

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].

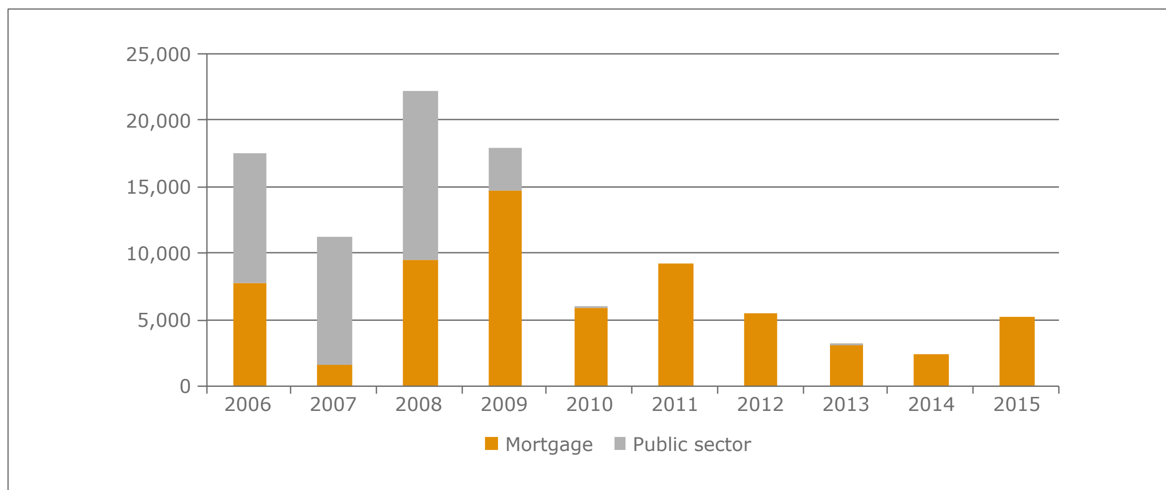
1 For further information on the UCITS Directive and the Capital Requirements Regulation (CRR) please see: http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> FIGURE 1: COVERED BONDS OUTSTANDING, 2006-2015, EUR M



Source: EMF-ECBC

> FIGURE 2: COVERED BONDS ISSUANCE, 2006-2015, EUR M



Source: EMF-ECBC

Issuers: There are five ACS Issuers with outstanding covered bonds – Bank of Ireland Mortgage Bank, DEPFA ACS BANK, EAA Covered Bond Bank plc, AIB Mortgage Bank and EBS Mortgage Finance.

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/28/Asset_Covered_Securities_-_ACS.

COVERED BOND · LABEL · : AIB Mortgage Bank ACS (Asset Covered Securities); Bank of Ireland Mortgages ACS (Asset Covered Securities).

3.17 ITALY

By Marco Marino, Italian Banking Association

I. FRAMEWORK

The Italian Legislator enacted a new regulation (Law no. 80/2005) in May 2005, by means of which two specific articles (article 7-*bis* and article 7-*ter*) were inserted into the existing Italian securitization law (Law no. 130/1999), providing for covered bonds.

The legislator decided to supplement Law no. 130/99 rather than adopt a separate and autonomous law/legal framework, in light of the markets' and international operators' positively assessing Italian securitization law. They found that the law introduced an established and reliable legal framework (e.g. from a standpoint of "bankruptcy remoteness").

Pursuant to paragraph 5 of the first of the two articles mentioned above, on 14 December 2006, the Ministry of Economy and Finance issued secondary rules in relation to some key issues of the structure. In particular, implementing rules have been enacted with respect to the type of assets eligible for the cover pool, the maximum allowed ratio between transferred assets and issuable securities, the type of guarantee to be provided to bondholders by the SPV.

As for the last procedural step, which formally allows Italian banks to start issuing covered bonds, the Bank of Italy enacted its implementing measures on 17 May 2007, 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 the same article 7-*bis*, also through auditors.

Under decree law 18/2016 article 13-bis, converted in law in April – law 49/2016 – the Italian legislator has set the compliance for "Obbligazioni Bancarie Collateralizzate" (OBC). This new instrument is a collateralised bond comparable with the European Secured Notes for his structure – double recourse instrument – and since the nature of the eligible assets in the cover pool, mainly: SME loans, corporate bonds, ship loans and receivables arising from factoring and leasing contracts.

II. STRUCTURE OF THE ISSUE OF COVERED BONDS

Pursuant to the abovementioned article 7-*bis*, the structure of a covered bond transaction is as follows:

1. 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;
2. 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);
3. the bank transferring the assets (or another bank) issues covered bonds;
4. 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.

According to the Bank of Italy's regulation, covered bonds can be issued only by banks with the following prerequisites:

- > own funds not lower than EUR 250 mln
- > 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. Bondholders hold a preferential claim on the cover assets and the covered bonds are direct, unconditional obligations of the issuer.

III. COVER ASSETS

As provided for by paragraph 1 of Article 7-*bis* of the securitization law, the eligible assets as coverage for covered bonds are:

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, up to 10% of the cover pool:

- 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%;
- other entities of non-EEA member countries with a risk weight of 20%.

c) notes issued under a securitisation transaction backed (for a minimum of 95%) by the claims under the abovementioned letters a) and b), that qualify for the credit quality step 1 under the Standardised approach. In case the covered bonds are backed by notes issued under a securitisation transaction for more than 10% of the issuance nominal value, the following additional conditions must be fulfilled:

- the residential or commercial mortgage loans must have been originated within the banking group of the issuer;
- the issuer or an entity consolidated in the same banking group holds the risk underlying the entire junior tranche;
- the issuer and the SPV are able to verify, on an ongoing basis, the eligibility and the volumes of the securitized assets and to provide the asset monitor with all the relevant information it may require to perform its controls.

As regards the transferring of such 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 total
Class C	Tier 1 ratio ≥ 7% and Core Equity Tier 1 ratio ≥ 6%	Eligible assets can be transferred up to 25% of total

As provided for by the secondary legislation enacted by the Italian Ministry of Economy, assets must 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 integration of cover assets can be performed through:

1. the transfer of additional eligible assets to the pool;
2. the opening of deposit accounts at banks located in an EEA member country, or in other countries with a 0% risk-weight;
3. the transfer of banks' own debt securities (with maturity of less than 1 year) to the pool.

It is also provided that integration through assets under points 2 and 3 is allowed only up to 15% of the cover pool's nominal value. With respect to such provisions, the Bank of Italy established that integration is allowed only to:

> maintain the ratio of issued bond to cover assets up to the abovementioned level provided for by the Ministry of Economy;
> in case of voluntary over-collateralisation, maintain the ratio of issued bond to cover assets up to the contractually-agreed limit;
> respect the abovementioned 15% limit for eligible supplementary assets.

IV. ASSET-LIABILITY MANAGEMENT

In order to allow the SPV to fulfil its obligations, issuing banks are required to adopt proper asset-liability management techniques and to perform specific controls at least every 6 months, 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.

V. 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 specific eligibility requirements for issuing banks which are stricter than those provided for traditional banking activities. These parameters require, in particular, own funds of at least €250 million and a consolidated total capital ratio of at least 9%. It is also provided that eligible assets may be assigned to the SPV only subject to a series of restrictions, graduated based on the total capital ratio and Tier 1 ratio at the consolidated level.

Although in some European countries the issuance of covered bond is subject to a "licence" granted by the Supervisory Authority upon the fulfilment of specific requirements, the Italian legislator has decided to make a different choice. Rather than introducing a "licence" system, it has defined a series of requirements and limitations to issuance which together can be *de facto* considered as the objective basis upon which to grant an issuance authorization. Moreover, it must be considered that such requirements and limitations are in most cases stricter than those required by other regulatory frameworks.

Furthermore, Italian regulation prescribes that the monitoring of the regularity of the transaction and of the integrity of the collateral securing investors must also be performed 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.

In general terms, specific control requirements on banks issuing covered bonds find their primary source from EU and national legislation. Additionally, in consideration of the peculiarities of a covered bond transaction, the Bank of Italy assigns to issuers the primary responsibility to evaluate the risk involved in the operations, to arrange a proper control mechanism and to ensure its functioning through the time. 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 (in order to be able to track down each borrower whose loan has been transferred to the SPV);

> the performance of the transferred assets (in order to monitor the "health" of the cover assets).

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*).

VI. TRANSPARENCY

In 2012, the main Italian OBG issuers, coordinated by the Italian Banking Association, worked together to create a transparency template, consistent with the guidelines of the ECBC Label Initiative. 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.

VII. ASSET SEGREGATION AND IMPACT OF INSOLVENCY PROCEEDINGS ON COVERED BONDS AND DERIVATIVES

As provided for by the secondary legislation enacted by the Italian Ministry of Economy, the guarantee granted by the SPV to the covered bondholders, must be irrevocable, first-demand, unconditional and independent from the issuing bank's obligations on the covered bonds. It will be callable upon non-payment and bankruptcy of the issuing bank, and it will be limited to cover pool asset value to ensure bankruptcy remoteness of the SPV.

The SPV is a financial intermediary, registered in the "special list" provided for by article 107 of the Banking Law, and therefore subject to the Bank of Italy's supervision.

Covered bondholders will have the right, represented exclusively by the SPV, to file a claim with the issuing bank for full repayment of the covered bonds. In case of liquidation of the issuing bank, the SPV will be exclusively responsible to make payments to covered bondholders (as well as other counterparties) and will represent covered bondholders in proceedings against the issuing bank.

All the amounts obtained as a result of the liquidation procedure will become part of the cover pool and therefore used to satisfy the rights of covered bondholders. 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, swap counterparties and transaction costs.

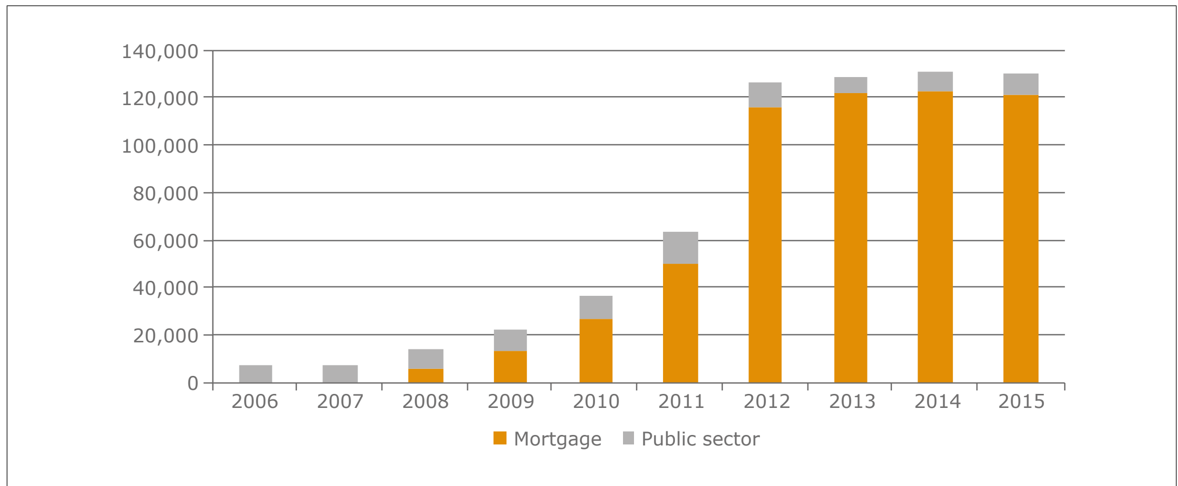
In case the proceeds obtained as a result of the liquidation procedure are insufficient to meet the obligations to bondholders in full, investors would still have an unsecured claim against the issuer for the shortfall.

VIII. 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 (7) of the Capital Requirements Regulation (CRR), also considered that a recent update of Bank of Italy's OBG regulation establishes that the asset monitor must verify, among other things, that the information disclosed to investor as per Article 129 (7) of the CRR are complete, accurate and provided in a timely manner. Italian covered bonds fulfil both the criteria of Article 52(4) UCITS and Article 129(1) CRR.[1] They are also eligible in repo transactions with the Bank of Italy. The same compliance has been set for the "OBC".

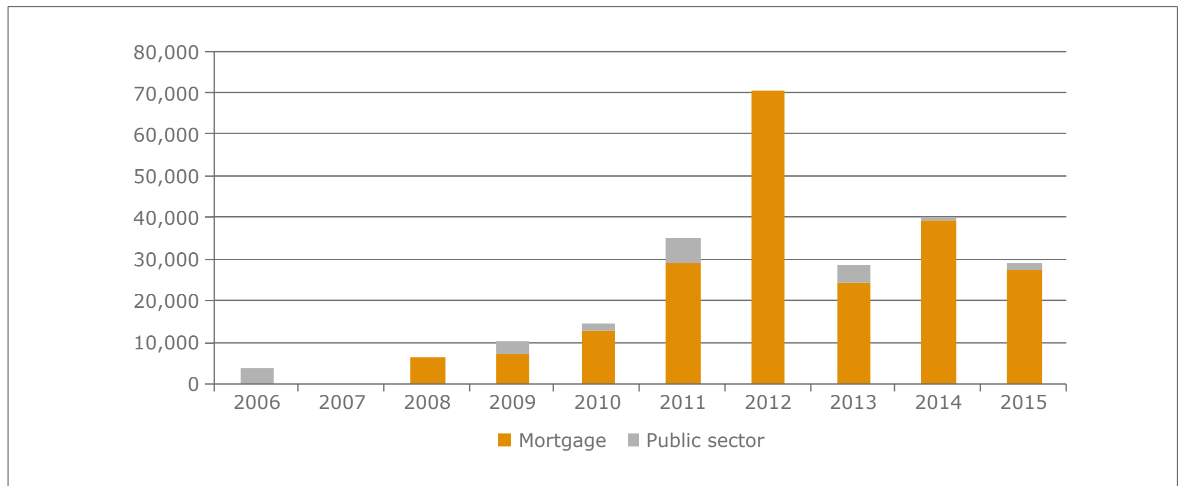
1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> Figure 2: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 3: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: Unicredit, Intesa Sanpaolo, Banca Popolare di Milano, Monte dei Paschi di Siena, Banco Popolare, Cariparma, UBI, Mediobanca, Deutsche Bank, Carige, Bper, Credem, Banca Nazionale Lavoro, Banca Nazionale Lavoro.

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/31/Obbligazioni_Bancarie_Garantite_-_OBG.

Covered Bond Label: Banca Carige S.p.A. Credit Home/Commercial Loan; Intesa Sanpaolo S.p.A. CB Ipotecario S.r.l.; Intesa Sanpaolo S.p.A. CB Pubblico S.r.l.; UniCredit BpC Mortgage S.r.l.; UniCredit OBG S.r.l.; Cassa di Risparmio di Parma e Piacenza S.p.A. Cariparma OBG S.r.l.; Banca Popolare di Milano Bpm OBG2.

3.18 LATVIA[1]

By Kaspars Gibeiko

I. FRAMEWORK

In Latvia, the legal basis for covered bond issuance is the Law on Mortgage Bonds (HKZL – Hipotekāro ķīlu zīmju likums) from 10 September 1998 and subsequent amendments to the HKZL (1 June 2000, 5 July 2001, 6 November 2002 and 25 October 2006). The insolvency and bankruptcy procedure is captured both by the HKZL (Section 4) and the Law on Credit Institutions (Articles 561, 161 and 191).

II. STRUCTURE OF THE ISSUER

There is no specialised banking principle in Latvia. As a result every registered bank can issue mortgage-backed covered bonds. The minimum requirements a bank must fulfil in order to issue mortgage bonds are as follows:

- Tier1 and Tier2 capital should be not less than stated in the Law on Credit Institutions;
- Provision of the banking services specified in Article 1, Clause 4 of the Law on Credit Institutions without any restrictions imposed by the Financial and Capital Market Commission (FCMC);
- Submission of rules approved by the bank's supervisory board regarding the valuation of the real estate to be mortgaged and the management of the mortgage bond cover register to the FCMC.

The issuer holds the cover assets on his balance sheet and the cover assets are not transferred to a different legal entity. All obligations from mortgage bonds are obligations of the issuing bank as a whole, to be paid from all the cover assets of the issuer. 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 mortgage bond holders.

The HKZL does not prescribe the issuing bank to have separate employees to manage the cover pool, but it prescribes that the cover assets are managed separately from other assets of the issuer. Therefore, if employees of the bank are involved both in the management of the cover assets and the management of non-cover assets, separation of the duties and responsibilities should be clearly stipulated in the bank's by-laws and internal procedures. There are also no specific requirements regarding the outsourcing of the management of cover assets in the Latvian covered bond legislation.

III. COVER ASSETS

Cover assets can be eligible mortgage loans or loans secured by either guarantees of the Latvian Government or guarantees of the local governments.

Up to 20% of the nominal volume of outstanding mortgage bonds and interest expenses (substitute cover) may consist of:

- cash;
- balances with the central banks of the EU member states; and
- securities issued and guaranteed by the EU member state governments up to 95% of their market value whilst not exceeding the face value of these securities or securities issued by the EU member state's financial institution and traded on the EU regulated securities market up to 95% of their market value whilst not exceeding the face value of these securities.

The eligible mortgage assets are restricted in geographical scope to the extent that a property that secures a mortgage loan should be registered with the EU member state's property register. This means that only properties which are registered in the EU member state can be used as collateral for mortgage loans included

1 Please note that due to no legislative changes at national level, this article is the same as the one published last year.

in the cover pool. The loans secured by Latvian sovereign and sub-sovereign guarantees are not restricted by geographical scope, but they are restricted by loan purpose; loans which finance public and infrastructure projects are eligible.

Derivatives are eligible for cover pool inclusion for the purpose of mitigating currency – and interest rate risk. The volume of derivatives is not limited and the general documentation used is the standard for derivatives.

IV. VALUATION AND LTV CRITERIA

Property valuation is regulated in Article 15 of the HKZL. Property valuation is carried out according to the international valuation standards. The basis for property valuation is market value. Professionals responsible for the determination of the market value of a property must be in possession of a relevant professional qualification. In addition to that, Article 151 (introduced by the amendment to the HKZL on 25th of October 2006) stipulates that the market value of property registered in the EU member state is determined by the persons who have received professional, real estate valuation, licence according to the legislation of particular EU member state.

The issuer is responsible for the monitoring of the property value. The frequency of monitoring is not defined by the HKZL, but it is prescribed by the regulations of the FCMC and by-laws of the issuer.

Article 14 of the HKZL stipulates that a mortgage loan together with debts previously registered with the national property register may not exceed 75% of the market value of residential property and 60% of the market value of other type of property.

V. ASSET – LIABILITY MANAGEMENT

Article 9 of the HKZL stipulates the following requirements to the asset-liability management of the cover pool:

> the total volume of the cover assets must be larger than the total volume of outstanding mortgage bonds at their face value by at least 10% of the risk weighted value of the cover assets, where risk weighted value of the cover assets is calculated based on specific weights of each type of the cover assets;

> The currency of the cover assets and that of the outstanding mortgage bonds may differ only if the issuer has taken all the necessary measures to prevent the currency risk in the cover pool;

> The total interest income from the cover assets must exceed the total interest expenses on outstanding mortgage bonds;

> The cash-flows from the outstanding mortgage bonds (in accordance with the mortgage prospectus) must always be covered by the cash-flows from the cover assets in terms of volumes and maturities;

> The issuer of the covered bonds has to prepare a report on the cash-flow mismatches and submit it to the FCMC on a semi-annual basis.

The latest amendment to the HKZL stipulates that the issuer should separate loans secured by a mortgage and loans secured by central or municipal governments. This requirement was introduced in order to separate mortgage bonds and public sector bonds.

VI. COVER POOL MONITOR AND BANKING SUPERVISION

The Latvian covered bond legislation does not require the appointment of a special entity to monitor the cover pool. Instead, the cover pool is managed by the issuing bank and it is the issuing bank's responsibility to set up a system to ensure that the cover pool is managed properly. In some banks, monitoring of the cover pool is executed by the internal audit department

The FCMC supervises cover pools. It inspects cover pool (quality and eligibility of the cover assets, quality of the asset-liability management) during regular banking supervisory audits which are carried out on average every two years.

The FCMC has the right to suspend the issue of mortgage bonds under the following circumstances:

> The issuing bank does not comply with the conditions laid down in the Law on Mortgage Bonds;

> The issuer does not ensure that the redemption and interest payments on outstanding mortgage bonds are always covered by the principal and interest payments of the cover assets of a higher value;

> By-laws on the valuation of properties securing the mortgage assets and by-laws on the management of cover pool submitted to the FCMC are not followed.

VII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

A cover register facilitates the identification of the cover assets, because all the cover assets, including substitute cover as well as derivatives, are recorded in the cover register. The type and scope of the information recorded regarding the cover assets in the cover register are determined by FCMC regulations

The legal effect of registration is the fact that in the case of insolvency of the issuer, the assets which form part of the separate legal estate can be identified and all assets recorded in the cover register qualify as part of this separate legal estate.

Asset segregation

A cover pool is a part of the general estate of the issuing bank as long as the issuer is solvent. If the insolvency proceedings are opened, by operation of law, the assets recorded in the cover register are excluded from the insolvency estate of the issuer. Those assets will not be affected by the opening of the insolvency proceedings, but automatically form a separate legal estate.

After the opening of the insolvency proceedings, a special cover pool administrator initiated by the FCMC and appointed by court carries out the administration of the cover assets.

Impact of insolvency proceedings on covered bonds and derivatives

Covered bonds do not automatically accelerate when the issuing institution becomes 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. During an insolvency procedure, derivatives' counterparties have the same rights as the holders of mortgage bonds.

Preferential treatment of covered bond holders

Covered bond holders enjoy a preferential treatment as the HKZL and the Law on Credit Institutions stipulates the separation of the cover assets in a case of the insolvency of the issuing bank. According to Article 191 of the Law on Credit Institutions, mortgage bond holders have the first access rights to the cash flows generated by the assets recorded in the cover register.

In the case of insolvency of the issuer, it is forbidden to modify the content of the cover register and all cash flows from the cover assets must be accrued within it. As long as there is sufficient cover, 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.

Only in the case of over-indebtedness or insolvency of the cover assets shall the FCMC file an application to court regarding the insolvency of the cover register (Article 26 of the HKZL). Insolvency of the cover pool is the only catalyst which could the trigger acceleration of covered bond.

Access to liquidity in case of insolvency

With the appointment of the cover pool administrator, the right to manage the cover assets is transferred to him by law. Thus, the cover pool administrator has first access to the cover assets and collects the cash flows according to their contractual maturity.

The cash-flows from the cover assets may only be used for the following purposes and the use of assets in any other manner is inadmissible:

> Disbursements to mortgage bond holders if the term for interest payments or mortgage bond redemption has become due;

> Purchase of mortgage bonds issued by the issuer itself with their subsequent redemption in the public securities market at a price not exceeding the face value of the mortgage bonds if the remaining cover assets are sufficient to cover outstanding mortgage bonds;

> Payments under derivatives' agreements concluded on the cover asset risk mitigation, provided that the contracting parties have met the conditions of such agreements.

The cover pool administrator is permitted, in case of the insolvency of the issuer, to exceed the substitute cover limit.

No specific regulation exists with respect to the insolvency remoteness of voluntary overcollateralisation. However, the cover pool administrator is not allowed to use voluntary overcollateralisation until all payments to mortgage bond holders are made fully and on time.

The cover pool administrator may carry out legal transactions in respect of the cover pools in so far as this is necessary for an orderly settlement of the cover pool and for the full and timely satisfaction of the cover pool's creditors.

Sale and transfer of mortgage assets to other issuers

The HKZL and the Law on Credit Institutions provide that the cover assets in a case of insolvency of issuer are transferred to other bank chosen by the FCMC. The bank to which the cover assets are transferred, also takes responsibility for all the obligations arising from outstanding mortgage bonds.

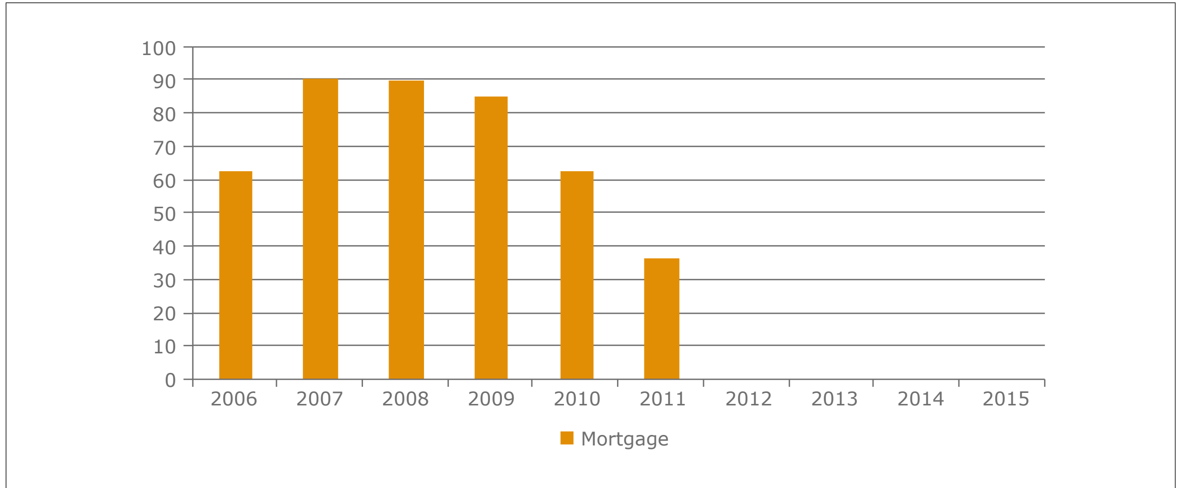
VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

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). Latvian mortgage bonds comply with the requirements of Article 52(4) UCITS Directive as well as with those of Article 129 CRR.[2] The current risk-weight applied to mortgage bonds in Latvia is 20%.

Latvian investment legislation allows mutual funds to invest up to 25% of their assets in mortgage bonds and pension funds – up to 10% of their assets.

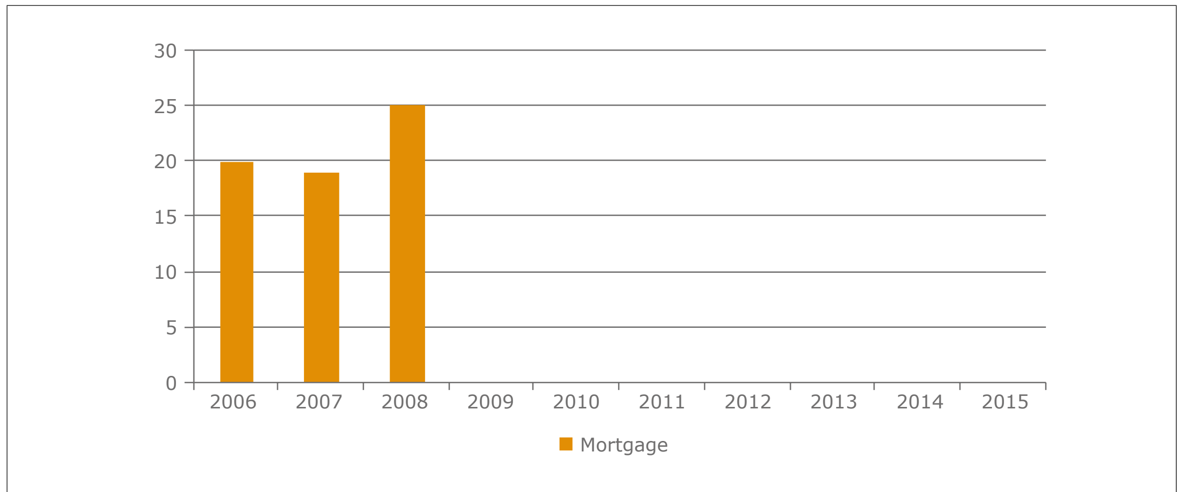
2 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> Figure 1: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 2: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

3.19 LUXEMBOURG

By Matthias Melms, NORD/LB and Frank Will, HSBC & Chairman of the ECBC EU Legislation Working Group

I. 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 and by the Act of 27 June 2013. 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 CSSF Circular 03/95 which defines the minimum requirements for the maintenance and control of the cover register, for the cover assets and for the issuance limit for outstanding Lettres de Gage. The CSSF is the supervisory authority in Luxembourg.

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); (ii) the introduction of Lettres de Gage Mutuelles which are backed by a system of institutional guarantee; (iii) 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; (iv) 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.

II. STRUCTURE OF THE ISSUER

The Lettres de Gage issuers have to be credit institutions with a specialist bank licence. Their business activities are restricted: In the past, the bank's principal activities were limited to mortgage lending, public sector financing, and lending guaranteed by movable assets which were primarily funded by issuing Lettres de Gage Hypothécaires, Lettres de Gage Publiques and Lettres de Gage Mobilières. Lettres de gage Mobilières were introduced in the amendment in October 2008. According to the last covered bond law amendments in 2013, the Luxembourg issuers are also allowed to issue Lettres de Gage backed by institutional guarantees (Lettres de Gage Mutuelles). They can grant loans to credit institutions in the EU, the EEA and the OECD or loans that are guaranteed by them, on the condition 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.

The issuers may only engage in other banking and financial activities if these activities are accessory and auxiliary to their main business.

The issuer holds the cover assets on its balance sheet in separate registers. Each class of Lettres de Gage has its own register: one for assets which are allocated to the Lettres de Gage Hypothécaires, another one for the cover assets backing the Lettres de Gage Publiques, potentially several more for the various forms of Lettres de Gage Mobilières and one for the cover assets backing Lettres de Gage Mutuelles. The cover assets remain on the balance sheet of the issuer. They are not transferred to another legal entity (special purpose vehicle) like in a securitisation. All obligations arising from Lettres de Gage 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 Lettres de Gage holders. There is no direct legal link between a single asset in the cover pool and an outstanding Lettre de Gage. Interest and principal payments of the outstanding Lettres de Gage Hypothécaires, Lettres de Gage Publiques, the various forms of Lettres de Gage Mobilières (including any derivatives benefiting from the preferential treatment) and the Lettres de Gage Mutuelles are backed by the assets in the respective cover pools.

Lettres de Gage issuers employ their own staff. 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

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 2013, there are four asset classes: mortgage assets, public sector exposures, movable assets, i.e. mortgage loans on ships, aircrafts, trains or other classes of movable assets, and assets backed by a system of institutional guarantee. There is only one regional limitation in place. Credit institutions that are members of a system of institutional guarantee have to be established in a member state of the EU, the EEA or the OECD. For all other cover assets the restriction to this region has been abolished. In return, a criterion regarding the credit quality of the assets has been introduced. The respective cover pools can contain 50% assets from outside the EU, the EEA and the OECD, if a rating agency registered on the list at ESMA grants a rating of the first credit quality step to these assets, and 10%, if the rating is of the second credit quality step.

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.

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; other public private partnership structures are subject to the above mentioned 10% limit) 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 of which are defined by the CSSF.

IV. VALUATION AND LTV CRITERIA

The property valuation methods are defined by a CSSF Circular 01/42 and are based on the mortgage lending value of the property. A special auditor, who may not simultaneously hold the position of company auditor, has the responsibility of determining whether the property valuation has been undertaken according to the valuation rules.

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 first 60% (80%, respectively) of the mortgage lending value is eligible for the cover pool.

V. ASSET – LIABILITY MANAGEMENT

There is a minimum overcollateralisation level of 2% on a nominal basis as well as on a net present value basis. The Luxembourg regulator has the right to review and adjust these overcollateralisation levels. Any mismatches in terms of currency or interest rate risk have to be hedged and the respective hedge instruments have to be included in the collateral pool. In addition, there are the requirements imposed by the rating agencies.

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.

VI. TRANSPARENCY

There is an explicit transparency requirement. The issuers have to publish information on the composition of the cover pool, the lettres de gage and the issuer. The details of which will be defined by the CSSF. This is in line with the ECBC Covered Bond Label Initiative.

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 Lettres de Gage 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.

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 and moveable assets and assets backed by a system of institutional guarantee 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 Lettres de Gage and derivatives

Lettres de Gage 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

Lettres de Gage holders benefit from a preferential treatment in case of an issuer insolvency. The registration of the cover assets in the cover register provides the Lettres de Gage 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 Lettres de Gage holders and the derivative counterparties, which rank pari passu. The general bankruptcy administrator has no direct access to the assets in the collateral pool.

Access to liquidity in case of insolvency

The administrator nominated by the court administers the cash flows resulting from the cover assets and according to the Article 12-10 (5). The administrator can issue lettres de gage for the account of the lettres de gage bank with limited activity. He or she can approach the Luxembourgish Central Bank for liquidity, where the conditions to be fulfilled as a counterparty for transactions within the framework of monetary politics depend on the Eurosystem.

The administrator can transfer the administration of the cover assets and the Lettres de Gage to another bank.

There is no explicit provision in the law regarding any voluntary overcollateralisation. But the overcollateralisation in a cover pool serves to pay for the expenses for the continuation of the bank with limited activity as well as absorb losses.

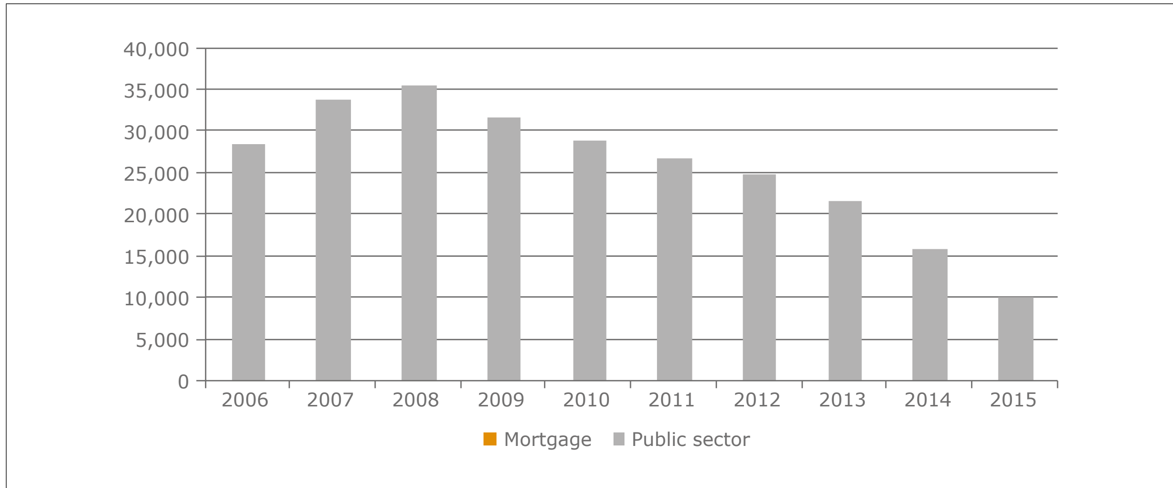
IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The Luxembourgish 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 current format, the Lettres de Gage legislation does 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 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.

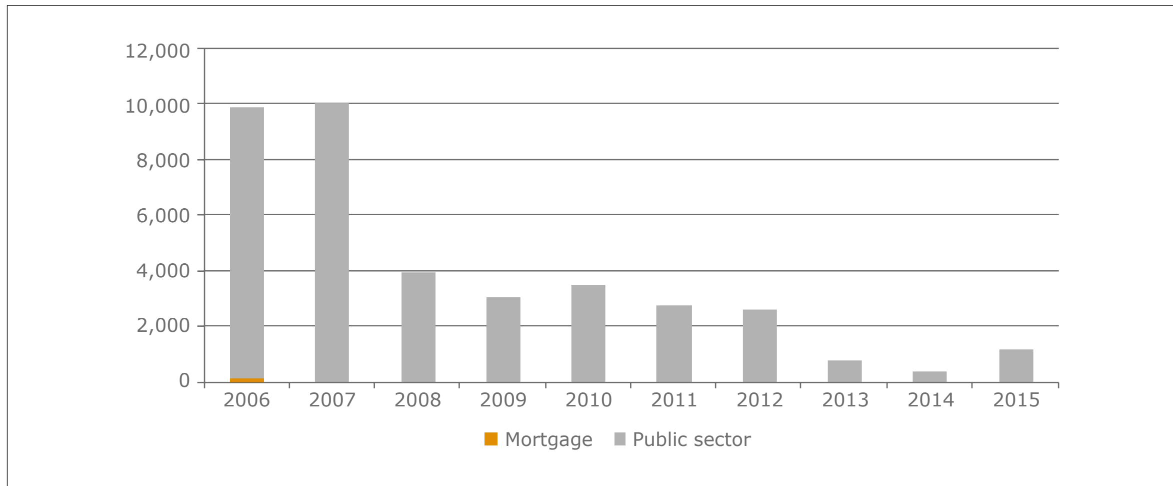
1 Please click on the following link for further information on the UCITS Directive and the CRR: http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> Figure 1: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 2: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: Commerzbank Finance & Covered Bond, DEPFA Pfandbrief Bank International, NORD/LB Luxembourg Covered Bond Bank.

ECBC Covered Bond Comparative Database:
http://www.ecbc.eu/framework/84/Lettres_de_Gage_publiques,
http://www.ecbc.eu/framework/85/Lettres_de_Gage_hypoth%C3%A9caires,
http://www.ecbc.eu/framework/86/Lettres_de_Gage_mobili%C3%A8res, and
http://www.ecbc.eu/framework/105/Lettres_de_Gage_mutuelles.

3.20 THE NETHERLANDS

By Joost Beaumont, ABN AMRO Bank and Maureen Schuller, ING Bank

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 issuance of Dutch covered bonds is regulated since via:

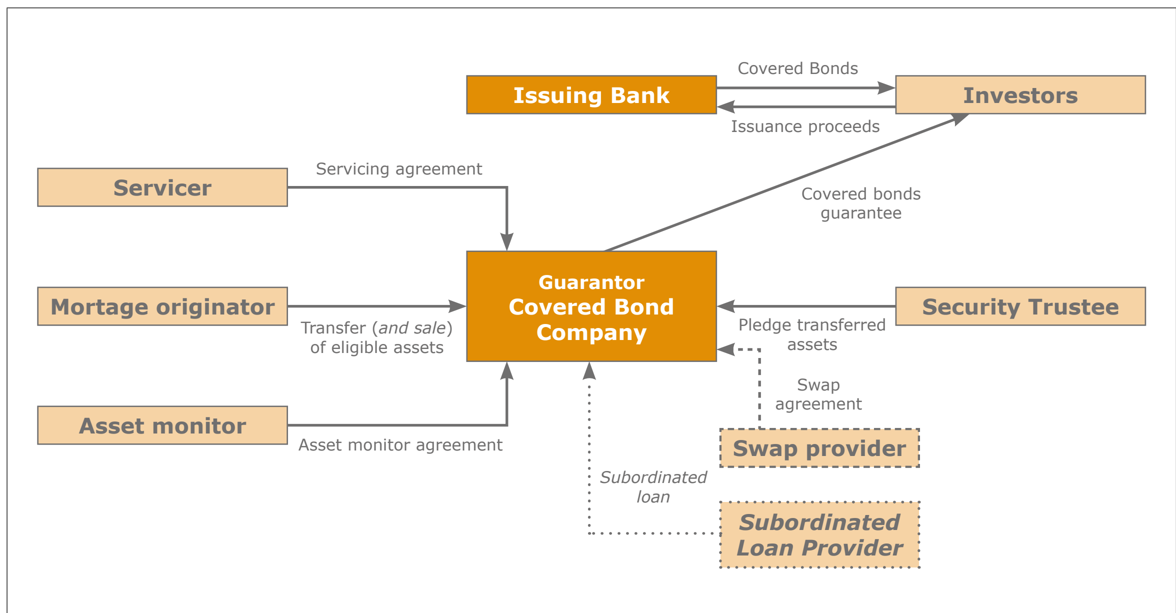
- The Amendment Act Financial Markets of 19 November 2014, published on 5 December 2014;[1]
- The Amendment Decree Financial Markets 2015 of 28 November 2014, published on 19 December 2014;[2]
- The Ministerial Regulation amending the Regulation Implementing the Financial Supervision Act on Registered Covered Bonds of 9 December 2014, published on 17 December 2014.[3]

The new regulatory regime came into force on 1 January 2015 per Decree 534 of 11 December 2014. Dutch registered covered bond issuers have to comply with all requirements since 1 January 2016.

II. STRUCTURE OF THE ISSUER

Dutch registered covered bonds can be issued by licensed banks that are located in the Netherlands. The issuing bank has to apply for registration with the Dutch Central Bank, which in turn decides to include a) the issuing entity and b) the category of covered bonds (to be) issued in a *public register*.

> Figure 1: Structural Overview



1 Wijzigingswet financiële markten 2015, nr 472.

2 Wijzigingsbesluit financiële markten 2015, nr 524.

3 Wijziging van de Uitvoeringsregeling Wft ter zake geregistreerde gedekte obligaties, FM 2014/1900 M.

To be registered, the bank needs to prove that, in the case of a default of the issuer, the covered bondholders have a priority claim over the eligible assets securing coupon and redemption payments due on the registered covered bonds. In practice this means that the issuer has to provide evidence that the cover assets are secured in favour of the covered bondholders via the transfer to a separate legal entity, the Covered Bond Company (CBC). The issuer has to deliver to the supervisor an independent legal opinion confirming this.

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 for the registered covered bonds. It can, but is not obliged to, give a right of lien over the cover assets to another separate legal entity (the Security Trustee), that represents the interests of the covered bondholders. In practice, Dutch covered bond programmes do provide for such a pledge of the transferred assets to a Security Trustee.

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. The Covered Bond Company is not permitted to take actions resulting in payment obligations ranking equal or senior to the covered bondholders, unless these are related to the management, risk management, payment and administration of the registered covered bonds and the cover assets.

III. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

In order to secure the cover assets in favour of the covered bondholders, the assets are transferred to a separate legal entity, 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 *assignment*, or a deed of *sale and assignment* with the tax authorities, 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, secured indirectly through a parallel debt, by a pledge of the transferred assets by the Covered Bond Company to the Security Trustee.

If the issuer defaults on his obligations, the Security Trustee 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 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 conditional on pool sales being unsuccessful and a breach of the amortisation test (conditional pass-through covered bonds).

To ensure the bankruptcy remoteness of the Covered Bond Company, the issuing bank or other group entities are not allowed to hold shares in, or have control over, this legal entity. Furthermore, to assure continuity of the management of the cover assets by the Covered Bond Company post issuer default, the bank has to submit to the supervisor, upon registration, a plan for the management of the cover assets in the event of an issuer default (Post Issuer Default Plan). This plan describes the operational procedures and internal controls related to the programme if the issuer can no longer manage the assets, including the circumstances leading to a transfer of the management tasks to the Covered Bond Company. This plan is set up by the issuer and discussed with the supervisor.

IV. COVER ASSETS

At the time of registration of a covered bond programme at the Dutch Central Bank, the issuing entity has to indicate the specific features of the covered bond programme. This includes a wide range of conditions, such as the maximum size of the programme, the rights and obligations of the Covered Bond Company, the rights

and obligations of the holders of the covered bonds, the type of cover assets, as well as various risk management procedures. In any case, the issuing entity needs to provide information about the following features:

> The **redemption profile of the covered bonds**, i.e. whether the covered bonds have a hard bullet, soft bullet, or (conditional) pass-through structure. The Dutch law allows issuance from a single programme of covered bonds with a hard bullet structure as well as those with a soft bullet structure with an extension period up to 24 months. In contrast, conditional pass-through covered bonds need to be issued from a separate programme.

Last year, ABN AMRO Bank and ING Bank received investor consent to switch their euro benchmark covered bonds from hard bullet to soft bullet structures. Covered bonds that had been privately placed as well as those denominated in foreign currencies, and which were issued before the consent solicitation, still have hard bullet structures. Meanwhile, SNS Bank only has soft bullet covered bonds outstanding, while the covered bonds issued by NIBC Bank, Van Lanschot, and Aegon bank, all have conditional pass-through structures.

> The **specific nature of the cover pool assets**. Public loans, residential mortgages, commercial mortgages, and shipping loans, all qualify as cover assets. Only residential mortgages and commercial mortgages can be combined in a single programme. Currently, all Dutch covered bond programmes are backed by Dutch residential mortgages only.

> The **country exposure of the cover assets** as well as the law by which they are regulated. Currently, all cover assets fall under Dutch law.

The Dutch covered bond law further stipulates that each issuer will make sure the above-mentioned features will be satisfied during the entire lifetime of the covered bond transaction, so that all covered bond issued from the same programme have the same features. This is both to protect investors as well as to enhance transparency.

Primary cover assets

The cover assets should meet the CRR Article 129 requirements, implying that the followings assets are eligible:

> Exposures to or guaranteed by central governments, central banks, public sector entities, regional governments, local authorities, multilateral development banks, international organisations as referred to in article 129 CRR, paragraph 1(a) and (b);

> Residential mortgages up to a 80% LTV ratio;

> Commercial mortgages up to a 60% LTV ratio;

> Ship loans up to a 60% LTV ratio;

> Other assets that can be made eligible under a Ministerial Regulation.

Only one type of primary cover assets can be used as collateral for a specific covered bond programme, except for residential mortgages and commercial mortgages. Residential and commercial mortgages can be used as collateral in a single programme, but only in a predefined mix (that is not allowed to change during the life of the transaction). Securitisation notes are not eligible as collateral.

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 outstanding covered bonds. Eligible as substitution assets are public sector exposures and exposures to institutions as referred to in the CRR Article 129 (1a, b, c). Furthermore, exposures that are explicitly permitted by the Dutch Central Bank as referred to in CRR Article 129 (paragraph 1, third sub-paragraph) will also be allowed.

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 are located in the EU, the European Economic Area, or, as assessed by the European Commission, in a country with prudential supervisory as well as regulatory requirements that are at least equivalent to those in the EU. Currently, cover assets backing Dutch covered bond programmes exclusively consist of Dutch residential mortgages.

Assets that are not allowed

Certain types of assets are not allowed as cover assets, such as impaired loans referred to in CRR Article 178, assets to which a specific legal claim is attached that supersedes the ownership entitlement of the owner of the assets, or exposures of owners of the cover assets to the issuing bank or entities of the same group (such as deposits).

V. VALUATION AND LTV CRITERIA

Loans backed by immovable property, such as residential and commercial mortgages, should meet the (valuation) requirements set out in CRR Article 208 and 229 (1), which includes, among others, legal enforceability as well as sound underwriting criteria. This CRR articles also state that the value of the property should be valued by an independent valuation agent on an annual basis for commercial properties, and every three years for residential properties. The Dutch covered bond law is a bit more strict and prescribes that the valuation has to be updated every year. The supervisor can even request a more frequent valuation if it sees a need to do so, for example during times of sharp house price declines.

The value of Dutch property has been based on the market value. Most covered bond issuers take a prudent approach when adjusting the value of the properties that are included in the cover pools. For example: all issuers take fully 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 Kadaster house price index or other recognised methods.

In order to comply with the CRR requirements, residential mortgages will only be recognised up to an 80% LTV, while this is up to 60% LTV for commercial mortgages. A large part of the Dutch mortgages tend to exceed the 80% LTV level, although the LTV criteria for newly originated mortgages have become more prudent in recent years. In 2016, the maximum LTV limit is 102%, which will be reduced to 101% in 2017, and to 100% in 2018. The high-LTV ratios in the Netherlands are mainly a result of the fiscal treatment of home ownership (tax deductibility of interest payments).

In a situation where mortgages with a 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 an extra credit enhancement.

VI. ASSET – LIABILITY MANAGEMENT

Asset coverage requirements

The Dutch covered bond law provides for two distinct asset coverage requirements:

> The total value of the cover assets (using the actual outstanding loan amount) always has to be equal to at least 105% of the nominal value of the outstanding registered covered bonds.

> The total value of the cover assets (using the CRR LTV cut-off percentages) always has to be equal to at least 100% of the nominal value of the outstanding registered covered bonds.

For the purpose of the calculation of these over collateralisation tests the primary cover assets are recognised at their nominal value and substitute cover assets at their market value. Banks typically commit contractually to higher overcollateralization levels under the asset cover test for, amongst others, rating agency purposes.

Liquidity coverage requirements

Issuers furthermore need to ensure that the Covered Bond Company always maintains sufficient liquid assets or generates sufficient liquidity via the cover assets to fulfil the *coupon and redemption obligations* on the covered bonds over a period of six months, including other obligations ranking senior to the covered bondholders (legal liquidity coverage requirements). The liquidity buffer requirement with respect to *redemption payments* is not applicable for covered bonds with maturity extension periods of more than six months (soft-bullet or conditional pass-through). Cash flows from derivatives contracts related to the covered bond liabilities are also taken into consideration.

The legal liquidity coverage requirements differ from the contractual liquidity coverage requirements. An example of this is the contractual *pre-maturity* test applied by Dutch issuers with regard to the redemptions of hard bullet covered bonds. This pre-maturity test is subject to issuer rating triggers and a test period of twelve months. Dutch issuers furthermore contractually commit to cover at least three months of interest expenses on the covered bonds by means of a *reserve fund* or a *reserve accounts*. In practice the legal liquidity coverage requirements overlap with the contractual liquidity coverage requirements.

Risk management procedures

The issuing bank has to employ reliable and effective risk management procedures to assure that sufficient eligible primary cover assets and substitute assets are available at all times during the life of the registered covered bond to meet, amongst other things, all over-collateralisation and liquidity requirements.

The Covered Bond Company can only enter into derivative contracts (such as currency swaps, interest rate swaps and total return swaps) or other risk mitigating contracts, if these support the risk management of the programme in favour of the registered covered bondholders. 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. If the counterparty itself no longer meets the minimum creditworthiness requirements, it should provide for sufficient collateral, a suitable third party guarantee, or replace itself.

Following the emergence of conditional pass-through programmes in the Netherlands, the use of derivative contracts to mitigate (interest rate) risks associated with the registered covered bonds has diminished in importance. Instead, several issuers decided to introduce interest reserve requirements, minimum mortgage interest rate requirements and/or to pledge additional collateral.

Asset encumbrance restrictions

The Dutch covered bond legislation provides for discretionary *soft asset encumbrance restrictions*. The Dutch Central Bank makes sure, on a case-by-case basis, that a healthy relationship is maintained between the nominal value of the registered covered bonds outstanding and the consolidated balance sheet total of the issuing bank (the so-called healthy ratio). The going-concern interests of the bank, in terms of stability and funding source efficiency, as well as the post-bankruptcy interests, including those of other unsecured creditors, are assessed. The issuance ceiling for covered bonds (the maximum amount of covered bonds that an issuer is allowed to have outstanding) is determined upon registration and is reviewed annually. The Dutch Central Bank can prohibit a bank from issuing any further registered covered bonds if it is of the opinion that the *healthy ratio* requirements are breached. The central bank can also decide to reject a request for registration on these grounds.

Stress testing

The issuer has to prepare stress tests on a regular basis for the Dutch central bank to show that there are sufficient primary cover assets available (i.e. unencumbered) on its balance sheet for replenishment purposes. Credit risk, market risk, currency risk and liquidity risk all have to be considered, including the derivative contracts mitigating these risks. Other risks deemed relevant by the Dutch Central Bank have to be considered as well.

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 Dutch covered bond law stipulates that the issuing entity shows at least every quarter to the Dutch Central Bank that the programme still fulfils all requirements, while it shows on at least an annual basis that it has enough unencumbered primary cover assets available for replenishment purposes (under different stress scenarios). Issuers also provide the Dutch Central Bank with an annual report of the Covered Bond Company within six months after closing of the reporting year. Finally, issuers need to notify the Dutch Central Bank in advance of any (upcoming) significant changes to the covered bond programme.

The Dutch law requires issuers to provide investors with the following information at least on a quarterly basis:

- Information on the credit risk, market risk, exchange rate risk, interest rate risk, and liquidity risk related to the cover assets and the covered bonds;
- The nominal value of the covered bonds outstanding;
- The total value and composition of the cover pool, including the geographical distribution;
- The ratio between the total value of the cover assets and the total nominal value of the covered bonds;
- The ratio between the total value of the cover assets when applying the CRR requirements and the nominal value of the covered bonds;
- The ratio between the total value of liquid assets and the upcoming interest payments (and redemptions if hard bullet structure) and other mandatory payments within the next six months;
- The maturity structure of the cover assets as well as the covered bonds;
- The percentage of cover assets in arrears (i.e. more than 90 days overdue);
- Information about the counterparties of the Covered Bond Company.

All Dutch registered covered bond issuers currently publish investor reports on a monthly basis, using the national transparency template. 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 (DACB) to these reports. The Dutch issuers have also agreed to implement the Harmonised Transparency Template, introduced by the ECBC. This will be added to the National Transparency Template as an appendix in 2016.

VIII. COVER POOL MONITOR AND BANKING SUPERVISION

The issuer has to appoint an asset monitor (which could be the issuing banks own external accountant) before its first issuance under a registered covered bond programme. At least once a year, the asset monitor has to check the asset coverage and liquidity coverage calculations. For as long as the issuing bank is capable of managing the cover assets, the asset monitor, randomly checks the files relating to the cover assets on an annual basis, including the valuation and administration of the assets, and reports its findings to the supervisor. These random checks can also be arranged separately with a different (not the issuing banks own) external accountant. The asset monitor agreement has to assure however that the asset monitor continues to perform its duties after an issuer event of default. To safeguard this, the Covered Bond Company will become a party to the asset monitor agreement. The agreement can also stipulate explicitly that the obligations of the asset monitor will remain unaffected by the situation of the issuing bank.

Dutch registered covered bond programmes are furthermore subject to special supervision of the Dutch Central Bank. The Dutch covered bond legislation gives substance to the special supervision via a set of strict requirements during the registration phase and post registration.

> Upon registration, the issuing bank has to provide the Dutch Central Bank with a written statement by the board of directors that all the regulatory requirements are met regarding the asset segregation, asset coverage, liquidity coverage and risk management procedures. The bank furthermore has to demonstrate that it fulfils all legal requirements ensuring that the payment obligations due on the registered covered bonds are adequately secured. The bank has to specify the conditions applicable to the covered bonds, such as the redemption profile, the type of primary cover assets, whether the assets are CRR eligible, and the geographical location of the assets. The bank furthermore has to demonstrate that it is able to meet the reporting obligations towards the Dutch Central Bank and the covered bondholders.

> After registration, the issuer has to make sure that the registered covered bonds continue to meet the registration requirements. The Dutch Central Bank will confirm in the register whether a category of registered covered bonds meets the CRR Article 129 requirements. The CRR listing remains intact for as long as the covered bonds meet the requirements. A category of registered covered bonds cannot be deregistered, but the Dutch Central Bank can decide to *deregister the issuer* if the issuer no longer complies with the regulatory requirements. The Dutch Central Bank can also impose a penalty or a fine if an issuer fails to meet its obligations. A deregistered issuer is not allowed to issue any new covered bonds.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Dutch registered covered bonds are UCITS 52(4) compliant, while they also meet all requirements of the CRR Article 129.[4] So, they should 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 currently outstanding Euro benchmark covered bonds fall within the Level 1 category of the LCR.

X. ADDITIONAL INFORMATION

It is worthwhile noting that the update of the Dutch covered bond law effective as of 1 January 2015 brought Dutch covered bond legislation in line with the best practices as proposed by the European Banking Authority. As a result, transparency as well as investor protection has increased.

Finally, 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;

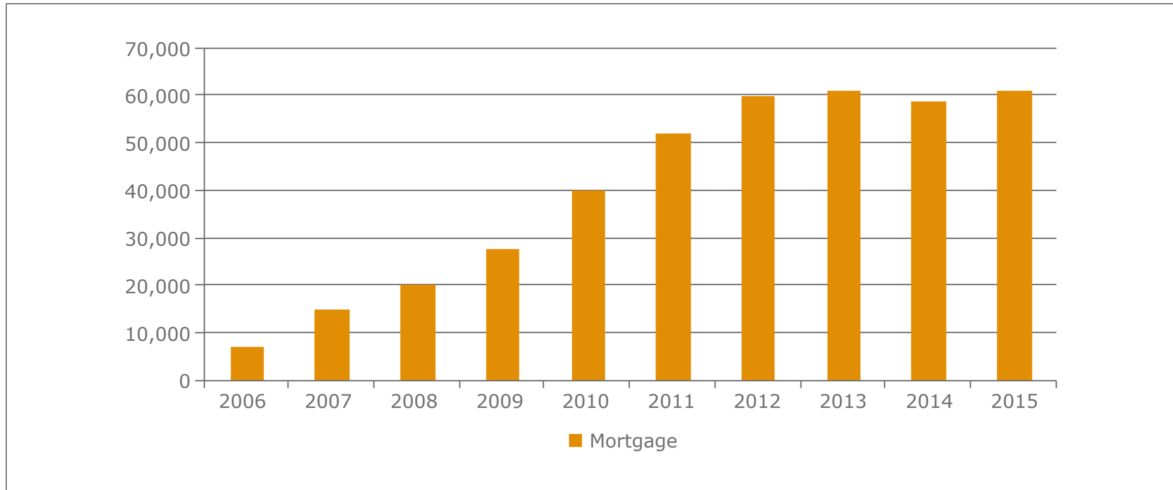
> To provide investors with information about the Dutch covered bond market;

> 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.

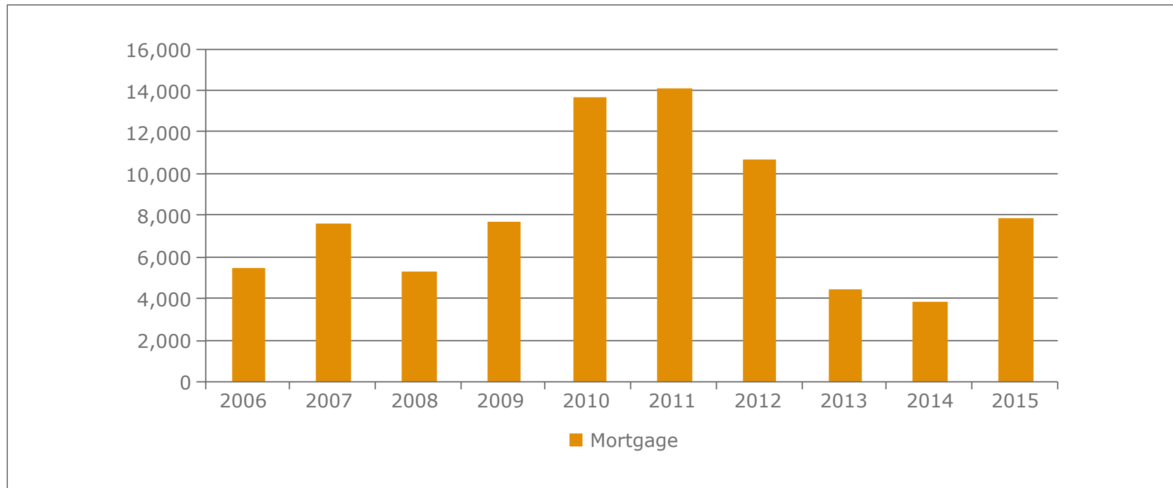
4 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> Figure 2: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

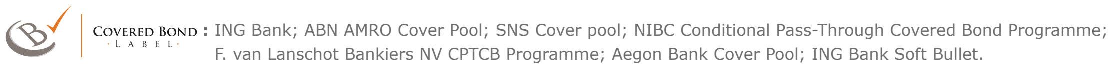
> Figure 3: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: ABN AMRO Bank, Achmea Hypotheekbank, Aegon Bank, F. Van Lanschot Bankiers, ING Bank, SNS Bank and NIBC Bank.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/65/Dutch_registered_CBs_programmes.


Covered Bond Label : ING Bank; ABN AMRO Cover Pool; SNS Cover pool; NIBC Conditional Pass-Through Covered Bond Programme; F. van Lanschot Bankiers NV CPTCB Programme; Aegon Bank Cover Pool; ING Bank Soft Bullet.

3.21 NEW ZEALAND

By Frank Will, HSBC & Chairman of the ECBC 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, covered bonds issues under the programmes prior to registration also received the benefits 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 June 2016, 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 1.5 m (Westpac)/NZD 2.0 m (ANZ, ASB, Kiwibank)/ NZD 2.5 m (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%-20% of the cover portfolio depending on the issuer (Westpac 20%, 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.

Over-collateralisation (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 of 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.

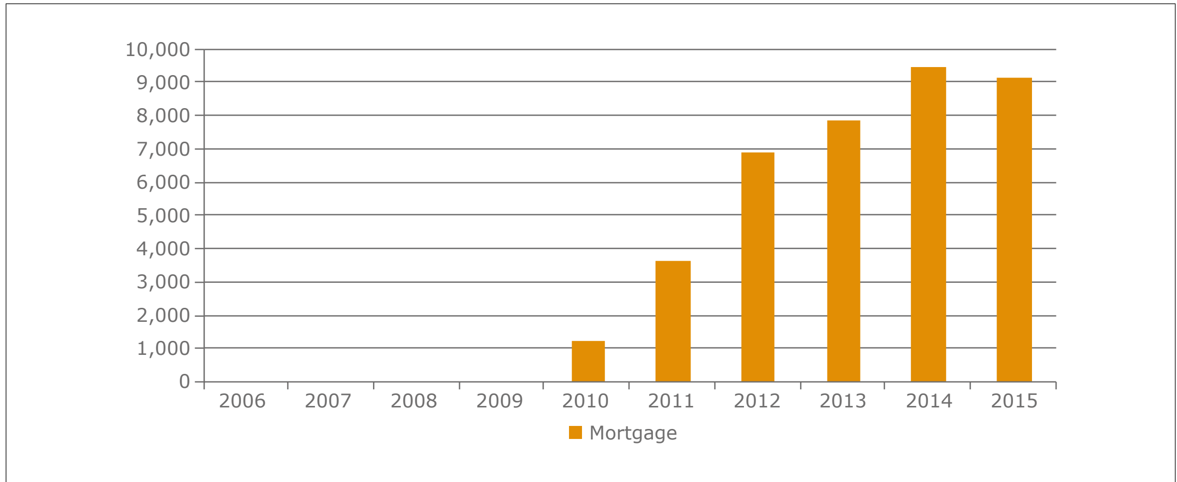
Under the existing covered bond programmes, the sale of the loans and their underlying security by the seller to the CB Guarantor is in the form of equitable assignment of the seller's rights, title, interest and benefit in and to the loans, their related security and the other assets which are being 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.

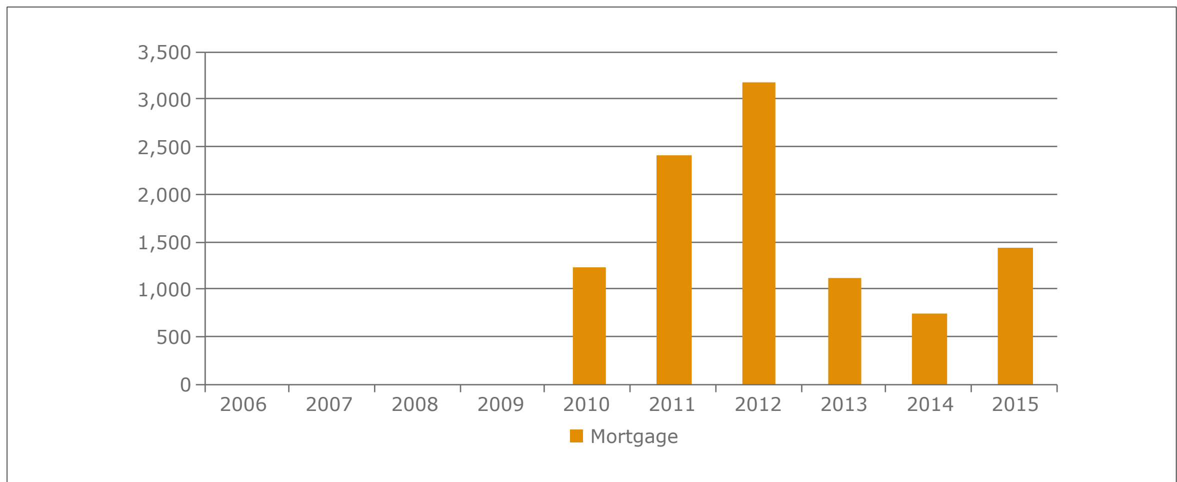
The covered bonds issued directly by financial institutions with registered offices in New Zealand are neither CRR nor UCITS compliant as both frameworks require the issuer to be based in the EU. The New Zealand covered bonds, therefore, do not benefit from the lower risk weighting for bank treasuries in the EU.

> FIGURE 1: COVERED BONDS OUTSTANDING, 2006-2015, EUR M



Source: EMF-ECBC

> FIGURE 2: COVERED BONDS ISSUANCE, 2006-2015, EUR M



Source: EMF-ECBC

Issuers: ANZ Bank New Zealand, ASB Bank, Bank of New Zealand, Kiwibank, Westpac Securities NZ.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/114/New_Zealand_Covered_Bonds.

3.22 NORWAY

By Michael H. Cook, Finance Norway

I. FRAMEWORK

The Norwegian Covered Bond legislation entered into force on 1 June 2007. Relevant amendments were made to the then governing Financial Institutions Act, and a regulation on credit institutions that issue covered bonds (hereafter "the regulation") was adopted. A new Norwegian Act on Financial Institutions (hereafter "the Act"), which entered into force 1 January 2016, have amended the covered bond framework so that covered bond issuers are treated the same as banks in the event of insolvency. This implies that issuers of covered bonds cannot be declared bankrupt, but will rather be placed under public administration. Further, the Ministry of Finance are now able to set a legal minimum overcollateralization level as well as specify more detailed regulation in a number of areas.

Issuance of Norwegian covered bonds started with an issuance denominated in euro in the second half of 2007. Thus, the issuers had not been active for very long before the financial crisis hit international financial markets the following year. Norwegian banks did not experience any substantial increase in their losses on lending during the crisis. However, the turmoil in international financial markets resulted in a liquidity-shortage which also affected Norwegian banks. In order to provide liquidity to the market, Norwegian authorities offered to swap treasury bills for covered bonds from Norwegian issuers, which lead to the establishment of several new covered bonds issuers and a substantial positive impulse to the fledgling domestic market of covered bonds. During 2008 and 2009 a total of NOK 230 bn. (approximately EUR 30 bn.) of Norwegian covered bonds were exchanged in swap agreements with the government. High market demand in the following years for covered bonds gave a smooth phasing out of the swap agreement. The last covered bonds in the arrangement came to maturity in June 2014.

II. STRUCTURE OF THE ISSUER

According to Norwegian legislation, covered bonds can be issued by special purpose vehicles only. Today there are 24 Norwegian specialised credit institutions with a license to issue covered bonds. The majority of issuers are subsidiaries of individual parent banks, while a few issuers are owned by groups of banks. The issuers are subject to a particular supervisory regime involving both an independent inspector and the public supervisor, the Financial Supervisory Authority of Norway (FSA). The smallest issuers issue NOK bonds in the domestic market only, whereas the largest issuers are present in international capital markets on a regular basis. Cover pools are dominated by residential mortgages, and the large majority of the issuers are specialised residential mortgage institutions (cf. the name "Boligkreditt"). Just a small number of issuers are specialised in commercial mortgages or in public sector loans.

A licensed credit institution may issue covered bonds where the object of the institution, as laid down in the articles of association, is (1) to grant or acquire specified types of mortgages and public sector loans and (2) to 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. Given the restricted scope and narrow mandate, Norwegian covered bonds issuers are very transparent.

III. COVER ASSETS

According to the Act the cover pool may consist of the following assets:

> Residential mortgages;

> Commercial mortgages;

> Public sector loans;

> Loans secured on other registered assets (subject to further regulations);
> Substitute assets (in accordance with the Regulation); and
> Assets in form of derivative agreements (in accordance with the Regulation).

The mortgage loans have to be collateralised with real estate or other eligible assets within the European Economic Area (EEA) or Organisation for Economic Co-operation and Development (OECD), and the public sector loan borrowers have to be located within the EEA or OECD. The Regulation adds rating requirements on the national government of the country where the mortgaged property or the borrower has its location.

The substitute assets may only amount to 20% of the cover pool (30% for a limited period of time with the consent of the FSA). In addition, the substitute assets must be secure and liquid. The Norwegian covered bond legislation adds requirements necessary in order to comply with the description of covered bonds given in CRR. Counterparty and rating regulations in accordance with the EU regulation apply.

IV. VALUATION AND LTV CRITERIA

Maximum loan to value ratios (LTV) are fixed by the Regulation, in accordance with the CRR. For residential mortgages the LTV limit is set to 75%, while the limit is 60% for holiday homes 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, according to the Act, and in accordance with the said directive.

Upon inclusion of loans in the cover pool, a prudent market value shall be set. This shall be done on an individual basis by an independent and competent person. The valuation shall be documented. However, valuation of residential properties may be based on general price levels.

Residential properties in Norway are primarily sold in open auctions in the market. Hence the actual selling price in principle reflects the market value and a recent sales contract may serve as documentation of the market value of a property.

The credit institution shall establish systems for monitoring subsequent price developments. Should property prices fall, 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 overcollateralization in the cover pool. The same principle applies to loans that are in default, i.e. more than 90 days in arrears.

Most covered bond issuers in Norway perform a complete revaluation of every individual property in the cover pool on a quarterly basis. The revaluation is done using recognised statistical methods in accordance with the covered bond regulation. The model assigns every valuation a confidence level. For origination purposes the value is applied a hair-cut depending on the confidence level. For the purpose of valuing the properties already in the cover pool, market practice is to use the most probable (unbiased) valuation, regardless of the confidence level.

V. ASSET – LIABILITY MANAGEMENT

The Norwegian covered bond legislation reflects a strict balance principle, implying that the value of the cover pool shall at all times exceed the value of the covered bonds with a preferential claim over the pool. However, with the introduction of the new Act, the Ministry of Finance may set a minimum overcollateralization (OC) requirement.

The regulation establishes a strict 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. Also, the Act caps the maximum exposure to one single borrower at 5% of the cover pool when compliance with the matching requirement is assessed.

All voluntary OC is part of the cover pool and most issuers have declared a certain level of OC, e.g. 5%, to which they are bound. Equally, the credit institution shall ensure that the payment flows from the cover pool enable the institution to honour its payment obligations.

A covered bond issuer shall not assume greater risk than what is prudent at any and all times. It is obliged to establish a limit on the interest rate risk which shall be fixed in relation to the institution's own funds and potential losses resulting from a parallel shift of 1 percentage point in all interest rate curves as well as non-parallel shifts in the interest rate curves. The interest rate curves shall be divided into time intervals, and value changes for each time interval shall be limited to a prudent portion of the overall limit on interest rate risk that is set for the institution. 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.

To deal with the interest rate and currency risk, the issuers make use of derivative agreements. If an 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, and ranks "pari passu" with the holders of covered bonds. As a corollary to this, the counterparties in the derivative agreements will be subject to same restrictions with respect to declaration of default as the bondholders.

VI. TRANSPARENCY

The issue of transparency is highly important for Norwegian issuers, both when it comes to the cover pool and the issuing institution in general. At the initiative of an international investor organisation, the Covered Bond Investor Council (CBIC), The Norwegian Covered Bond Council undertook the task to establish a Norwegian transparency template in accordance with the one from CBIC. This template was published in early 2012.

Norwegian issuers welcomes the new Harmonised Transparency Template (HTT) to increase harmonisation among issuers of covered bonds. Although the HTT is similar to the Norwegian Transparency Template, the increased demand for standardisation of information may lead to other Norwegian issuers adopting the HTT. There are currently four Norwegian issuers with the label: DNB Boligkreditt, Eika Boligkreditt, Nordea Eiendomskreditt and SpareBank 1 Boligkreditt. More information and the HTT for Norwegian issuers can be found on Finance Norway's webpage: www.finansnorge.no/en/covered-bonds/.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Credit institutions are regulated under Chapter 2 of the Act. This chapter sets out the general provisions for a credit institution, i.e. the obligation to obtain a license and to fulfil capital requirements and undertake organisational measures etc.

The issuing of covered bonds is regulated by Chapter 11, Subchapter II of the Act. The issuance of such bonds is not subject to any further governmental approvals. However, the articles of association shall be approved by the FSA. Furthermore, the institution shall notify the FSA no later than 30 days prior to the initial issuance of covered bonds. The FSA has the power to instruct licensed credit institutions not to issue covered bonds whenever the FSA judges the financial strength of the institution to give cause for concern.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Under the new Act, covered bond issuers will no longer be able to be declared bankrupt, but will instead be placed under public administration if facing large 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 term "covered bonds", (in Norwegian "obligasjoner med fortrinnsrett" or "OMF") is protected by law. The assets in the pool remain with the estate in case of the issuer is placed under public administration, but the bondholders and derivative counterparties have exclusive, equal and proportionate preferential claim over the cover pool, and the administrator is bound to assure timely payment, provided the pool gives full cover to the said claims.

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 have no 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 in particular 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 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 bound to comply with all relevant single market directives and regulations applicable to European credit institutions. Pending the inclusion of relevant newer EU regulations in the EEA-agreement with the EU, for example the CRR, Norwegian authorities have implemented the necessary provisions directly into Norwegian law.

X. ADDITIONAL INFORMATION

Market overview

All covered bonds are listed. Most issues in NOK are listed on Oslo Stock Exchange (Oslo Børs) and may be traded on the exchange. However, they are also traded off exchange. Trades are then reported to and published by Oslo Børs. Issuances in foreign currencies may be listed anywhere, usually done on one of the major international exchanges. Some of the issuers supplement their public bond issuances with private placements. The ways of placement do not affect bondholders' preferential claims in the cover pool.

The secondary market for Norwegian covered bond is by market participants considered to be liquid. As a measure for further improving liquidity and transparency in the secondary market, Oslo Stock Exchange launched a Norwegian Covered Benchmark list in June 2014. Bonds listed on the Benchmark list are subject to continuous indicative quotation. In addition, Nordic Bond Pricing, established by Nordic Trustee and the Norwegian Fund and Asset Management Association, provide daily independent pricing services for bonds (distributed through Nordic Trustee ASA's web portal Stamdata).

Norwegian covered bonds issuers issued a total of EUR 18.1 bn. during 2015. Of this amount 51% was issued in domestic currency (NOK), whereas euro and other currencies accounted for 37.5% and 11.5% respectively. The activity in the primary market increased somewhat compared to 2014. The aggregate outstanding volume increased to a total of almost EUR 110 bn. at the end of the year.

For more information and additional statistics see Covered Bonds on Finance Norway's webpage: www.finansnorge.no/en/covered-bonds/. Finance Norway is the industry organisation for banks, insurance companies and other financial institutions in Norway. It represents some 240 financial institutions operating in the Norwegian market. Finance Norway follow the covered bonds market and the associated legal framework closely, supported by an expert group (The Norwegian Covered Bond Council) consisting of high level representatives from the largest Norwegian issuers.

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 effectively and expedient forced sale procedure.

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

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 they are secured or not. This also includes mortgage backed loans included in a cover pool. The Act is invariable in respect of consumer contracts, i.e. it cannot be dispensed by an agreement between the parties that gives the consumer less preferable terms.

The Mortgage Act (Act of 8 February 1980 no. 2) regulates mortgages on real estate. Ownership and special rights in real property may be mortgaged under the provisions set out in Chapter 2 of the Act. This also includes lease and a right of dwelling, and also parts in cooperative building societies. Unless otherwise agreed, real property mortgage comprise the land, houses and building that the mortgagor owns and accessories and rights as set out in law. A mortgage may also be established on a lease of land or an owner section in a building/freehold apartment. Mortgage rights acquire legal protection by registration in the Land Registry/Register of Deeds.

The Enforcement Act (Act of 26 June 1992 No. 86) provides for an effectively 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. The court will, after giving the debtor sufficient time to contest the application, decide if the forced sale should be carried out. The court will normally appoint a real estate broker to administer the sale in order to obtain a reasonable price. Normally, nine to twelve months are required to repossess the property and finalise a forced sale.

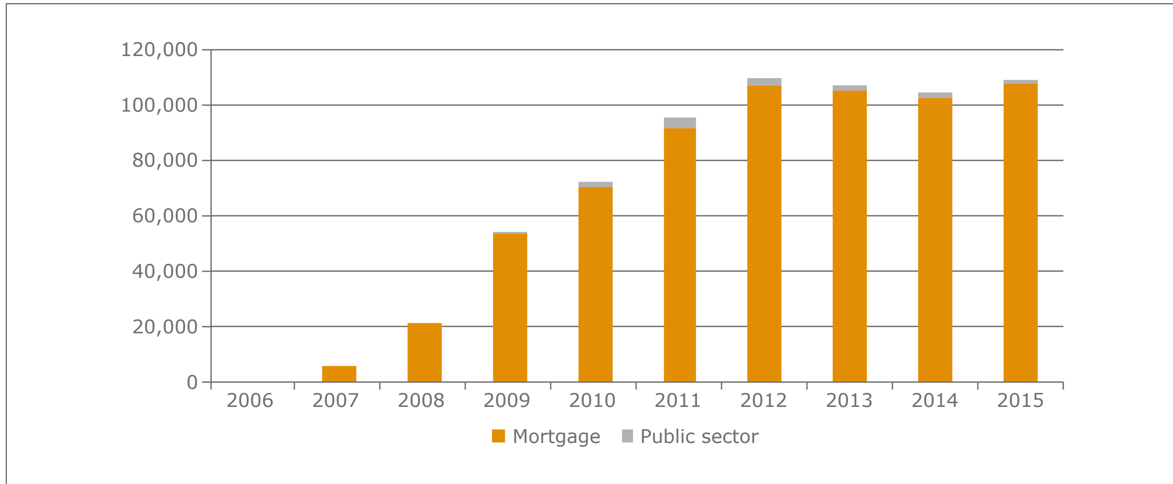
Tightening of regulations regarding mortgage lending

On 15 June 2015, the government announced a new strategy for the housing market. The objective of the strategy is to simplify regulations and bureaucracy to increase housing supply in relevant areas, as well as tighten credit regulations to dampen the growth in house prices and household debt. The latter led to a change in regulation, and borrowers now face the following requirements:

- Maximum loan-to-value (LTV) of 85%;
  - It is possible with higher LTV if one has additional security in the form of other property or others provide a personal guarantee;
- Mandatory instalments for loans with LTV over 70%;
  - Set to 2.5% annually or the equivalent to instalments on an annuity loan with 30-year duration;
- Credit lines up to maximum 70% of market value;
- Borrowers must be able to withstand an increase in the mortgage interest rate of 5 percentage points; and,
- To ensure some flexibility, banks are able to deviate from the above requirements in certain cases. The limit is however set to 10% of granted loans each quarter. The new regulation will only affect new loans.

The regulation became effective from 1 July 2015 and is set to last until 31 December 2016, but may be extended further.

> FIGURE 1: COVERED BONDS OUTSTANDING, 2006-2015, EUR M



Source: EMF-ECBC

> FIGURE 2: COVERED BONDS ISSUANCE, 2006-2015, EUR M

Source: EMF-ECBC

Issuers: Bustadkreditt Sogn og Fjordane AS, DNB Boligkreditt AS, DNB Næringskreditt 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, SpareBank 1 Boligkreditt AS, SpareBank 1 Næringskreditt AS, Sparebanken Sør Boligkreditt AS, Sparebanken Vest Boligkreditt AS, Sparebanken Øst Boligkreditt AS, SSB Boligkreditt AS, Storebrand Boligkreditt AS, Totens Sparebank Boligkreditt AS, Verd Boligkreditt AS, SR-boligkreditt AS, Skandiabanken Boligkreditt AS.

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/75/Norway.

COVERED BOND · LABEL · : DNB Boligkreditt mortgage cover pool; Eika Boligkreditt AS (EIKBOL); Nordea Eiendomskreditt cover pool; Sparebank 1 Boligkreditt (Spabol).

3.23 PANAMA

By Frank Will, HSBC & Chairman of the ECBC 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 200 m deal was issued under Global Bank's USD 500 m Residential Mortgage Loans Covered Bond Programme. In October 2013, the bond was increased by USD 100 m. As of June 2016, we have not seen any new issuance or new covered bond issuers out of Panama.

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 programme in Panama to date, i.e. the one from Global Bank.

II. STRUCTURE OF THE ISSUER

In the absence of a specific covered bond law in Panama, Global Bank Corp. y Subsidiarias 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 programme has 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 other Panamanian covered bond issuers, we focus below on the asset requirements of Global Bank's covered bond programme. Under the programme, the covered bonds are backed by a dynamic pool of first-ranking residential mortgage loans originated in Panama.

The residential mortgage loans are subject to various 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.

IV. VALUATION AND LTV CRITERIA

The maximum permitted LTV is 100% in Global Bank's covered bond programme. 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%.

V. ASSET – LIABILITY MANAGEMENT

Global Bank's covered bond programme 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.

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.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The asset monitor reports on the arithmetic accuracy of the calculations performed by the cash manager on the calculation date immediately prior to the guaranty trust payment date at the end of each fiscal quarter with a view to confirmation of compliance with the Asset Coverage Test or the Amortisation Test on that calculation date. Following the occurrence of a servicer termination event, the asset monitor will, subject to receipt of the relevant information from the cash manager, be required to report on such arithmetic accuracy following each calculation date and, following a determination by the asset monitor of any errors in the calculations

performed by the cash manager such that the Asset Coverage Test has been failed on the applicable calculation date or the adjusted aggregate loan amount or the amortisation test aggregate loan amount is misstated by an amount exceeding one per cent of the adjusted aggregate loan amount or the amortisation test aggregate loan amount, the asset monitor will be required to verify the procedures and calculations made by the cash manager on each calculation date for a period of six months thereafter.

The cash manager will check compliance with the tests on each calculation date. The asset monitor will periodically check compliance. If any of the tests noted above are not satisfied and the breach is continuing, the issuer must take prompt remedial action. The issuer will immediately notify the trustee of the breach of any of the tests. In the event of a breach of either the Asset Coverage Test or the Interest Shortfall Test which is continuing, the issuer will not be permitted to issue.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

As mentioned above, the covered bonds are direct and unconditional obligations of the issuer but are secured by the guaranty trust assets. The guaranty trustee has no obligation to pay the amounts set out in the guaranty trust priority of payments until the occurrence of an issuer event of default, service by the trustee on the issuer of an issuer acceleration notice and on the guaranty trustee of a notice to pay. There are a number of features of the programme which are intended to enhance the likelihood of timely payments to covered bond holders: (1) the guaranty trust assets secure the obligations of the issuer in respect of the covered bonds; (2) the Asset Coverage Test is intended to test the asset coverage of the guaranty trust assets in relation to the covered bonds prior to the occurrence of an issuer event of default, service of an issuer acceleration notice on the issuer and service of a notice to pay on the guaranty trustee; and last but not least (3) the Amortisation Test is intended to test the asset coverage of the guaranty trust assets in relation to the covered bonds following the occurrence of an issuer event of default, service of an issuer acceleration notice on the issuer and service of a notice to pay on the guaranty trustee.

If an issuer event of default occurs then, for so long as such issuer event of default is continuing, (i) no further covered bonds may be issued and (ii) following service of a notice to pay on the guaranty trustee, the guaranty trust available funds will be dedicated exclusively to the payment of interest and repayment of principal on the covered bonds and to the fulfilment of the obligations of the issuer to the other creditors in accordance with the guaranty trust priority of payments.

All covered bonds issued from time to time will rank pari passu with each other in all respects. If an issuer event of default occurs in respect of a particular series of covered bonds, then, following the service of an issuer acceleration notice, the covered bonds of all series outstanding will accelerate at the same time against the issuer but will be subject to, and have the benefit of, payments made by the guaranty trustee under the Guaranty Trust Agreement (following service of a notice to pay on the guaranty trustee). Payments by the cash manager on behalf of guaranty trustee under the Guaranty Trust Agreement in relation to such covered bonds will continue to be required to be made on their original due for payment date. If a guaranty trust event of default occurs, following service of a Guaranty Trust Acceleration Notice, the covered bonds of all series outstanding will accelerate against the issuer (if not already accelerated following an issuer event of default) and the obligations of the guaranty trustee under the Guaranty Trust Agreement will also accelerate against the guaranty trustee.

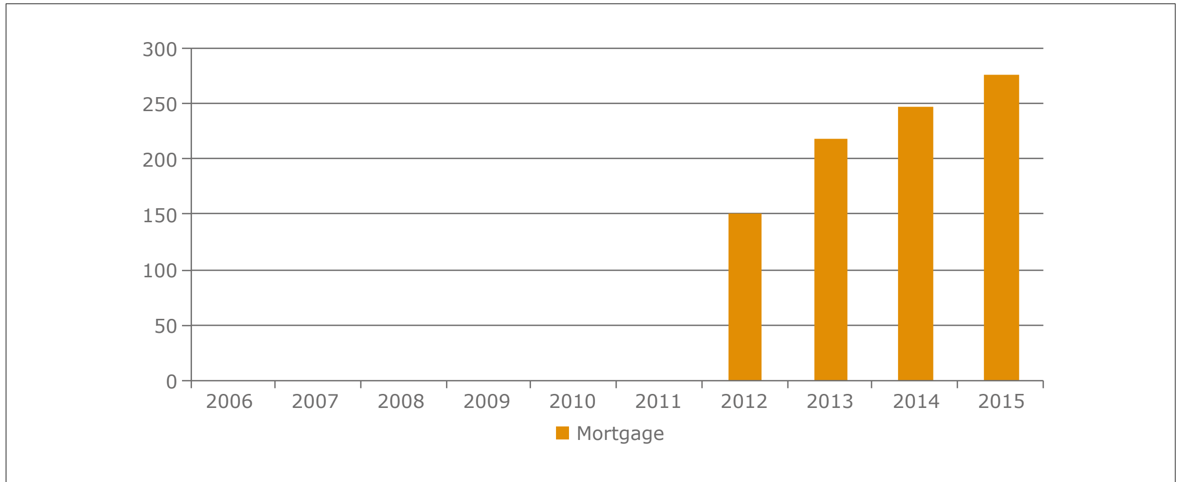
In order to ensure that any further issue of covered bonds under the programme does not adversely affect existing holders of the covered bonds, the Asset Coverage Test will be required to be met both before and after any further issue of covered bonds and, on or prior to the date of issue of any further covered bonds, the issuer will be obliged to obtain written confirmation from the rating agencies that such further issue would not adversely affect the ratings of the existing covered bonds. Nevertheless, there can be no assurance that any further issuances will not adversely affect existing holders of the covered bonds.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Global Bank's 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.

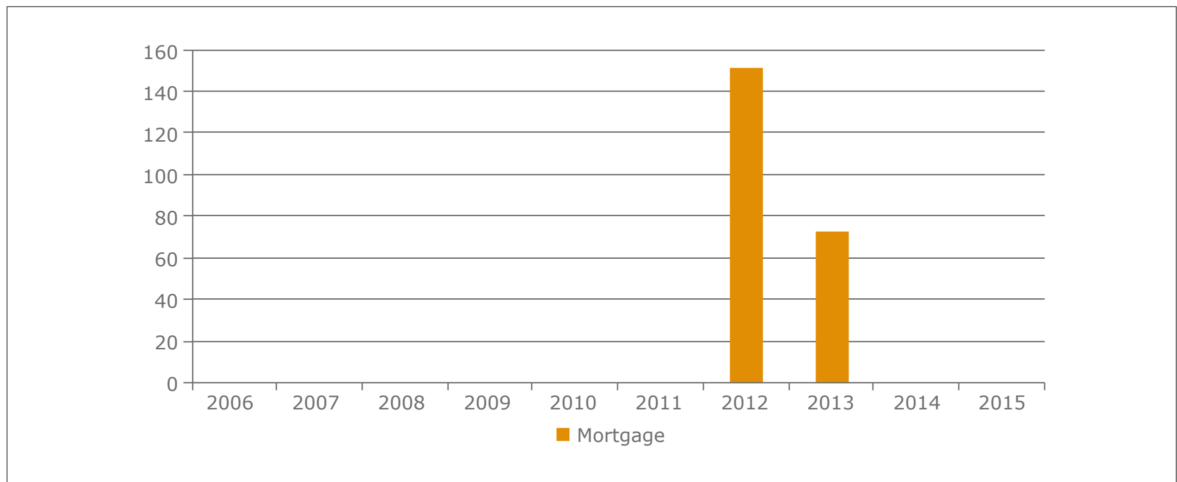
As Panama is neither an European Economic Area (EEA) country nor a G10 country, Panamanian covered bonds are not eligible for the European Central Bank repo operations regardless of their currency and their rating.

> Figure 1: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 2: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: Global Bank Corp (Panama)

3.24 POLAND

By Agnieszka Tułodziecka, Polish Mortgage Credit Foundation and Krzysztof Dubejko, mBank Hipoteczny

I. FRAMEWORK

The legal framework for Polish covered bonds (Listy Zastawne, also LZ) is 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 and Reorganization Law (*Prawo upadłościowe i naprawcze*) of February 28, 2003, Chapter II – Bankruptcy proceedings for mortgage banks, Article 442–450.

In 2015 the LZ Act has been thoroughly updated in order to enhance covered bond risk profile with new provisions coming into force as of 1 January 2016. Among the key modifications were: introduction of statutory overcollateralization and liquidity buffer, increase of funding limit for residential loans as well as implementation of soft bullet and conditional pass through structure upon insolvency.

In 2014, key under-law regulations for mortgage banks were amended by Polish Financial Supervision Authority:

> Recommendation F – the standards for determining mortgage-lending value were ease.

> Recommendation K – the rules on keeping and managing cover registers were actualised.

Both recommendations were to be implemented by 1 January 2015.

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 licences: a banking licence and consent to start operating activity, both granted by the KNF.

Since 23 February 2011 there is one more entity authorised to issue covered bonds. The additional covered bond issuer is Poland's only state-owned bank, Bank Gospodarstwa Krajowego (BGK), which may issue covered bonds to finance government programmes in particular. 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 upon obtaining relevant authorisations.

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 banks may engage in accepting term deposits, taking credits and loans, issuing bonds, safekeeping securities, keeping bank accounts for servicing investment projects funded by a mortgage bank, 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 service savings accounts. Such limitations facilitate maintaining a more simplified and clear 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 (ranking *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 covered bonds in trading.

Derivatives are eligible for the cover pool for hedging purposes only. 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, which stipulate in details 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%/80% 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 loan granted by a mortgage bank cannot exceed the mortgage lending value of the property.

V. ASSET-LIABILITY MANAGEMENT

According 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 on-going cover principle is more prudent, including 10% mandatory overcollaterisation. That would apply to both public and mortgage covered bonds, the overcollaterisation is calculated on nominal basis regarding the capital amount of outstanding covered bonds. Additionally, part of the covered bond collateral would be compulsory composed of liquid assets (e.g. central bank eligible bonds), in order to ensure preparation of liquidity buffer. 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

The information on the activity of Polish mortgage banks can be found on the Polish Mortgage Credit Foundation's website: http://fundacja1.home.pl/ehipoteka/pol/Covered-Bonds/Information-for-investors.

The range of data published on a six month basis comprises all data required by the transparency rules according to Article 129(7) CRR, including:

- new issues of covered bonds,
- outstanding covered bonds (both mortgage and public sector),
- total assets of mortgage banks,
- sales results of residential and commercial credits by mortgage banks.

All 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.

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, of which 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: www.mhipoteczny.pl/investor-relations/;
Pekao Bank Hipoteczny: www.pekaobh.pl/u235/navi/31467;
PKO BP Bank Hipoteczny: http://www.pkobh.pl/.

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 comprises 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 same to the KNF.

The cover pool monitor is required to perform above mentioned tasks not only on an ongoing basis, but also prior to the 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 including 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, lunching of the insolvency proceedings does not affect *listy zastawne*, i.e. they do not automatically accelerate when the issuer becomes insolvent and shall be repaid at the time of their contractual maturity.

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. Since January 2016, the insolvency law provisions stipulate that in the first year of insolvency, liquidity buffer will be directly used to ensure timely payment of covered bond interest. 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) and not on demand of investors or issuers.

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 an 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 March 2016, the haircut level for repo amounts to 15% (3M repo); 20% (6M repo); 13.5% – 25.5% (depending on maturity) for intraday and lombard credit, same as for corporate and municipal debt.

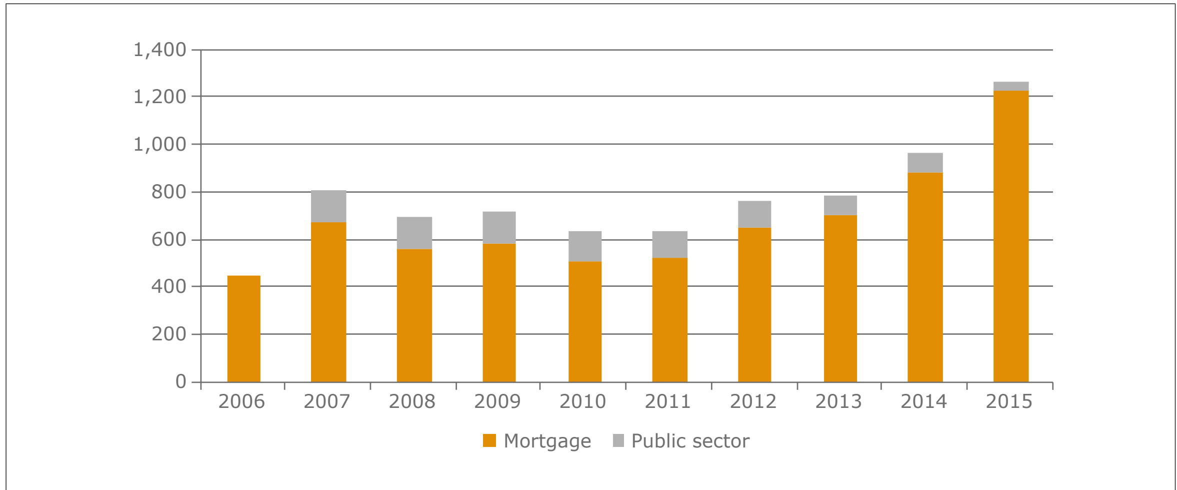
EUR denominated issues at present moment are due to technical limitations not eligible for Eurosystem credit operations.

1 For further information on the UCITS Directive and the Capital Requirements Regulation (CRR) please see: http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

Polish investment regulations pertaining to investment limits for covered bonds are as follows:

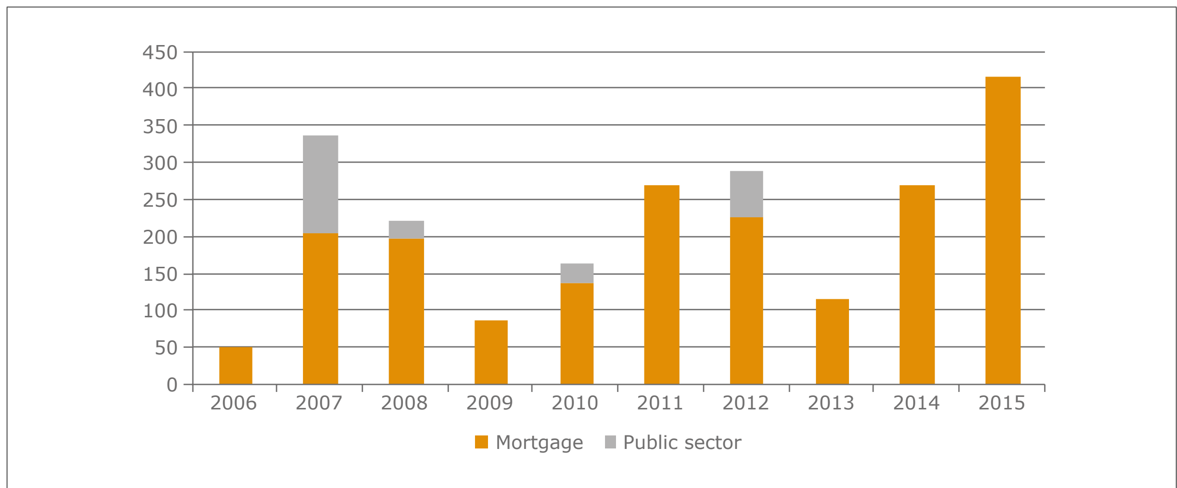
- Banks – no statutory limits, internal concentration limits apply, non-high-quality liquid assets status at present due to limited issue size;
- Credit Unions – up to 8% of assets per issuer;
- Insurance companies – aggregate limit up to 40% (publicly traded) or up to 10% (not admitted to trading) of technical-insurance reserves;
- Investment funds – 25% of assets under management (AuM) limit for covered bonds per issuer or group, 35% of AuM limit for total exposure per mortgage bank or group (incl. deposits, unsecured debt and OTC derivatives), 80% of AuM limit for all covered bonds in portfolio;
- Pension funds up to 40% of the total asset value, 5% (private placement) or 10% (public offer) per one issuer or issuer's group.

> FIGURE 1: COVERED BONDS OUTSTANDING, 2006-2015, EUR M



Source: EMF-ECBC

> FIGURE 2: COVERED BONDS ISSUANCE, 2006-2015, EUR M



Source: EMF-ECBC

Issuers: mBank Hipoteczny S.A., Pekao Bank Hipoteczny S.A. and PKO Bank Hipoteczny S.A.

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/77/Polish_Covered_Bonds.

3.25 PORTUGAL

By Alda Pereira, Caixa Geral de Depósitos

I. FRAMEWORK

In Portugal, the legislation on covered bonds (*Obrigações Hipotecárias* and *Obrigações Sobre o Sector Público*) is regulated by Decree-law no. 59/2006 of 20 March 2006 and complemented by secondary legislation – Notices and Regulatory Instruments of the Central Bank (*Avisos e Instruções*), which address issues such as the segregation of assets from the insolvent estate in case of issuer insolvency, the compliance of asset and liability matching and mortgage valuation methodology.

The exemption of withholding tax for non-resident investors for bonds issued by Portuguese entities was passed in November 2005 (Decree Law n. º 193/2005).

II. STRUCTURE OF THE ISSUER

Obrigações Hipotecárias (OH) and *Obrigações Sector Público* may be issued by credit institutions legally authorised to grant credits guaranteed by mortgages on real estate and with own funds amounting to no less than EUR 7,5 m. These credit institutions are either universal banks or special issuance entities – Mortgage Credit Institutions (MCI).

If the issuer is a universal bank, a direct issue will take place with the cover assets remaining on its balance sheet. If the issuer is a MCI, its authorised business activity is restricted to the granting and acquisition of credits guaranteed by a mortgage or loans of the central government, regional or local authorities or credits guaranteed by these entities. They may also undertake the management of assets that have been repossessed from credits in default, and undertake the activities necessary to obtain additional liquidity and adequately manage the pool.

Assuming the MCI is wholly-owned, the asset originator then transfers the cover assets to this institution and the assets and liabilities will consolidate on the originator's balance sheet. However, it is also possible for the MCI to have multiple owners and, in this case, the assets may or may not consolidate back to the originator.

Considering the MCI has a limited business activity which only makes sense within the context of covered bond issuance, one could expect the MCI to be a 100% owned subsidiary and, as such, act as a complement to the originator's business and funding activity. In this sense, it seems reasonable to expect that it could draw on the parent company's resources to operate.

However, the Bank of Portugal will always determine, on a case by case basis, the necessary conditions that must be met in order to set up an MCI.

III. COVER ASSETS

Credit mortgage loans are eligible as collateral for mortgage covered bonds i.e. credits guaranteed by first ranking mortgage loans. Second mortgage loans can be assigned to the pool if the first mortgage loan was previously assigned as well – therefore both loans are attached to the same property, provided that the total amount of these loans does not exceed the maximum Loan to Value (LTV) level permitted.

Public sector assets are eligible as collateral for public sector bonds i.e. loans granted to the central governments, regional or local authorities or guaranteed by these entities.

The Law specifies that the registration of the assets must assure mortgage credit and public sector segregation. This means that separated pools will have to be set up.

Substitution assets (up to 20%) can be included in the pool:

> Deposits with the Bank of Portugal in cash, government bonds or other eligible bonds (ECB Tier 1 assets)[1];

> Deposits in other credit institutions rated at least "A-";

> Other low risk and high quality assets – if necessary, to be defined by the Bank of Portugal.

Even though the Portuguese Covered Bonds Decree Law allows for substitution assets up to a limit of 20% of the pool, Bank of Portugal's regulation establishes that the pool can only trade with credit institutions qualifying for credit quality assessment step 1 and that the aggregate risk positions cannot exceed 15% of the aggregate nominal value of the outstanding covered bonds or public sector covered bonds (with the exception of those positions with a residual maturity of 100 days or less), thus complying with what is establish by Article 129(1)(c) of the Capital Requirements Regulation (CRR).

The geographical scope of eligible assets is restricted to loans guaranteed by first lien mortgages on property located in the European Union (EU) or loans granted to the central governments and regional or local authorities located in an EU member state.

Derivative contracts are permitted in the cover pool for hedging purposes, namely to mitigate interest rate, exchange rate and liquidity risks. The transactions involving derivatives, must be executed in a regulated market of a Member State of the European Union, in a legally established exchange of a full member of the OECD, or entered into with a counterparty that must be a credit institution rated "A-" or above. The legal documentation (agreement between the parties) should be standardised, however this will have to safeguard the preferential claim for the counterparty. If the currency of the issue is not in EUR, the use of exchange rate derivative contracts is mandatory in order to hedge the inherent risk of the issue.

The cover pool is dynamic while the originator is solvent and issuers are required to maintain a record of all the assets in the cover pool, including derivatives contracts.

IV. VALUATION AND LTV CRITERIA

The value of the mortgaged asset[2] is the commercial value of the real estate, considering:

> Sustainable characteristics over the long term;

> Pricing under normal market conditions;

> The peculiarities of the local market; and

> The current and alternative uses given to the mortgage asset.

The value of the mortgage asset ascertained by the issuer cannot be superior to its market value, which is the price that the object could be sold at the time the appraisal is made. This assumes that the real estate is placed on sale and that market conditions allow for a regular transmission of the mortgaged asset within an adequate timing.

The property appraisal should be carried out by an independent appraisal specialist, previous to the respective mortgage credits being assigned to the covered bond pool.

Appraisals already carried out by a property appraisal expert are also accepted as long as the following conditions have been met:

> Appraisals have been carried out by an expert independently of the credit analysis and decision process of the bank;

1 Notice n.º 6/2006.

2 Notice n.º 5/2006.

> Appraisals have been documented in a written report that includes, in a clear and rigorous form, the elements that allow for an understanding of the analysis conducted and the conclusions arrived at by the expert;

> The property was appraised from a market value perspective or a property value perspective as defined in the law;

> There is no evidence that the property appraisal, arrived at from the perspective above mentioned, was overvalued at the time the loan was assigned to the covered bond pool.

The value of the mortgaged property must be checked by the institution on a periodic basis, at least every three years for residential mortgages and at least once a year for commercial properties. More frequent checks must be carried out if market conditions are prone to significant changes.

In order to check the value of the mortgaged property or to identify those properties that require periodic appraisal by an expert, the institution may use indices or accepted statistical methods that it considers appropriate. When indices or statistical methods are employed, the credit institution must submit to the Bank of Portugal a report detailing the foundations for the use of those indices or statistical methods along with an opinion on their adequacy by an external independent appraisal specialist.

Property appraisal must be revised by an expert whenever there is relevant information that indicates that a substantial reduction of the asset value has occurred or that the asset value relative to the general trend of the market has declined significantly.

For loans that exceed 5% of the institutions' own funds or exceed EUR 500,000 for residential mortgages and EUR 1 m for commercial mortgages, the appraisal must be carried out at least every three years.

Revision of the value of an asset must be documented by the credit institution, in a clear and rigorous way, namely a description of the criteria and frequency of such a revision.

The property appraisal should be carried out by an independent appraisal specialist, with qualifications, competency and professional experience to perform this function.

The appraisal specialist is deemed not to be independent if he is in a situation susceptible of affecting his unbiased opinion, namely if he has any specific interest in the real estate being appraised or any relationship – commercial or personal – with the debtor, or if his compensation is dependent on the appraisal value of the property. The appraisal specialist may belong to the institution; however, he must have independence from the credit analysis and decision process.

The selection of the appraisal specialist by the institution must assure both diversification and rotation, and the credit institution has to maintain an updated list of the selected appraisal specialists, identifying the criteria justifying their selection and the real estate appraised by each specialist.

This list should be sent to the Bank of Portugal until the end of January of each year, reporting up to 31 December of the previous year, and indicate any changes from the last report. If there are any doubts on the performance of the appraisal specialist, the Bank of Portugal can refuse to accept the valuations, demanding the appointment of another appraisal specialist by the credit institution.

When choosing the appropriate method, the appraisal specialists should consider the specific characteristics of the real estate and its local market. The appraisal of the real estate performed by the specialist should take the form of a written report and include all the elements that allow for an understanding of the analysis carried out and conclusions arrived at.

The maximum loan to value accepted for assets to be eligible into the pool is 80% for residential mortgages and 60% for commercial mortgages loans.

V. ASSET – LIABILITY MANAGEMENT

There are various asset and liability matching requirements established in the decree-law:

> The global nominal value of the outstanding mortgage bonds cannot exceed 95% of the global value of mortgage credits and other assets at any point in time assigned to the bonds (i.e., mandatory overcollateralisation of 5.2632%);

> The average maturity of outstanding mortgage bonds can never exceed the average life of the mortgage credits and substitution assets assigned to the issues;

> The total amount of interest to be paid by the mortgage bonds shall not exceed, at any point in time, the amount of interest to be collected from mortgage credits and other assets assigned to the bonds – cash flows from the cover pool must all be sufficient to meet all scheduled payments due to covered bond holders.

The law also promotes a sound cover pool management by allowing the issuer to apply the funds (for example, funds received from early repayment) to other assets and assign new mortgages to the pool. This option allows issuers to avoid potential cash-flow mismatches. It is also possible for issuers to establish a credit facility to provide for liquidity. This credit facility counterparty is required to have a minimum credit rating of "A-".

Issuers may use derivatives contracts to hedge the interest and exchange rate and liquidity risks. The derivatives are included in the cover pool and derivative counterparties – who also benefit from preferential claim – have to be rated "A-"or above.

If the limits defined in the Decree Law are exceeded, the issuer shall immediately resolve this situation by assigning new mortgage credits, purchasing outstanding bonds in the secondary market and/or assigning other eligible assets. These will, in turn, be exclusively assigned to the debt service of the bond.

Regarding these matters, the secondary legislation[3] determines the application of the following criteria:

> Loans must be accounted according to their outstanding principal, including matured interest;

> Deposits shall be accounted according to their amount including accrued interest;

> Interests eligible for Eurosystem credit transactions shall be accounted according to the value resulting from the rules regarding valuation margins defined by the Eurosystem or, if lower, according to its nominal value, including accrued interest;

> Covered bonds and public sector covered bonds shall be accounted according to the corresponding outstanding principal, including accrued interest.

Interest rate or FX derivatives must be accounted in accordance with their market value and in the event that the corresponding loans and other substitute assets are denominated in different currencies, the issuer must ensure hedging of the relevant currency risk, and the reference exchange rates published by the European Central Bank shall be used for this purpose.

Single name risk is also addressed. The aggregate in risk positions with credit institutions – excluding those with a residual maturity date of 100 days or less – cannot exceed 15% of the aggregate nominal value of the covered bonds or public sector covered bonds outstanding.

The net present value of the liabilities arising from the issuance of mortgages covered bonds or public sector covered bonds cannot be higher than the net present value of the portfolio allocated to such bonds, taking into account any derivative instruments put in place. The ratio established shall be able to comply even when 200 basis points parallel movements of the curve are considered.

3 Notice n.º 6/2006.

Each issuer must deliver in writing the specific and individual policies in written form for risk management, namely exchange risk, liquidity risk, interest rate risk, counterparty risk and operational risk and any other procedures aimed at ensuring compliance with the applicable regulatory regime and with any devised risk limitation policies set by the issuer.

The Bank of Portugal may also make use of its regulatory role to require additional steps by the issuers to meet with all the asset-liability criteria that it sets out.

VI. TRANSPARENCY

In order to provide consistent data and transparency for their issues, thus complying with Article 129 (7)(b) CRR, Portuguese covered bond issuers have developed a Common National Transparency Template based on the CBIC Template in order to ensure standardisation and comparability of the data provided by its covered bond investor reports. The Template can be found at the Covered Bond Label website.[4]

These investor reports are published on each bank's website, encompassing specific, relevant and detailed information on the Portuguese covered bonds and the cover pools and are updated on a quarterly basis. Key concepts explanations are available for a better comprehension.

Should investors require additional financial information they deemed relevant on the Bank`s consolidated accounts or Groups Balance Sheet, they can obtain it on the respective website or directly by contacting the issuers.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The Board of the issuer will appoint an independent auditor who must be registered with the Portuguese Securities Commission, with the task of defending the interests of the bondholders and of verifying the compliance to applicable legal and regulatory guidelines. An annual report must be published. The Bank of Portugal will review its content and may make use of its regulatory role to request additional information[5].

In the law, there are no specific rules on the cover pool monitor's responsibility. General rules on civil and contractual responsibility apply. The cover pool monitor will only be liable in case it does not comply with rules applicable to its activity or with its contractual obligations. If the cover pool monitor has complied with all its obligations, it will not be liable in case the issuer has not respected the applicable regulation.

Also, a bondholders' joint representative – common to all mortgages or public bond issues – is to be appointed by the Board of Directors of the issuer in order to represent the interest of the bondholders and supervise the cover pool.

The Bank of Portugal and the Portuguese Securities Commission (CMVM) are responsible for banking and capital markets supervision. The law grants powers to the Bank of Portugal to regulate and supervise the issuers of covered bonds, so they must comply with the requirements of the law and all applicable regulations. Non-compliance by the issuer could imply the application of fines and other sanctions and, ultimately (in a worst case scenario), could determine the revocation of the issuer's licence.

Additionally, the Bank of Portugal has been granted powers to control compliance of the applicable rules for as long as the bonds remain outstanding, namely it may:

> Refuse asset valuations made by a valuation's expert if it has doubts concerning its performance, and demand to the issuer its replacement;

> Require new asset valuations by different experts; and

> Ask for clarifications or additional documents concerning all reports required and received.

4 https://www.coveredbondlabel.com/issuers/national-information-detail/19/.

5 Regulatory Instrument n.º 13/2006.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Preferential status for Portuguese covered bonds holders and bankruptcy remoteness

Holders of covered bonds benefit from special preferential claim over the assets assigned to the issue, with precedence over any other creditors – the covered bond law supersedes the general bankruptcy regulation – for the redemption of principal and payment of interest.

The mortgages that guarantee these credits prevail over any real estate preferential claims. The derivatives contracts are part of the pool and derivatives counterparties rank pari passu with bondholders in terms of preferential claim over the assets in the pool, and consequently, their contracts are not expected to be called in case of insolvency of the originator.

Despite the absence of a direct link between the cover assets and the outstanding covered bond issuance, there is a legal provision that links the cover pool to the payment of capital and interest on the covered bonds thus rendering covered bonds direct, unconditional obligations of the issuer. The issuer of covered bonds holds the claims on the cover assets and these, in turn, will guarantee the covered bonds until all payments due to bondholders have been met.

If the issuer becomes insolvent, cover assets form a separate legal estate – a pool that is to be administered in favour of the covered bondholders, and consequently there is no automatic acceleration of the mortgage bonds.

However, bondholders may convene a bondholders' assembly and may decide by a majority of 2/3 with regard to the outstanding bond volume to call the mortgage bonds, in which case, the administrator shall provide for the liquidation of the estate assigned to the issues and thereafter the payment of creditors in accordance with the provisions defined in the decree-law.

If the cover assets are not sufficient for the covered bonds, bondholders and derivative counterparties will rank pari passu with any common creditors of the issuer in relation to all other assets of the issuer (not included in the cover pool), after all guaranteed and privileged creditors have been duly paid up, for the payment of the remaining debt due to them.

Asset segregation

The assets – mortgages loans or public sector loans and substitute assets – and derivative contracts assigned to the issues are held by the issuer in separated accounts – cover register – and can be identified under a codified form. This information is deposited in the Bank of Portugal in the form of a code key. The Bank of Portugal regulates the terms and conditions by which the bondholders will have access to such key in case of default[6].

The legal effect of registration is to segregate those assets from the insolvent estate over which bondholders will have a special claim in case of insolvency/bankruptcy. In this situation the assets pledged to one or more issues of mortgage bonds will be separated from the insolvent estate for the purpose of its autonomous management until full payments due to the bondholders have been met. Despite this, the law stipulates that timely payments of interest and reimbursements should continue. In that way, cover assets form a separate legal estate, a pool administered in favour of the covered bondholders.

In an insolvency situation of the issuer two situations may occur:

> The issuer voluntarily assumes that it is insolvent and will present a project to the Bank of Portugal pursuant to article 35-A of the Credit Institutions General Regime, containing the identification of the credit institution that will be appointed to manage the cover pool, together with the terms under which those services will be rendered;

6 Notice n.º8/2006.

> The revocation of the authorisation of the issuer with outstanding covered bonds or public sector covered bonds takes place, and the Bank of Portugal shall appoint a credit institution[7] to undertake the management of the cover pool.

The cover pool will be managed autonomously by this credit institution, which should prepare, immediately upon initiating its management, an opening balance sheet in relation to each autonomous portfolio and relevant bonds, supplemented by the necessary explanatory notes and should perform all acts and deals necessary for a sound management of the loan portfolio and its guarantees with the aim of ensuring a timely payment on the covered bonds, including selling credits, assuring their servicing all administrative procedures pertaining to these credits, the relationship with the debtors, and all modifying and extinguishing acts relating to their guarantees and must carry out and keep updated a registry, in off-balance sheet accounts, the details of the cover pool, in the terms set forth in the Decree-law No. 59/2006.

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) are allowed to apply a 20% risk weighting[8]. 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.

X. ADDITIONAL INFORMATION

Developments in the Portuguese covered bond market

In 2015, Banco Santander Totta benefiting from a sustained environment of good funding conditions successfully tapped the market in October 2015 with a EUR 750 million 5 year issue with a coupon of 0.875% at a reoffer price of 55 bps over middle swaps. This was the second covered bond out of Portugal in 2015 following Caixa Geral de Depósitos' issue in January of a EUR 1 billion 7 year bond with a coupon of 1%.

Throughout the year and in the first months of 2016, the secondary market for Portuguese covered bonds remained relatively stable with spreads and yields influenced by various factors the most significant of which was the European Central Bank's intervention in the market through its Covered Bond Purchase Program. This had the effect of lowering yields gradually, with greater incidence in the first months of 2016, when shorter maturities begun to achieve very low or even negative yields. Nevertheless, it still represents a pickup for investors when compared to German Government and Covered Bonds.

In October, a Portuguese covered bond issuer, Novo Banco, set up a new Conditional Pass-Through Covered Bond Program (CPT) under the Portuguese Covered Bond Law, listed on the Irish Stock Exchange. This new program includes additional conditions when compared to the existing soft bullet covered bond programs including the possibility of extending maturity up to 50 years after the issue date for each Series and the enhanced liquidity with the obligation of holding a reserve account with sufficient liquidity to cover payments of at least 3 months of interest.

Thus far, Novo Banco was the only Portuguese Bank to issue under a specific Program, retaining the bonds as collateral for central bank repurchase agreements. However, with the same objective, in the past, other issuers used special provisions for maturity extension in their issues' final terms to achieve similar structures within already existing covered bonds prospectus.

7 Designated Credit Institution.

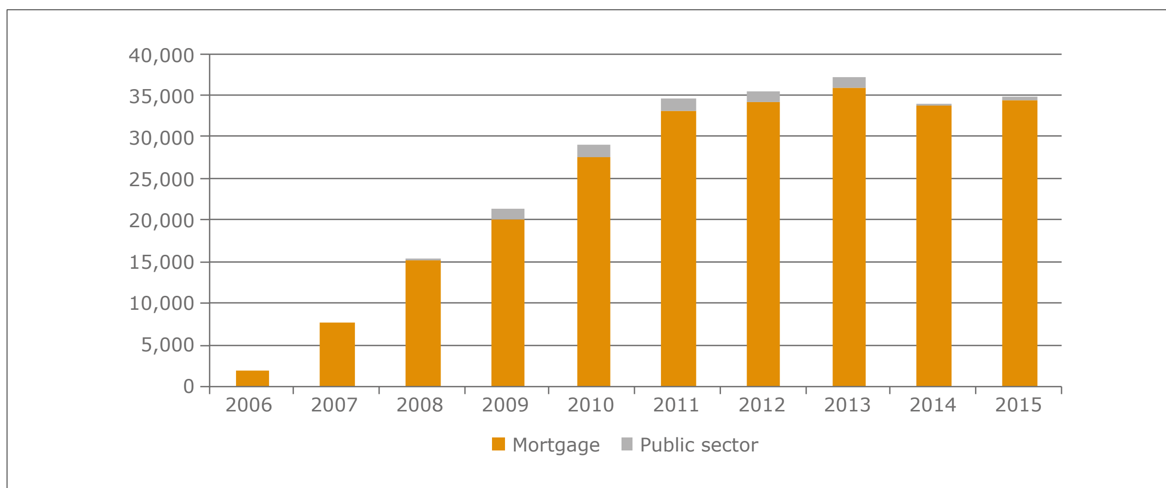
8 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

Other CPT programs may follow, since the bonds issued with these characteristics give additional guaranties to investors and obtain higher ratings by reducing liquidity and repayment risk permitting a higher credit differential between this type of covered bonds and senior bonds of the same issuer with the additional benefit of requiring a lower level of overcollateralisation.

Mention should be made to the fact that the major Portuguese covered bonds issuers are preparing the implementation and disclosure of the Common Transparency Template ensuring that the particularities and strengths of Portugal Covered Bonds' Law are observed.

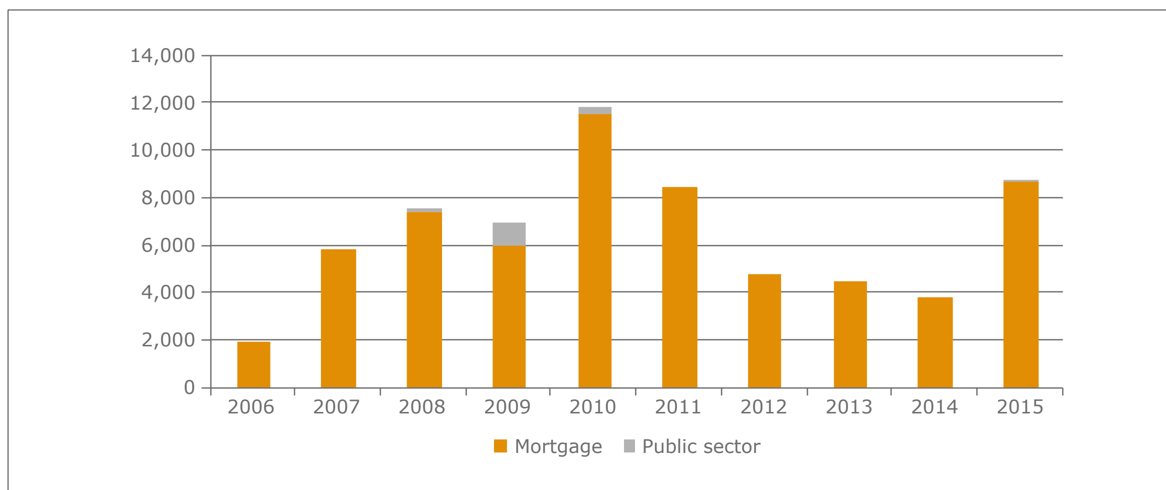
By December 2015, both *Obrigações Hipotecárias* and *Obrigações sobre o Sector Público* combined had an outstanding amount of € 34.96 billion with a residual weighted average tenor of 3.7 years.

> Figure 1: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

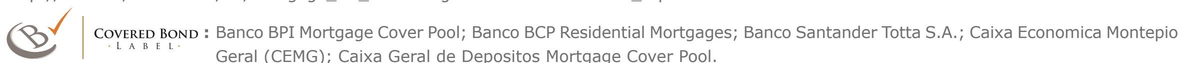
> Figure 2: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: Banco Comercial Português, Novo Banco, Banco de Investimento Imobiliário, Banco Português de Investimento, Caixa Económica Montepio Geral, Caixa Geral de Depositos, Banco Santander Totta, Banco Popular Portugal and Banco Internacional do Funchal[9].

ECBC Covered Bond Comparative Database:
http://ecbc.eu/framework/38/Public_Sector_CB_%28Obriga%C3%A7%C3%B5es_sobre_o_Sector_P%C3%BAblico%29 and
http://ecbc.eu/framework/39/Mortgage_CB_%28Obriga%C3%A7%C3%B5es_Hipotec%C3%A1rias%29.



Covered Bond : Banco BPI Mortgage Cover Pool; Banco BCP Residential Mortgages; Banco Santander Totta S.A.; Caixa Economica Montepio Geral (CEMG); Caixa Geral de Depositos Mortgage Cover Pool.

9 Banco Internacional do Funchal was bought by Banco Santander Totta and its respective covered bonds issues were called on the 23th of January 2016.

3.26 ROMANIA

By Irina Neacsu, Banca Comerciala Carpatica, in the name of Romanian Banking Association,
and Adrian Sacalschi, FHB Bank

I. FRAMEWORK

In Romania the legal basis for Covered Bond issuance is the Mortgage Covered Bonds Law Nr. 304/2015. This law replaced the Mortgage Covered Bonds Law Nr. 32/2006 and supersedes the general bankruptcy regulation.

Since the implementation of the Mortgage Covered Bonds Law no covered bonds have been issued by a local issuer.

II. STRUCTURE OF THE ISSUER

The issuer can only be a credit institution (as defined by Romanian Banking Law, which is in line with the EU legislation). Therefore, all commercial or mortgage banks may be issuers. For each issue of mortgage bonds, the issuer must obtain an issuance approval from the National Bank of Romania. The Central Bank is supervising the covered bond issuance activity for fulfilment of the prudential requirements.

Pursuant to the Mortgage Covered Bonds Law, the issuer holds the assets on its balance sheet. The covered bond issuer holds the ownership title over the portfolio. 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 holders of the specific bond issue.

Assets servicing may be outsourced, but for covered bonds it is expressly regulated only in case of the issuer's bankruptcy.

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 interest over the cover assets, which are segregated in bankruptcy. *The legislative provisions in the old Mortgage Covered Bonds Law regarding separate cover pools for each covered bond issue were set aside in the amended Romanian covered bond legal framework.* Real estate receivables, other financial assets and financial derivatives securing the mortgage bonds are structured by the issuer into a single cover pool.

III. COVER ASSETS

In the case of covered bonds structured under the Mortgage Covered Bonds Law, only mortgage loans (i.e. residential or commercial mortgage loans) can be included in the cover pool. The cover pool must be replenished with other mortgage loans if some of the pledged loans don't fulfil the eligibility criteria anymore. Other eligible assets (besides mortgage loans) will only be used for supplementing the cover pool if the issuer has no other mortgage loans that could be used for such purpose. The list of these other eligible assets which can be included in a cover pool is established by the National Bank.

In terms of derivatives, the issuer can include in the cover pool, apart from real estate receivables, other financial assets and, subject to conditions set out in art. 14 and art. 18 par (8) of the Mortgage Covered Bonds Law, also financial derivatives. The National Bank of Romania issues regulations regarding the categories of financial assets other than real estate receivables, the eligibility conditions and the maximum threshold of such assets in relation to the other elements of the cover pool. 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 general regulation issued by the National Bank has further details in art. 47 on the conditions which have to be fulfilled by the derivatives included in the cover pool.

The amended Mortgage Covered Bonds Law stipulates in art. 18 that the mortgage loans must fulfil several eligibility or performance criteria in order to be included in the cover pool:

- The funds under the mortgage loans have been made available in full to the beneficiaries of the respective loans;
- The mortgage loans have been granted for real estate investment purposes in Romania or in the European Union or European Economic Area member states, or for real estate investment purposes in third countries. However, in the latter case, the threshold of real estate receivables which can be included in the cover pool cannot exceed 10% of the real estate receivables included in the pool;
- The relevant real estate receivables should not be subject to any mortgage or legal or contractual privilege;
- The rights *in rem* created to secure the repayment of the real estate receivables have been created solely in favour of the issuer;
- The mortgaged real property must hold an all-risk insurance for an amount at least equal to the market value of the real property as of the execution/renewal of the insurance policy, the rights under the insurance agreement have been assigned in favour of the issuer and the insurance has been maintained valid throughout the secured period of the mortgage bonds issues;
- At the time of its inclusion in the cover pool, each real estate receivable must not incur delayed payments, and subsequently, it should not record a delay in payment of more than 15 days throughout the validity of the cover pool;
- The debtor under such receivable must have been notified, pursuant to the provisions of art. 10 par. (1) of the Law, that the receivable the issuer held against it is to be included in the cover pool which will serve as security for the issuance of mortgage bonds;
- The debtor of the relevant receivable has not notified its failure to waive the right to claim compensation against the issuer, according to art. 10 par (2) of the Law;
- Throughout their inclusion in the cover pool, the receivables must comply with any potential additional eligibility conditions provided in the prospectus or, as applicable, in the offering document attesting the conditions of the issue;
- The cover pool shall include the mortgage loans for which the ratio, determined at the date each loan is granted, between the nominal value of each loan and the reference value of the real property serving as security is not in excess of 80% for the residential real estate loans and of 60% for other real estate loans;
- The value of real estate receivables secured with mortgages over land without buildings and of those secured with mortgages over real property under construction cannot exceed the threshold established by the National Bank of Romania in its relevant regulations;
- The value of the receivables against a single debtor, itself or together with the value of the receivables against its affiliated persons, must not exceed the threshold established by the National Bank of Romania in its relevant regulations;
- 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;
- 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;
- Issuers may establish additional eligibility conditions in their internal regulations, which will be more through than those specified in par. (1) to (8) of the Law and will be made public through the prospectus or, as applicable, are mentioned in the offering document attesting the conditions of the issue.

The Mortgage Covered Bonds Law stipulates that the cover pool is dynamic. The replacement of the mortgage loans included in the cover pool is prescribed as an obligation when certain mortgage loans no longer comply with the eligibility criteria, have become non-performing in the meaning of this law or determine the reduction of the weighted average of the maturities of the mortgage loans included in the cover pool, of the value of the mortgage loans included in the pool or of the interest amount, according to the limits provided by law.

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. The trustee will check the fulfilment of this issuer's obligation.

V. ASSET – LIABILITY MANAGEMENT

The Mortgage Covered Bonds Law stipulates that the net present value of the outstanding bonds must be covered at all times by the net present value of the assets. The new Law stipulates in art. 13 a minimum of 2% overcollateralization.

VI. TRANSPARENCY

Regarding the disclosure requirements, detailed information concerning the assets included in the cover pool has to be provided in the offering circular, such as: the value of the mortgage loans included in the cover pool; the reference value of the collateral created for the reimbursement of the mortgage loans as established at the conclusion of the collateral agreement against the nominal value of the issue; the interest coverage provided by the cover pool; geographical dispersion of the mortgage loans, maturity, interest, interest computational method and payment schedule as well as prepayment conditions under the respective mortgage loans.

The internal cover register shall contain detailed information on the cover pool and separate sections for registering the substitute assets, other eligible assets and derivatives included in the cover pool. The internal cover register shall be kept and filled in by the issuer with respect to any amendments or changes to the data since the initial registration.

Issuers shall prepare and publish on their own websites quarterly reports, no later than the 15th day of the month following the end of the quarter for which they are drafted, as regards 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.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Under the Mortgage Covered Bonds Law, the activity of a mortgage bond issuer is monitored by the Romanian National Bank (BNR). For mortgage covered bonds, the law provides for the mandatory appointment of an agent. The agent have to be authorised by the National Bank. Initially, the agent shall be appointed by the issuer from a list of agents, approved by the National Bank (mandatory pre-requisite for the issuance of mortgage bonds). Upon subscription of the mortgage bonds by the investors, the revocation/appointment of the agent shall be made exclusively by the general meeting of bondholders.

The agent's main role is to monitor the cover pool on behalf of the bondholders. Its monitoring obligations shall be performed on a monthly basis, based on the synthetic documentation provided by the issuer. The agent has to observe issuer's compliance with the law and prospectus requirements. Based on the documentation provided by the issuer, the agent shall issue a certificate attesting the issuer's compliance with the provisions of the law and with the offering curricular regarding the cover pool structure. The agent shall be jointly and

severally liable towards the bondholders with the issuer, with the financial investment services company handling the sale and with the issuer's financial auditor for the damages caused by non-fulfilment of several duties provided for under the law (including the obligation to monitor the issuer's compliance with the requirements related to the cover pool).

Also, a representative of the covered bond holders must be appointed by the bondholders in the first covered bond holders meeting, his role being to exercise, on its own name, but on the account of bondholders, the bondholders rights, except the voting rights.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

The issuer has the obligation to keep a cover 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. The cover register contains information with respect to each mortgage loan included in the cover pool (i.e. type: commercial or residential, beneficiary of the loan, immovable asset over which the security for reimbursement of the mortgage loan has been created, land book number, value of the mortgage loan and reference value of the immovable asset, any other collateral and its nominal value) and substitute assets.

Registration in the cover register triggers an obligation for the issuer to have a security interest, which is registered with the Electronic Archive for Security Interests in Movable Property and covers each and all assets registered in the register. These assets are specifically registered in the accounting books of the issuer and segregated from the estate of the issuer in the event of bankruptcy. The cover register is kept by the issuer and subject to checks by the agent and supervision by the National Bank of Romania.

Asset segregation

By registration of the security interest over the pledged cover assets and the entry into the internal cover register of the mortgage loans or other assets included in the cover pool, such assets are segregated from the other assets of the issuer. The segregation of the cover assets from the insolvent estate of the issuer is thus a consequence of a contractual pledge and the operation of the law.

In order to fulfil all the obligations of the issuer towards bondholders under this law and under the prospectus, or, as applicable, the offering document attesting the conditions of the issue, the cover pool securing the mortgage bonds represents in accordance with art. 48 of the Law an autonomous estate, separate from the estate of the issuer subject to the liquidation procedure and shall not be, under any circumstances, subject to any liquidation procedure of the issuer's assets. The sale-purchase agreements concluded in breach of these legal provisions shall null and void.

After the launching of the insolvency proceedings, a special portfolio management company carries out the administration of the cover assets. The appointment of the cover pool manager is made by the general meeting of bondholders.

For the purpose of satisfying the receivables of bondholders in the amount and at the dates provided in the prospectus or, as applicable, in the offering document attesting the conditions of the issue and of the distribution of the amounts owed to them, the pool manager may:

- Continue to collect the amounts owed by the debtors of the cover pool, including by way of restructuring or enforcement of receivables in the event of default by the relevant debtors;
- Transfer the obligations undertaken by the issuer to bondholders to another issuer, together with the related cover pool; and
- Perform any other activities necessary for the satisfaction of the receivables included in the cover pool.

The pool manager is bound to consult the National Bank of Romania prior to committing to perform the following operations:

> Postponement of mortgage bonds maturity;

> Partial or total sale of the cover pool;

> Procurement of new financing to cover the temporary liquidity deficit based on the cover pool securing the mortgage bonds; and

> Acceleration of mortgage bond payments.

Impact of insolvency proceedings on covered bonds and derivatives

Mortgage bonds do not automatically accelerate when the issuing institution becomes insolvent, but the bondholders could be obliged to accept payments in advance, with the corresponding recalculation of their rights if the cash-flows in the cover pool allow that.

Preferential treatment of covered bond holders

Mortgage bond holders enjoy preferential treatment as the law stipulates the separation of the cover assets from the insolvent issuer's estate.

A moratorium on the insolvent issuer's estate cannot delay the cash flows from the cover assets and, therefore, endanger the timely payment of covered bond holders.

A special insolvency procedure could be commenced against the cover pool only by the bondholders.

Access to liquidity in case of insolvency

After bankruptcy proceedings are opened, with the appointment of an asset management company as the cover pool administrator, the right to manage and dispose of the recorded assets is transferred to this company by law. Thus, the cover pool manager first has access to the cover assets and collects the cash flows according to their contractual maturity and pays the amounts due by the issuer to the bondholders.

There are no specific regulations expressly addressing the issue of voluntary overcollateralization in insolvency. It may be argued that voluntary overcollateralization is part of the cover pool with all legal consequences regarding segregation in the event of bankruptcy applicable to the respective pool.

Sale and transfer of mortgage assets to other issuers

The pool manager may in accordance with art. 46 and 47 of the Law propose to the approval of the general meeting of bondholders the acceleration of the payment of the mortgage bonds and, in this respect, the assignment of the receivables to a third party, whom is permitted by law to grant mortgage loans as a professional activity.

The distribution of the amounts resulted from the assignment of receivables shall be made in the following order of preference:

> Receivables representing expenses incurred by the pool manager with the sale, its remuneration and the remuneration of the trustee;

> Receivables under the financing granted to the issuer with the view to covering the temporary liquidity deficit;

> Receivables resulting from the holding of mortgage bonds, pro rata, irrespective of the seniority and maturity of the mortgage bonds issue and receivables held by counterparties under the agreements underlying the financial derivatives included in the cover pool; and

> Receivables of the issuer's creditors, according to art. 49 par (3), not paid in full upon the temporary closing of the bankruptcy proceedings.

If the amounts resulting from the assignment of receivables are insufficient to pay the obligations of the issuer, as recalculated to date, to the bondholders, for the remaining balance, they may satisfy their claims against the issuer's estate, together with the other unsecured creditors.

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).[1] The covered bonds issued under the Mortgage Bonds Law comply with Article 129(1) CRR and fulfil the UCITS 52(4) criteria. The law requires such bonds to be issued by a credit institution, which is subject by law to special public supervision designed to protect bondholders (i.e. supervision by the National Bank of Romania and respectively by the National Securities Commission) and provides coverage by law of the claims attaching to the bonds in the event of failure of the issuer, on a first priority basis for the reimbursement of the principal and payment of the accrued interest.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/99/Obligatiuni_Ipotecare_-_Mortgage_Covered_Bonds.

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

3.27 RUSSIA

By Tim Lassen[1], PFP Group Ltd., Representative Office, Moscow

I. FRAMEWORK

This article will give an overview over the current legal framework for mortgage obligations. Legal basis is the Law on Mortgage Securities[2]. This law is supported by rules in the Mortgage Law, the Bankruptcy Law, and the Securities Market Law.

In addition the Central Bank of the Russian Federation (CBRF) issued the Mortgage Cover Mandatory Requirements Instruction[3]. The former Federal Financial Markets Service (FSFR) released:

> The Mortgage Cover Determination Order[4],

> A joint order containing (i) the Special Depositor Decree and (ii) the Register Maintenance Rules[5] and

> The Mortgage Cover Administrator/Special Depositor Data Reporting Decree[6].

Further rules are in general regulations of the CBRF as the regulator of the financial market[7].

II. STRUCTURE OF THE ISSUER

The Russian Law on Mortgage Securities foresees two types of "mortgage obligations"[8] (Art. 7, sec. 1[9]): obligations[10] issued (i) by a credit organisation (covered bonds) or (ii) by a SPV ("mortgage agent") (MBS)[11].

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1 Special thanks go to the colleagues from VTB Capital and DeltaCredit for proof reading and commenting on this article. An important information source was published earlier this year: Information Agency CBonds/Rusipoteka (publ.): Encyclopedia of Russian Securitization, 4rd ed. Saint Petersburg 2016.

2 Federal law dated 11 November 2003 No 152-FZ "On Mortgage Securities", last amendments: (1) article 26 sec 1 subsec 3 of the Federal law dated 29 June 2015 No 210-FZ "On entering changes in several legislative acts of the Russian Federation and declaration to lose force of several provisions of legislative acts of the Russian Federation", published SZ RF, 06.07.2015, No 27, item 4001 and (2) article 2 of the Federal law dated 30 December 2015 No 461-FZ "On entering changes in art 17 of the Federal law "On the Securities Market" and the Federal law "On Mortgage Securities"", published SZ RF, 04.01.2016, No. 1 (part I), item 81.

3 Instruction of the CBRF dated 31 March 2004, No 112-I "On mandatory requirements for credit organisations, issuing securities with mortgage cover".

4 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".

5 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".

6 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".

7
> Instruction of the CBRF dated 03 December 2012 No 139-I „On mandatory requirements for banks"; here following: Instruction CBRF No. 139-I/2012.

> Statute on Dislcosure of Information by the Issuers of Issuing Securities (confirmed by the Bank of Russia, 30.12.2014, No. 454-P) (registered by the Ministry of Justice, 12.02.2015, No. 35989; published: Herald (Vestnik) of the Central Bank, No. 18-19, 06.03.2015) (here following: Statute CBRF No. 454-P).

> Statute on Standards for Issues of Securities, Procedure of State Registration of the Issue (Additional Issue) of Issuing Securities, State Registration of Reports on Results of the Issue (Additional Issue) of Issuing Securities and Registration of Securities' Prospectus' (confirmed by the Bank of Russia, 11.08.2014, No. 428-P) (registered by the Ministry of Justice, 09.09.2014, No. 34005; published: Herald (Vestnik) of the Central Bank, No. 89-90, 06.10.2014) (here following: Statute CBRF No. 428-P), as amended by the ordinance of the CBRF No. 3774-U, dated 02.09.2015 (registered by the Ministry of Justice, 12.11.2015, No. 39691; published: Herald (Vestnik) of the Central Bank, No. 105, 19.11.2015).

> Instruction of the Bank of Russia dated 27.12.2013 No. 148-I "On the Procedure of the Conduct of the Procedure of the Issue of Securities of Credit Organisation on the Territory of the Russian Federation" (registered by the Ministry of Justice, 28.02.2014, No. 31458; published: Herald (Vestnik) of the Central Bank, No. 32-33, 28.03.2014)(here following: Instruction CBRF No. 148-I), as amended by the ordinance of the CBRF No. 3635-U, dated 18.05.2015 (registered by the Ministry of Justice, 28.07.2015, No. 38242; published: Herald (Vestnik) of the Central Bank, No. 66, 12.08.2015).

8 Language of the Law: "Obligations with mortgage cover".

9 Law citations without link are citations of the Law on Mortgage Securities.

10 "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, pt. 5).

11 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.

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. As many rules in the law apply similarly for both types of securities, for a better understanding they will be presented here together.

For new issues (new series of issues) new cover pools need to be set up. The cover pools itself are dynamic (as defined by the ECB[12]): 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).

By pt. 1.1 and 2.4 of the Mortgage Cover Mandatory Requirements Instruction, the CBRF has set up a special regulation[13] for the minimal ratio between the volume of the cover pool and the volume of the issued mortgage obligations (N18): 100 % (pt. 1.1, sec. 3 and 2.4 of the Mortgage Cover Mandatory Requirements Instruction).

For credit organisations the excess amount of the cover pool shall not be more than 20% (Art. 13, para. 3, sec. 2).

The Central Bank has not used its right to set a special limit for mortgage obligation issued by credit organisations for the interest rate and foreign exchange risk[14].

SPVs (mortgage agents, Art. 8)

The mortgage agents are described in detail in the ECBC Fact Book 2011, p. 413 and 2015, p. 393.

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")[15] 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).

Eligible are also money in Russian and foreign currency, state bonds and real estate (Art. 3, sec. 1). Real estate can only be used as cover, if it is purchased in foreclosure of a cover mortgage (Art. 3, sec. 1; Art. 13, sec. 1, para. 3[16]).

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).

> 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).

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12 European Central Bank: Mortgage obligations in the EU Financial System, December 2008, p. 7.

13 On the bases of Art. 7, sec. 2.

14 But issuing credit organisations have to describe the f/x and the interest rate risk in the prospectus (Annex 2 Part B pt. 2.3.5, Statute CBRF No. 454-P).

15 "Mortgage specialized organization" is another allowed name for "mortgage agent" (Art. 8, sec. 1, para. 5).

16 And for not longer than two years since the acquisition (pt. 27.3 Statue CBRF No. 428-P).

- 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).

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%[17] of the market value (Art. 3, sec. 3, para. 2). In both cases, the valuation has to be made by an independent valuer[18].

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,
- 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, para. 1; Art. 3, sec. 2 and 4)[19].

For proper performance of the obligations under the mortgage obligations[20] 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 not less than the nominal value of each tranche together with other tranches with similar or 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[21] 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).

17 Including the first ranking mortgage.
18 The valuers' profession and independence of the valuer is regulated in the Valuation law.
19 Federal law No 461-FZ, dated 30.12.2015 added the link to Art. 3, sec. 2 and the possibility to replace assets, if this is forseen in the decision on the issue (Art. 14, sec. 1, para. 4).
20 In Russian "nadlezhashchoe ispolnenie obyazatel'stv po obligatsiyam s ipotechnym pokrytiem".
21 The Securitization Law clearifies this rule regarding interest.

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 obligations 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 obligations;
- 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).

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 account 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).
- Interested persons have the right to get knowledge of the cover register (Art. 39, para. 1)[23].
- The regulator set up further special rules for mortgage obligation issuers in the general regulations on disclosure of information[24].

22 See pt. 5 Explanatory Memorandum of the authors of the draft dated 19 August 2011.
23 The cover register contains information on the mortgage claims on the loan-level basis (Art. 5).
24 Statute CBRF No. 454-P. Special rules for mortgage securities are foreseen in Section VIII, chapter 76 – 78, Annex 1 pt. 4.2, Annex 2 Part B pt. 8.12.3 and 9.4.1, Annex 3 Part B pt. 8.4.1.w

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.

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"[27] (Art. 5). The FSFR has adopted Register Maintenance Rules[28].

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[29]: (i) Taking the decision on issue, (ii) approval of the decision, (iii) state registration of issue or assignment of identification number to the 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 set up special requirements for the issue of mortgage securities.

Federal law No 461-FZ, dated 30.12.2015 introduced for housing mortgages obligations the possibility to set up an issuance program (Art. 12 para 3.1 – 3.3). 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 concrete 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. The CBRF is entitled to set up further rules, which it has not done yet.

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

25 In Russian "spetsializirovannyj depozitariy ipotechnogo pokrytiya".
26 Not affiliated with the issuer (Art. 33, sec. 3, para. 2).
27 In Russian "reestr ipotechnogo pokrytiya".
28 The "register" contains information on loan-level basis (Art. 5).
29 Pt 1.1 Statute CBRF No 428-P, special rules for mortgage securities are foreseen in section VII, chapter 27 – 30 and Annex 16 of this Statute.

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.[30]

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.[31]

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[32].

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). 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. 328 – 403).

30 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.

31 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).

32 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).

Mortgage obligations still enjoy a privileged risk weighting compared to other non-public securities: Mortgage obligations are weighted with 100% instead of 150%[33], if they enjoy a rating of not less than "B" (Standard & Poor's, Fitch Ratings) respectively "B2" (Moody's).

The CBRF is implementing Basle III rules.[34] In 2015 it adopted the "Statute on the Order on Calculation of the Amount of Market Risk by Credit Organisations"[35]. 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 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.

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 2014/2015 the Central Bank has set up new rules for investing pension deposits of non-state pension funds in different asset classes.[36] Along with fulfilling the rules of the Mortgage Securities Law, the Statute stipulates additional requirements to covered bonds and the issuing credit organisations.[37]

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33 See also ECBC Fact Book 2012, p. 426. This privilege is also based on pt. 2.3.4., Schedule 1 Designation code "8815" of the Instruction CBRF No 139-I/2012.

34 See on this topic:
- *Lassen, Tim*: Evropeyskiy pynok sek'yuritizacii: Tendencii regulirovaniya (European Securitization Market: Tendencies of Regulation), pp. 34 – 39;
- *Pikhnovskaya, Tat'yana*: Osnovnye izmeneniya polozheniy zakonodatel'nykh aktov, primenimykh k sdelkam sek'yuritizacii (Basic Changes to the Provisions of Legal Acts, applicable to securitization transactions), pp. 164 – 167;
- *Ivanov, Oleg*: Sovershenstvovanie prudentsial'nykh trebopvaniy k sek'yuritizacii: Rossiya i Bazel' (Improvement of Prudential Requirements to Securitization: Russia and Basle), pp. 168 – 177;
- *Dragunov, Vladimir and Guseynov, Adil*: Bazel' III, mladshie transhi, strukturirovanie sdelok v noviyh realiyakh (Basle III, Junio Transhes, Structuring of Transactions in the New Reality), pp. 178 – 182;

all in: Information Agency CBonds/Rusipoteka (publ.): Encyclopedia of Russian Securitization, 4rd ed. Saint Petersburg 2016.

35 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).

36 Statute approved by the Central Bank on 25.12.2014 No. 451-P (registered by the Ministry of Justice, 23.01.2015, No. 35661; published: Herald (Vestnik) of the Central Bank, No. 6 (1602), 29.01.2015, p. 44 – 50, here following: Statute CBRF No. 451-P), accompanied by a decision of the Council of the Central Bank dated 19.02.2015 (published: Herald (Vestnik) of the Central Bank, No. 16 (1612), 26.02.2105, p. 6 – 8). This decision is based on pt. 1.4.7. of Statute CBRF No. 451-P.

37 Pt. 1.4.1. sec 1, 1.4.3, 1.4.4., 1.5.6. of Statute CBRF No. 451-P.

> Figure 1: Overview over the issues of bank mortgage obligations (covered bonds)[38]

	Date	Issuer	Tranches	Volume		Interest	Maturity
				mRUB	mEUR[39]		
1	11.10.2007	MIA		2,000.0	56.7	12.50%	01.10.2015
2	16.12.2009	VTB 24		15,000.0	341.3	9.70%	10.12.2014
3	14.09.2011	Unicreditbank		5,000.0	121.3	8.20%	07.09.2016
4	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
5	09.11.2011	DeltaCredit		5,000.0	119.2	8.33%	02.11.2016
6	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
7	11.12.2012	DeltaCredit		5,000.0	125.5	9.15%	05.12.2017
8	02.04.2013	DeltaCredit		5,000.0	125.6	8.50%	02.04.2016
9	23.05.2013	VTB 24	 A B	6,000.0 4,000.0 2,000.0	148.7 99.7 49.6	 9.00% 3.00%	01.09.2044
10	10.07.2013	Delta Credit		5,000.0	117.3	8.65%	04.07.2018
11	05.09.2013	DeltaCredit		5,000.0	113.4	8.45%	30.08.2018
12	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
13	27.03.2014	DeltaCredit		5,000.0	102.1	12.00%	27.03.2024
14	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
15	10.10.2014	DeltaCredit		5 000.0	98.1	11.92%	10.10.2024
16	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
17	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
18	04.02.2015	Delta Credit		5,000.0	65.1	8.50%	04.02.2018
19	12.02.2015	Investtorgbank		2,500.0	33.5	15.35%	12.02.2020
20	04.02.2015	DeltaCredit		5,000.0	65.1	8.50%	04.02.2018
21	12.02.2015	Investtorgbank		2,500.0	33.5	14.15%	06.02.2020
22	23.09.2015	Unicredit		4,000.0	54.1	12.25%	16.09.2020
23	26.02.2016	Gazprombank		15,000.0	178.1	10.90%	19.02.2021
24	30.03.2016	DeltaCredit		5,000.0	65.1	10.57%	30.03.2019
Total (including redeemed)				**144,100.0**	**2,821.0**		
Redeemed							**Date**
	16.12.2009	VTB 24		15,000.0	341.3		10.12.2014
	11.10.2007	MIA		2,000.0	56.7	12.50%	01.10.2015
	12.02.2015	Investtorgbank		2,500.0	33.5	14.15%	18.12.2015[40]
Total				**19,500.0**	**431.5**		
Outstanding				***124,600.0***	***2,389.5***		

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/41/Mortgage_Obligations_.

38 Details of the issues can be found on www.cbonds.info.

39 CBRF exchange rate as of date of issue.

40 Prepaid.

3.28 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 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 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 USD10 Billion Covered Bond Programme under these new regulations on 16 June 2015 and on 30 July 2015, issued the inaugural Singapore covered bond, pricing USD1 Billion, fixed rated covered bonds due 2018. Following then, United Overseas Bank Ltd. also launched its USD8 Billion Covered Bond Programme on 23 November 2015. The first series of EUR500 Million fixed-rate covered bonds was subsequently issued on 3 March 2016.

In January 2015, MAS proposed an amendment to its regulation regarding the issuance of covered bonds. Comments were collected until the end of February 2015 and the amendments became effective on 4 June 2015.

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 payments 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 whether or not 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

1 MAS Notices can be found on MAS website at www.mas.gov.sg.

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.

III. COVER ASSETS

The cover pool may consist of the following assets, according to Paragraph 6 of Notice 648:

> Mortgage loans secured by residential property ("residential mortgage loans"), whether in Singapore or elsewhere (no geographic limitation to mortgage loans); the loan-to-value (LTV) limit is set at 80% ("soft limit"), taking into account the current market value of the residential property;

> 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 (a) and (b);

> 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 4% of total assets of an issuer. Total assets of the bank includes 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 shall exclude assets it uses to meet regulatory requirements under sections 38, 39 and 40 of the Banking Act, section 8 of the Deposit Insurance and Policy Owners' Protection Schemes Act 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 shall be conducted on an annual basis.

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 shall be at least 103% of the outstanding nominal amount of the covered bonds secured by the assets at all times." Covered Bond issuers shall 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 shall 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 shall 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 Notice 648 regulations and report these to MAS. A certified report has to be submitted to the Authority 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 (h));

> 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; 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 shall 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, pre-payment, 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, regulations constitute a covered bond framework that broadly complies with European standards. Covered bonds are LCR eligible in Singapore if it

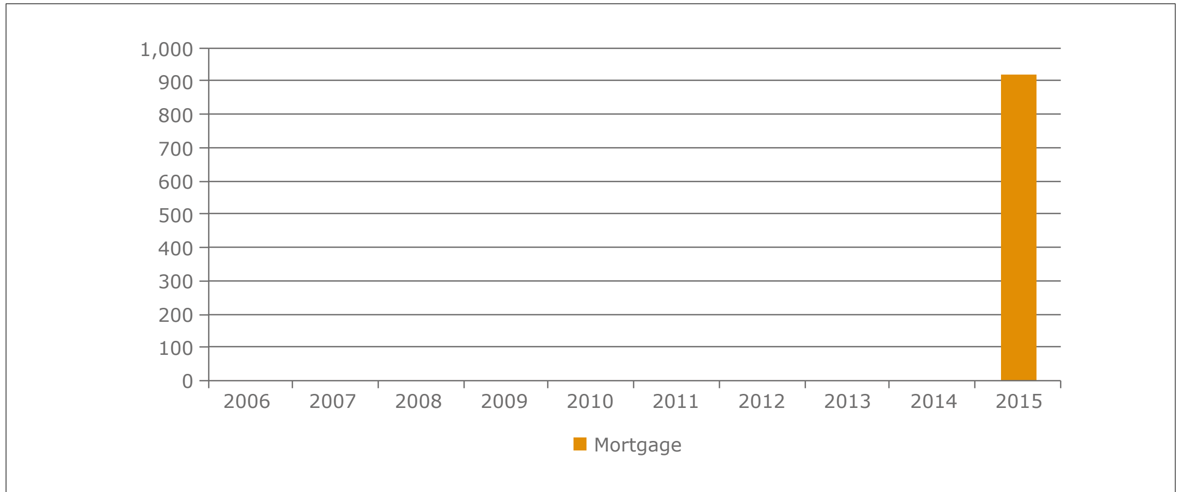
has a long term credit rating of at least AA- from a recognized external rating agency, and has a proven record as a reliable source of liquidity in the markets even during stressed market conditions.

X. ADDITIONAL INFORMATION

The mortgage loan-to-GDP[2] ratio in Singapore was 48.17% in 2015, up from 46.59% in 2014. Home ownership is relatively high and is dominated by the public home ownership sector (Housing & Development Board ("HDB")). According to data from Yearbook of Statistics 2015, approximately 90.3% of the total housing stock are owner-occupied in 2014, with 80.4% being public housing and the remainder, private housing. Landed properties comprise approximately 5.78% of the total housing stock in 2014. Based on the household sector balance sheet, total housing loans in 4Q2015 (SGD 224.78 bn) rose 3.70% from 4Q2014 (SGD 216.76 bn). According to data from MAS, outstanding limits granted for owner-occupied housing loans amounted to SGD 157.64 bn in 4Q2015, up from SGD 150.43 bn in 4Q2014. The average loan-to-value ratio was 51.3% and the total non-performing loan ratio was 0.4% in 4Q2015.

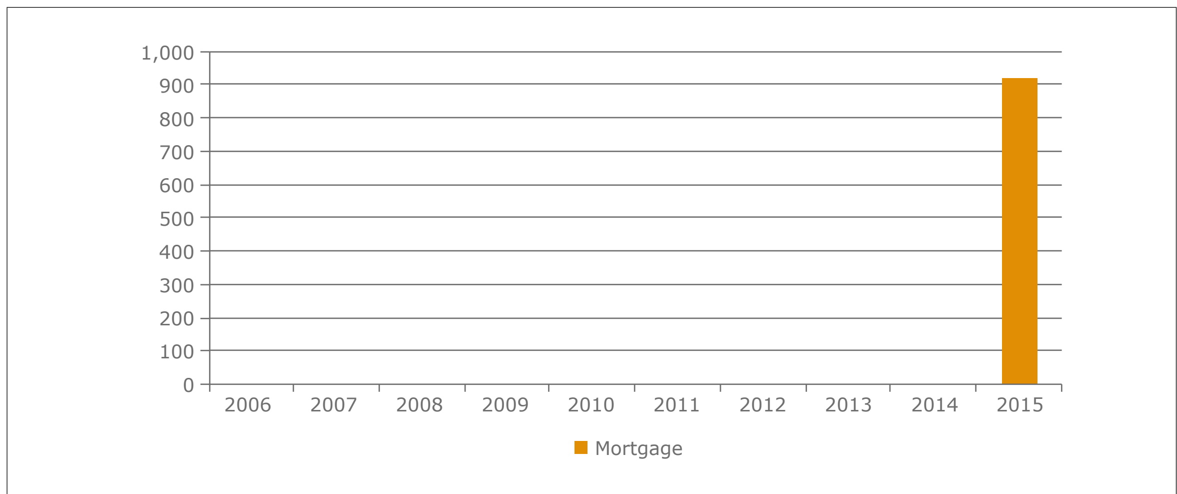
2 Mortgage loan is taken as the total outstanding housing loans (both owner-occupied properties and investment properties) that are utilised as reported by MAS. GDP is quoted at current market prices as reported by Department of Statistics Singapore ("http://www.singstat.gov.sg").

> FIGURE 1: COVERED BONDS OUTSTANDING, 2006-2015, EUR M



Source: EMF-ECBC

> FIGURE 2: COVERED BONDS ISSUANCE, 2006-2015, EUR M



Source: EMF-ECBC

Issuers: DBS Bank Limited.

ECBC Covered Bonds Comparative Database: http://www.ecbc.eu/framework/111/Singapore_Covered_Bonds.

COVERED BOND · LABEL · : DBS Bank Limited USD10 billion Global Covered Bond Programme; United Overseas Bank Limited USD8 billion Global Covered Bond Programme.

3.29 SLOVAKIA

By Franz Rudolf, UniCredit Bank and Libor Ondrich, UniCredit Bank Czech Republic and Slovakia

I. FRAMEWORK

Mortgage covered bonds (hypotekárny záložný list – HZL) are regulated by the Bond Act (Act No. 530/1990 Coll., Part Four, Articles 14-17); by the Bank Act (No. 483/2001 Coll., Part 12); by the Insolvency Act (Act No. 7/2005 Coll., Part 6); and the Mortgage Registry Regulation (Regulation No. 600/2001). According to Article 14 of the Bond Act, a mortgage covered bond shall be a bond whose par value, including yields therefrom, is duly covered (Article 16.4) by the receivables of a bank or branch of a foreign bank from mortgage loans backed by rights of lien on real estate properties or by substitute coverage (Article 16.5) and shall bear the specification "mortgage bond" ("hypotekárny záložný list"). Mortgage covered bonds may only be issued by banks with the license to perform mortgage transactions in addition to the general banking license.

Besides ordinary collateral, the cover pool can also consist of substitute collateral. Assets eligible as ordinary collateral are residential and commercial mortgage loans with a maximum loan-to-value (LTV) of 70 % of the value of the mortgaged real estate set under a separate regulation. Substitute collateral is limited at 10% of the total par value of issued mortgage covered bonds (Article 16 of the Bond Act). Derivatives are not eligible as cover assets.

Covered bond holders have recourse to the issuer as well as a preferential claim on the cover pool. The collateral in the dynamic cover pool is recorded in a special cover register and overseen by a cover pool monitor. The special banking supervision is performed by the National Bank of Slovakia (NBS).

II. STRUCTURE OF THE ISSUER

The mortgage covered bonds issuers in Slovakia are credit institutions holding a special license to conduct mortgage business.

In accordance with the Act on Banks, No. 483/2001 and with Regulation of NBS 12/2001, the elements of the application for a banking license as minimum requirements to obtain and keeping the special mortgage licence are, among others, as follows:

- Minimum amount of bank equity capital of EUR 33.2 m;
- Development strategy of mortgage loans in the first three years;
- Business plan for mortgage lending in the first three years in accordance with the balance sheet structure and the structure of the income statement;
- Information on organisational and personnel issues of providing mortgage loans;
- General conditions of mortgage loans;
- Information on keeping of the register of mortgages in accordance with the specific regulations of the register;
- Method of separate analytical accounting system;
- Documents with regard to the fulfilment of requirements on persons nominated for supervisor (trustee) and its deputy;
- Real estate assessment methods (valuation);
- Proposed amount of remuneration for a supervisor (trustee) and its deputy;
- Statement of the supervisor (trustee) that the provided documents are current, accurate and complete.

Basic requirements, principles, rules and limits of mortgage credits are included in Part Twelve – Mortgage Banking, Articles 67 – 88.

The issuer of mortgage covered bonds has to own the cover assets and holds them on its balance sheet. A mortgage bank may only have one cover pool for all mortgage covered bonds issued. The holders of the mortgage covered bond has a direct recourse to the credit institution.

III. COVER ASSETS

According to Article 72 of the Bank Act 483/2001, the issued mortgage covered bonds may be duly secured only by a mortgage bank's claim from mortgage loans. Mortgage loans generally may not exceed 70% of the value of the mortgaged property. The 70% threshold can be exceeded only if the total amount of mortgage loans with an LTV of above 70% does not exceed 10% of the total amount of outstanding mortgage loans.

Assets used to cover the nominal value of issued mortgage covered bonds, including liens on real property, may be neither pledged by the mortgage bank nor otherwise used to guarantee its other liabilities.

Mortgage covered bonds owners shall have a preferential right to assets used to secure issued mortgage covered bonds, including liens on the real property.

The substitute collateral can make up to 10 % of the value of issued mortgage covered bonds. The following assets are eligible as substitute collateral:

- Deposits at the National Bank of Slovakia (NBS);
- NBS bills;
- Deposits at banks incorporated in Slovakia;
- Deposits at branches of foreign banks in Slovakia;
- Cash;
- Treasury bonds;
- Treasury bills; and
- Covered bonds issued by another bank.

The definition of mortgage loans can be found in Article 68 of the Slovak Banking Act Nr 483/2001 Coll. According to this Article, a mortgage loan is a loan with a maturity of at least four years and a maximum maturity of thirty years, secured by a lien established upon a domestic real estate.

Eligible mortgage loans are loans provided by the mortgage bank for the purpose of:

1) Acquisition of domestic real estate property or any part thereof;
2) Construction or modification of existing buildings or structures;
3) Maintenance of domestic real properties; or
4) Repayment of an outstanding mortgage loan drawn for any of the purposes mentioned in subparagraphs 1) to 3);
5) Repayment of an outstanding loan drawn for any of the purposes mentioned in subparagraphs 1) to 3), other than a mortgage loan.

The Bank Act requests that each mortgage bank must finance at least 90 % of its mortgage loan portfolio through the issuance of mortgage covered bonds unless NBS allows for an exception. The National Bank of Slovakia (NBS) may for special reasons (e.g. in order to maintain the stability of the financial sector) and for a maximum period of two years, stipulate special conditions for financing mortgage loans and decrease the financing ratio to 70%.

Mortgage loans generally may not exceed 70% of the value of the mortgaged property. The 70% threshold can be exceeded only if the total amount of mortgage loans with an LTV of above 70% does not exceed 10% of the total amount of outstanding mortgage loans. Mortgage loans exceeding the 70% LTV threshold cannot be included in the cover pool. A mortgage loan may not be secured by a lien on the real estate, on which a lien has already been established and continues in favour of a third party.

Derivatives, e.g. interest rate swaps or currency hedges are not eligible as cover pool collateral.

IV. VALUATION AND LTV CRITERIA

Valuation and LTV criteria are stipulated in Articles 73 – 74 of the Bank Act. The value of real estate property shall be determined on the basis of an overall assessment of the real estate. The mortgage bank may only take into account the permanent features of the real estate property and the benefits that can be derived for the owner from the real estate in its normal use in the long run. For real estate burdened by a lien on the same real estate, a mortgage bank shall lower the value of this real estate by the amount of claims guaranteed by such real estate. A mortgage bank shall only be bound by its own valuation of real estate, in accordance with Article 73(2) of the Bank Act.

A security interest in a mortgage bank's claim from mortgage loans shall be established through its entry into the real estate register under a separate regulation (Act No 162/1995 Coll.; Cadastre Law), on the basis of a proposal of the mortgage bank and on the basis of the owner of the real estate.

A mortgage loan may not be secured with a lien on the real property in which another lien has already been established and is still outstanding. This holds true except for a lien established in favour of the same mortgage bank in order to secure another mortgage loan or a lien established in favour of a home savings bank, or the State Housing Development Fund. The lien ceases to exist with the repayment of the debt for which the lien was registered. A mortgage bank shall notify the extinction of the lien on real estate to the Land Register. The lien of mortgage banks must be ranked at the first position for purposes of order.

In enforcing its lien, a mortgage bank may sell the real property on the basis of an agreement made in the form of a notarial deed between the mortgage bank, its borrower, and the mortgagor. Such agreement shall establish a legal obligation, and specify the beneficiary and the person subject to this obligation, the legal grounds, objects, and the time limit for its fulfilment.

Monitoring requirements result from the Decree of the National Bank of Slovakia of 13 March 2007 on banks' own funds of financing and banks' capital requirements and on securities dealers' own funds of financing and securities dealers' capital requirements, Article 110, subparagraphs a) – d).[1]

The LTV ratio limit for commercial and residential property is set at 70% of the mortgage lending value of the property. The mortgage lending value shall be determined by the bank on the basis of an overall assessment of the real estate property concerned. In determining this value, the bank may only take into account the permanent features of the real estate property and the benefits that can be derived by the owner from the real estate property in the long run. The LTV-limit is a hard limit, i.e. when the loan exceeds the 70% limit, also the part of the loan up to 70% LTV is not eligible for the cover pool. A bank may grant mortgage loans with an LTV of above 70% only if their total value does not exceed 10% of the total amount of mortgage loans granted by the bank. The covered bond holders do not benefit from the loans exceeding the LTV cap.

1 Múčková, V., Sobolič, J.: Slovakia. In: ECBC Covered Bond Fact Book. Brussels: Europe Mortgage Federation, 2014, p. 411 – 412.

V. ASSET-LIABILITY MANAGEMENT

Article 16(4) of the Bond Act requires that the aggregate nominal value of outstanding covered bonds must be covered at all times by assets of at least the same amount and with at least the same interest rate. A specific level of mandatory minimum overcollateralization is not stipulated by law. Furthermore, the obligation of the issuer to fund at least 90% of its mortgage loan portfolio through the issuance of mortgage bonds limits the level of potential overcollateralization.

Cash flow mismatches between cover assets and cover bonds are reduced by prepayment rules applicable to fixed interest rate mortgage loans. Prepayments of mortgages are only permitted in cases of "legitimate interest" of the borrower or after a specific period subject to the individual loan agreement. In other cases, the borrower has to compensate the lender for the prepayment.

The primary method for the mitigation of market risk uses natural matching and stress testing on the entire bank portfolio, not only the mortgage portfolio. Stress testing of coverage calculations is not applied separately.

Banks must submit to the supervisory authority information about the residual maturity of financial instruments, including mortgage instruments.

VI. TRANSPARENCY

Mortgage banks are required to notify NBS and the Ministry of Finance by the end of January and July of each calendar year, of all entries made in the register of mortgages in the last six months.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The cover pool monitor is legally independent from the issuer. Mortgage trustee duties are regulated by the Decree of the National Bank of Slovakia and the Ministry of Finance 661/2004 Coll. on mortgage register and mortgage trustee position.

The prudential supervision of mortgage transactions is performed by the National Bank of Slovakia (NBS). The NBS performs authorisation and licensing activities, as well as supervision of liquidity and stability of mortgage banks.

The cover pool monitor:

- Shall supervise the issuance of mortgage covered bonds with regard to the compliance to separate regulation;
- Shall check that the criteria of coverage are fulfilled and documented;
- Prior to each issue of mortgage covered bonds, a trustee shall check the quality of cover assets;
- The cover pool monitor shall verify whether a mortgage bank provides mortgage loans, secured by a security interest in real estate property, and whether a mortgage bank meets its obligations in relation to the mortgage register under the Bank Act, Bond Act and other generally binding regulations;
- Evaluate the exposure to market, operational and liquidity risk;
- If requested by a mortgage bank, a cover pool monitor shall assist in activities related to the performance of mortgage transactions, which could not be completed by the mortgage bank without such assistance.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

The cover register records the cover assets relating to issued mortgage covered bonds. The list of mortgage loans, their amounts, liens, mortgage bank's claims in respect of mortgage loans that serve to back mortgage covered bonds, or other assets serving as substitute collateral, shall be kept separately by the mortgage bank in its register of mortgages.

Article 77 of the Act 483/2001 on Banks Coll. requires that mortgage banks shall maintain a separate analytical evidence of all the mortgage transactions in their accounting system.

Preferential claim of covered bond holders

The preferential claim of the mortgage covered bonds owner is specified in Article 72 of the Bank Act. The owners of mortgage covered bonds shall have a preferential claim on assets used to cover issued mortgage covered bonds, where the right to lien to real property is registered.

Following the bankruptcy of the issuer, the cover pool will be segregated from the general insolvency estate of the bank. There is no special covered bond administrator stipulated by law, but instead the cover pool will be managed by the general insolvency administrator, appointed by the insolvency court.

If it is not possible to fully satisfy the claims of covered bond holders, the unsatisfied portion may be claimed against the mortgage bank's general insolvency estate (dual claim) and will rank pari passu with other unsecured claims.

Although there is no explicit regulation regarding mortgage bonds following the insolvency of an issuer, it is understood that mortgage bonds automatically accelerate when the insolvency administrator terminates operations of the bankrupt mortgage bank's business. In addition, the general banking license as well as the license for mortgage transactions terminates upon declaration of bankruptcy of the issuer.

According to Article 59 of the Act No 371/2014 Coll. on resolution in the financial market, covered bonds are explicitly exempt from applying the bail-in tool and the write-down or conversion power shall not be exercised in relation to covered bonds.

IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

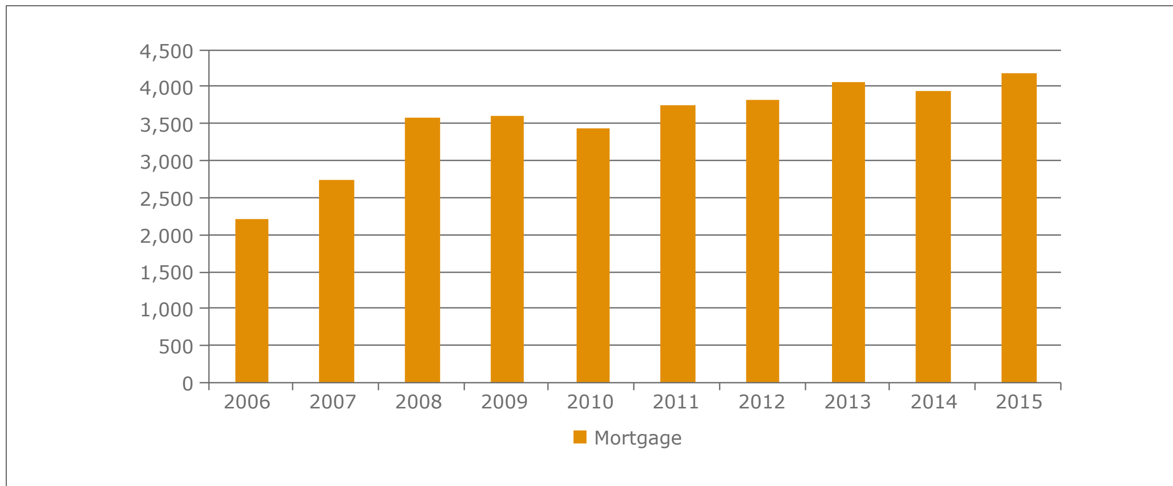
Slovak "*Hypotekárny záložný list*" comply with the requirements of Article 52(4) UCITS. Compliance with Article 129 CRR depends on the underlying assets, as certain eligible assets for Slovak cover pools according to the Bond Act are not in line with CRR requirements.

The mortgage covered bonds are listed as eligible for repo transactions with the central bank. Mortgage covered bonds are subject to special regulations.

As mortgage covered bonds in Slovakia fulfil the criteria of Article 52(4), UCITS-compliant investment funds can invest up to 25% (instead of max. 5%) of their assets in covered bonds of a single issuer. Similar, the EU Directives on Life and Non-Life Insurance (Directives 92/96/EEC and 92/49/EEC) allow insurance companies to invest up to 40% (instead of max. 5%) in UCITS- compliant covered bonds of the same issuer.[2]

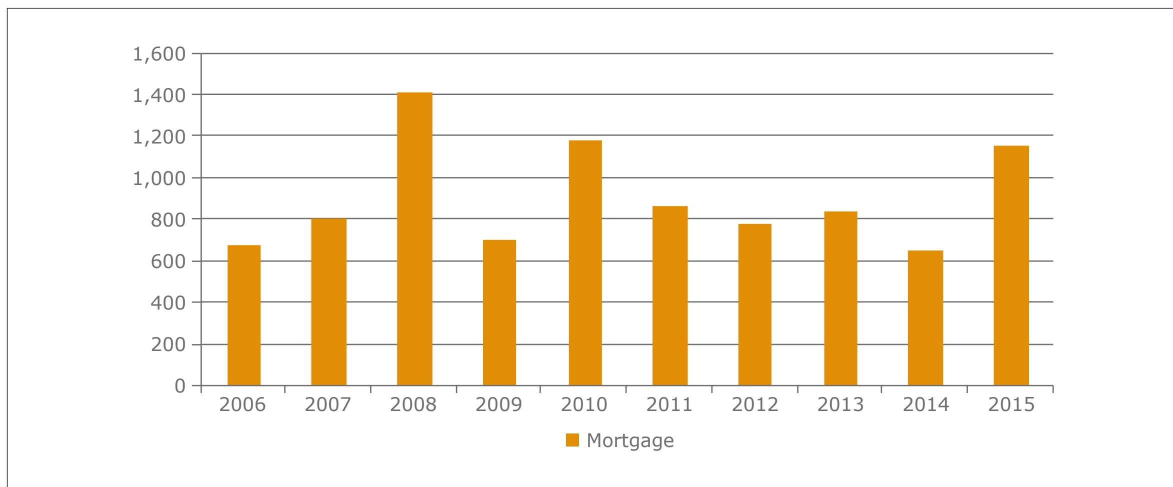
2 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> Figure 1: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 2: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: CSOB, OTP Banka Slovensko, Prima banka Slovensko, Sberbank Slovensko, Slovenská sporitelna, Tatra Banka, UniCredit Bank (Slovakia) and Všeobecná úverová Banka.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/42/Slovakian_Covered_Bonds.

3.30 SLOVENIA

By Ursula Habe, employed at UniCredit Banka Slovenija d.d.

I. FRAMEWORK

The covered bond issuance in Slovenia is mainly regulated by the Mortgage Bond and Municipal Bond Act (Official Gazette of the Republic of Slovenia no. 10/12 and no. 47/12, hereinafter referred to as "the Covered Bond Act"). As regards covered bonds, an issuer of covered bonds and the mortgage loans, granted to consumers, also the Financial Instrument Market Act (Official Gazette of the Republic of Slovenia no. 67/07 and amendments), the Banking Act (Official Gazette of the Republic of Slovenia no. 25/15) and the Consumer Credit Act (Official Gazette of the Republic of Slovenia no. 59/10 and amendments) are to be subsidiary applied (Article 6 of the Covered Bond Act).

The Bank of Slovenia[1] (hereinafter referred to as "the BoS") further issued relevant by-laws, 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 Derivative 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 (all four Regulations published in the Official Gazette of the Republic of Slovenia no. 17/2012). In addition, the Governing Board of the BoS adopted Recommendations for Managing the Records of the Cover Register as of 28th 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, there have been no covered bond issuances from the Slovenian market yet. It seems that banks in Slovenia find it difficult to meet strict management requirements as regards, in particular, the maintenance of the cover register, the real estate valuation procedures and the segregation of cover assets. Eventually, also relatively high IT, administration and real estate valuation costs, necessary for the establishment and maintenance of a sound and sustainable system for the issuance of covered bonds, could pose hurdles for Slovenian banks.

II. STRUCTURE OF THE ISSUER

In principle, covered bonds can be issued by any bank that holds a valid banking license, issued by the BoS. Prior to the issuance of the relevant type of covered bonds, a bank must nevertheless obtain a further licence, also issued by the BoS. The issuance of a licence to issue mortgage and/or municipal bonds is subject to the provisions, applicable to the issuance of a licence to perform banking services pursuant to the Banking Act. At this point it should be noted that until now the BoS issued two licences to the same bank, one for the issuance of mortgage bonds and the other one for the issuance of municipal bonds. Since the bank failed to issue those two types of covered bonds within two years from the date of the issued licences, both licences expired pursuant to Article 13 of the Covered Bond Act.

In order to obtain a special license for the issuance of covered bonds, an issuing bank must fulfil the following conditions, set out in Article 9 of the Covered Bond Act:

- An issuer must dispose of suitable risk management procedures and instruments associated with the issuance of covered bonds as well as with the cover pool assets;
- An issuer must have an adequate number of qualified staff and be organizationally and technically qualified to issue mortgage and municipal bonds and to finance the real property, owned by entities, governed by public law, and other legal entities;

1 The Central Bank of the Republic of Slovenia.

- An issuer must ensure the separation of services related to the issuance of covered bonds and to the covered assets from the bank's other operations;
- An issuer must dispose of rules for maintaining the cover register;
- An issuer must have in place rules for property valuation if the valuation is based on the mortgage lending value; plus, he must either employ on a permanent and full-time basis or engage contractually at least one independent valuer.

III. COVER ASSETS

Firstly, only receivables from mortgage loans and loans that are secured by an eligible state or a local community, that are compliant with provisions of the Covered Bond Act, can be considered as the cover assets for covered bonds in circulation.

The cover assets of mortgage bonds consist of receivables arising from (i) loans secured by a mortgage on residential property that is located in the EEA or Switzerland, (ii) loans secured by a mortgage on commercial property that is located in the EEA or Switzerland (up to 20% of the cover assets).[2]

The cover assets of municipal bonds, on the other hand, consist of receivables arising from (i) loans granted to, or debt securities issued by, an eligible state[3] or an eligible local community[4], (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 and unlimitedly guaranteed by an eligible state.

It should be added that mortgage loans and loans, granted to an eligible state or a local community, can also be purchased by an issuer from other banks/lenders.

However, a maximum of 20% of the cover assets can consist of the substitute cover assets. The latter are comprised of (i) balances on the accounts with the BoS, (ii) investments in marketable debt securities issued or guaranteed by an EEA member state and Switzerland or their central banks or ECB, or (iii) investments in other debt securities issued by EIB, EBRD or any other bank, provided that they are used as the collateral for receivables in accordance with the ECB's criteria, published in the Articles of Association governing the European System of Central Banks (Article 20 of the Covered Bond Act).

Additionally, an issuer can also include derivative financial instruments in the cover pool (up to 12%) 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:

- 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, provided that the process of registration in the Slovenian land register is completed within 12 months from the date of filing the application;
- Up to 20% of the cover assets can consist of mortgage loans to an individual or to legal entities which are considered as a group of related parties in accordance with the Banking Act; nevertheless the bank's exposure to these entities must not exceed the maximum admissible exposure set out in the Banking Act.

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2 As stipulated in Article 19 (3) of the Covered Bond Act, only receivables from mortgage loans for which the mortgage is entered in the Slovenian land register as the first-ranking one are eligible as the basis for the mortgage bond issuance.

3 An eligible state is (i) the Republic of Slovenia and (ii) an EEA member state and Switzerland, whose credit rating is equal to or higher than the Eurosystem's credit rating threshold, established by the BoS.

4 An eligible local community is a local community (i) in the Republic of Slovenia and (ii) in an EEA member state and Switzerland, whose credit rating is equal to or higher than the Eurosystem's credit rating threshold, established by the BoS.

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 of mortgaged property or, should the issuer decides to use the general market value, 50% of the general market value of property for loans secured by mortgage on residential properties; (ii) 60% of the mortgage lending 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 appropriate portion of the loan can be considered as eligible cover assets (Article 28 of the Covered Bond Act).

Generally, a valuation of residential and commercial property is based on the mortgage lending value.[5] 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 an independent property valuer and in compliance with the international property valuation standards, adopted by the IVSC (Article 26 (4) of the Covered Bond Act). However, as regards residential property, also the general market value, estimated by using the mass appraisal methods, can be used (Article 27 of the Covered Bond Act).

A value of property is determined individually for each real property. During the property mortgage loan term, an issuer must regularly monitor the value of mortgaged property and re-assess this value at least once a year for commercial property and at least once every three years for residential property. In addition, 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 30 of the Covered Bond Act).

V. ASSET – LIABILITY MANAGEMENT

As Article 22 of the Covered Bond Act states, an issuer can issue covered bonds only to the extent that still ensures the coverage for liabilities stemming from bonds in circulation and derivative financial instruments by means of cover assets at all times and in at least the same aggregate nominal amount. Additionally, the matching of cover assets with the liabilities stemming from covered bonds and derivative financial instruments must be at all times ensured also according to the present value principle[6]. In this case, the cover assets' present value must exceed the present value of liabilities stemming from covered bonds by the minimum legal overcollateralization requirement of 2%. 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 and currency exposure.

The compliance with the above–mentioned conditions must be verified at least once a month. In addition, stress tests (i.g. tests of the impact of a change in interest rates and foreign exchange rates) must be performed monthly too. If the present value of cover assets do not exceed the present value of covered bonds by at least 2%, an issuer must immediately start with the activities to increase cover assets accordingly (Articles 4-7 of the Regulation on Matching the Cover Pool with the Outstanding Mortgage and Municipal Bonds).

Additionally, an issuer must daily over the next 180-day period compare the amount of matured receivables from the cover assets entered in the cover register with the amount of matured liabilities stemming from the issued covered bonds and from the derivative financial instruments entered in the cover register. Subsequently he must provide the coverage in a form of the substitute cover assets following the comparison of the largest calculated difference between the matured liabilities and the matured receivables (the so-called cover assets reserves) (Article 23 of the Covered Bond Act).

5 The methodology for determining the mortgage lending value is established by property valuation rules, adopted by each individual issuer (Articles 26 and 29 of the Covered Bond Act).

6 In case of derivative financial instruments the fair value principle is used instead of the present value principle (Article 3 (3) of the Regulation on Matching the Cover Pool with the Outstanding Mortgage and Municipal Bonds).

VI. COVER POOL MONITOR AND BANKING SUPERVISION

Cover register

Each issuing bank needs to keep a cover register (Article 37 (1) of the Covered Bond Act). In case of issuing both mortgage and municipal bonds, a bank must keep two separate cover registers (Article 51 (2) of the Covered Bond Act).

The cover register contains the receivables and investments that represent cover assets for the issued mortgage and municipal bonds as well as the record of all mortgage and municipal bonds issued, all of them clearly individualised. Moreover, it must reveal the nominal value of the cover assets and mortgage/municipal bonds in circulation at all times (Article 37 (2-4) of the Covered Bond Act).

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 (Articles 39 and 40 of the Covered Bond Act).

The duties and obligations of a cover register administrator are as follows (Articles 38 (1-3), 41 and 42 of the Covered Bond Act):

- 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 and to notify the BoS without any delay if he considers such a coverage to be unsatisfactory;
- 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 give consent to the issuer's request for a cancellation of a mortgage in the Slovenian land register that serves as a security for the claims, entered as a coverage in the cover register;
- to regularly notify the BoS of its findings pursuant to the Covered Bond Act;
- to examine the books of account and other documents of the issuer that could be in any way associated with covered bonds and cover assets;
- to require from an issuer to keep him regularly informed of the performance of the cover asset-related repayments and any other changes, associated with these assets.

Replacement of inadequate assets

A cover register administrator must require from an issuer to replace receivables from inadequate mortgage loans with receivables from other mortgage loans or other suitable assets if (i) during the term of the mortgage loan the value of real property declines to such an extent that the value of the outstanding mortgage loan exceeds the legally prescribed level of the real property's mortgage lending value or the real property's general market value; (ii) the borrower falls behind in meeting his payment obligations under the loan agreement for more than 90 days; or (iii) the time limit for entering the mortgage in the Slovenian land register expires.

In case of a decline in the real property's general market value an issuer may nonetheless supplement existing receivables from mortgage loans by receivables from other mortgage loans or other suitable assets to the minimum extent of the deficit in the cover assets resulting from a decline in the real property's value (Article 31 of the Covered Bond Act).

Role of the BoS

The BoS carries out a constant supervision on the implementation of the Covered Bond Act (Article 53 of the Covered Bond Act). In addition, it grants and withdraws the licence, given to a bank prior to the issuance of covered bonds, as well as it grants and withdraws the license, granted to a cover register administrator.

An issuer is required to send to the BoS an extract from the cover register, signed by a cover register administrator, every three months (Article 52 (1) of the Covered Bond Act). Similarly, a cover register administrator and a cover assets trustee have to report to the BoS both on a regular basis and on request.

VII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Segregation of cover assets

Cover assets, entered in the cover register, remain the property of an issuer and are intended primarily for the payment of obligations under covered bonds and derivative financial instruments that are included in the cover assets (Article 3 (1) of the Covered Bond Act). Moreover, (substitute) cover assets must be free from any encumbrances and cannot be used or pledged for any other purpose (Articles 19 (4) and 20 (2) of the Covered Bond Act).

The issuer must further ensure that services related to granting mortgage loans and loans to entities governed by public law as well as services related to the issuance of mortgage and municipal bonds are conducted separately from the bank's other operations. This encompasses also separate keeping of the books of account, other records and documents (Articles 9 (1) and 10 of the Covered Bond Act).

Only the obligations of the issuer under covered bonds and derivative financial instruments can be enforced against the cover assets (Article 37 (5) of the Covered Bond Act). The law also limits the type of claims that can be – under certain conditions – subject to set-off rights of debtors and their guarantors whose liabilities are included in the cover pool (Article 37 (6) of the Covered Bond Act).

Bankruptcy remoteness of covered bonds

Cover assets are part of the general estate of a bank as long as an issuer is solvent. Upon the commencement of the issuer's insolvency proceedings[7], the cover assets are automatically separated from the issuer's general insolvency estate. Moreover, covered bond holders and creditors under derivative financial instruments have a primary secured claim (costs included) against all assets in the cover pool. However, in their mutual relationship holders of covered bonds and creditors under derivative financial instruments have the same order of priority (i.g. rank *pari passu*) (Articles 44 (1, 3) and 45 (1, 2) of the Covered Bond Act).

It is important to note that covered bonds and derivative financial instruments do not automatically accelerate as soon as an issuer is insolvent. On the contrary, they are repaid at the time of their contractual maturity. On the proposal of the BoS the insolvency court appoints a cover assets trustee (who must not be the same person as an issuer's insolvency administrator) and he 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. Moreover, a covered assets trustee is entitled to obtain liquidity loans in order to ensure continuous compliance with the payment obligations under covered bonds and derivative financial instruments for what no approval of the insolvency court is needed. Only if the redemption of covered bonds prior to their maturity will result in better terms for repayment of the issuer's obligations under covered bonds and derivative financial instruments, a cover assets trustee may ask the insolvency court for approval on the acceleration (Articles 18 and 47 (1-3) of the Covered Bond Act).

In case that the cover assets prove insufficient to ensure the continuous payment of obligations under covered bonds and derivative financial instruments, a separate insolvency proceedings is initiated against the cover as-

7 Similarly in case of the withdrawal of the licence to issue covered bonds (Article 15 of the Covered Bond Act).

sets on the request of the BoS. Moreover, if such a separate insolvency proceedings still do not result in a full payment of the obligations under covered bonds and derivative financial instruments, the holders of covered bonds and the creditors under derivative financial instruments are entitled to lodge a claim for the remaining part of their receivables in the issuer's general insolvency proceedings (Article 49 (1-3) of the Covered Bond Act).

It should be added that an issuer's insolvency administrator is entitled to request the cover assets trustee to transfer to the issuer's insolvency estate a certain part of the cover assets that will, beyond any doubt, not be required for the payment of obligations under covered bonds and derivative financial instruments, included in the cover pool. The final decision on the transfer is made by the insolvency court. Furthermore, when all the obligations under covered bonds and derivative financial instruments have been paid, a cover assets trustee nevertheless transfers the remainder of the cover assets to the issuer's insolvency estate (Article 47 (5-7) of the Covered Bond Act).

Finally, the cover assets trustee can transfer the entire cover pool and all obligations arising out of the issued covered bonds to other issuer by a way of contract. A full transfer must be authorised by the BoS (Article 48 of the Covered Bond Act).

VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

With the new Banking Act, adopted in May 2015, the Regulation on the Calculation of Capital Requirements for Credit Risk under the Standardised Approach for Banks and Savings Banks and the Regulation on the Calculation of Capital Requirements for Credit Risk under the Internal Ratings Based Approach for Banks and Savings Banks (both published in the Official Gazette of the Republic of Slovenia no. 135/06) ceased to be valid. Since then, the risk-weighting of covered bonds in Slovenia is regulated directly by Capital Requirements Regulation (CRR).

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. The provisions of the Covered Bond Act fall within the criteria of Article 129 (1) CRR as well as within the criteria of Article 52 (4) of the UCITS Directive.[8]

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/110/Slovenian_Covered_Bonds.

8 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

3.31 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 ("Covered Bond Act") was passed by the National Assembly on December 19, 2013 and came into effect on April 15, 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 Securitization (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 securitization techniques under the ABS Act and the Trust Act that enabled the relevant asset pool to be"ring fenced" 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.

Many Korean banks looked into possible issuance of similar structured covered bonds after Kookmin Bank's inaugural transaction. Due to the complex structure and favorable market conditions allowing banks to procure funding at acceptable rates, Korean banks did not follow through with covered bond issuance under the Kookmin Bank structured covered bond model.

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. The KHFC Act contemplates various financing options for KHFC and to issue mortgage-backed bonds is one of these options. 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.

Following the enactment of the Covered Bond Act, on June 12, 2015, Kookmin Bank became the first bank in Korea to set up a global covered bond programme pursuant to the Covered Bond Act and list it on the Luxembourg Stock Exchange. KB Covered Bond Programme was the first covered bond programme by an Asian financial institution that was listed and obtained ratings of AAA and Aaa from Fitch and Moody's, respectively. These ratings were higher than Kookmin Bank's ratings (A1, A) and even Korea's sovereign ratings (Aa2, AA) and this enabled Kookmin Bank to procure funds from the offshore market at reduced cost in subsequent issuances. On October 21, 2015, Kookmin Bank issued the first covered bonds under the KB Covered Bond Programme in the amount of US$500 million with five-year maturity and this led to the second issuance on February 3, 2016, also in the amount of US$500 million with five-year maturity. Following these successful issuances by Kookmin Bank, other commercial banks are showing increased interest in covered bonds as an alternative, long-term funding source.

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.

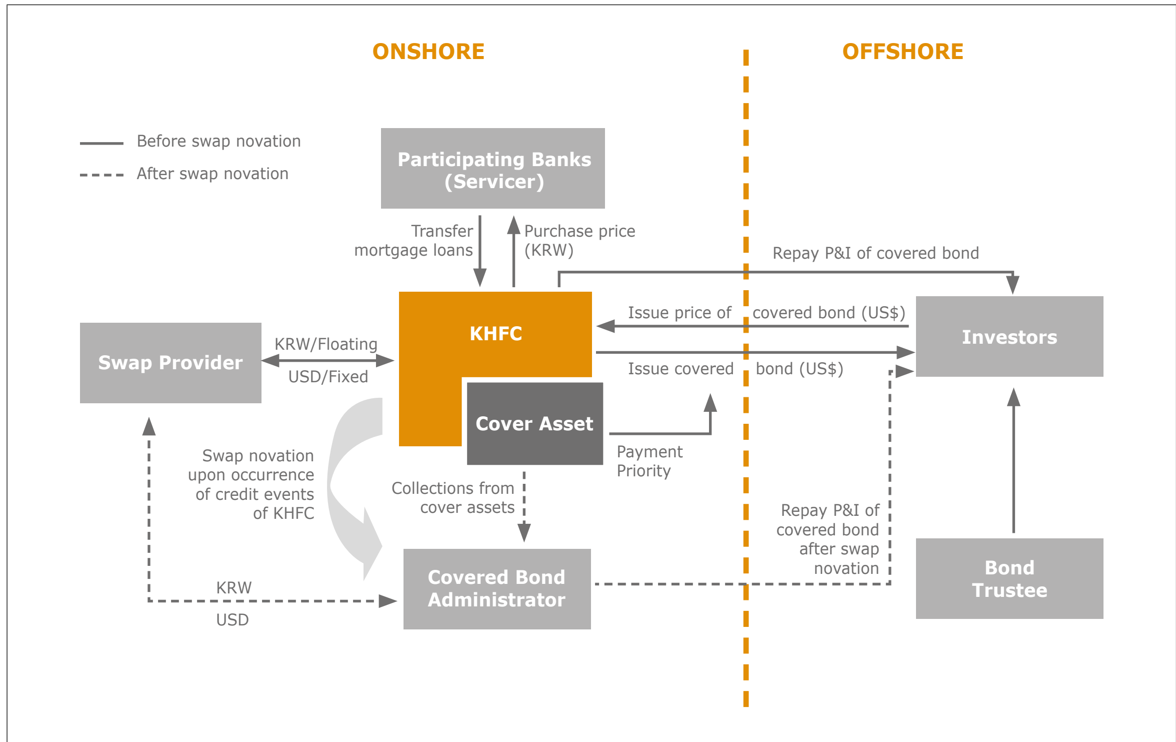
A bond trustee is typically appointed to act on behalf of the investors and an onshore covered bond administrator is appointed for the purpose of the automatic swap novation described below. The investors have dual recourse in respect of the KHFC Covered Bonds: (a) a senior unsecured claim to KHFC upon the occurrence of an issuer event of default or at maturity; and (b) a statutory priority right of payment over the KHFC Cover Pool.

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 U.S. dollar currency payments. The swap providers pay U.S. dollar 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 covered bond administrator entered into a tripartite automatic novation agreement, which states that the swap agreement will be automatically terminated with KHFC and novated to the covered bond administrator 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 covered bond administrator.

Subsequent to such events of default, the covered bond administrator will pay KRW generated from the KHFC Cover Pool to the swap providers in exchange for the U.S. dollar denominated payments, and the swap providers will pay the U.S. dollar 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 under the Korea Development Bank Act, (iii) the Export-Import Bank of Korea under the Export-Import Bank of Korea Act, (iv) the Industrial Bank of Korea under the Industrial Bank of Korea Act, (v) NH Bank under the Agricultural Cooperatives Act, (vi) the credit business division of National Federation of Fisheries Cooperatives under the Fisheries Cooperatives Act, (vii) KHFC under the KHFC Act, or (viii) any other company engaging in finance business pursuant to other laws as prescribed by the Presidential Decree of the Covered Bond Act (the "Presidential Decree"). The Presidential Decree came into effect on April 15, 2014 and does not stipulate any additional eligible issuers other than those already set out in the Covered Bond Act. Eligible issuers of Covered Bonds, however, must have equity capital of not less than KRW 100 billion, Bank for International Settlements (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 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 Financial Services Commission (the "FSC"), which is the main financial regulator in Korea, 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 will delegate 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, (iii) Korean Treasury bonds, municipal bonds or bonds issued by a corporation incorporated under the special laws, (iv) mortgage loans secured by ships or aircraft with 70% or lower LTV ratio and is insured for an amount in excess of a prescribed minimum level (which is currently 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 (v) 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

KHFC's detailed rules for the purchase of residential mortgage loans stipulates the requirements of such loans that it can acquire from financial institutions, prescribing that if the DTI ratio is in excess of 60% but no higher than 80%, LTV shall not exceed 60%, while if DTI ratio is 60% or lower, LTV shall be 70% or lower for apartments or 65% or lower for general houses. However, if (i) the grace period is in excess of 1 year; (ii) the interest rate is floating rate; (iii) the credit rating is at or below a certain grade; or (iv) the income for DTI is computed based on estimation, LTV shall be 60% or lower.

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. 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 portfolio yield test and the failure for the KHFC Cover Pool to satisfy the foregoing tests 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 covered bond administrator, 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. In this case, the relevant assets shall be deemed to form part of the Cover Pool until the relevant assets are substituted.

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 securitization plan with the FSC and this securitization plan is available to the public on the FSS website. Amendments to the securitization plan after issuance must also be registered with the FSC.

The securitization plan should include (i) name of KHFC and location of its office, (ii) term of the securitization plan, (iii) the details, total sum and appraisal value of the residential mortgage loans as cover assets, (iv) types, total sum and issuance conditions of the KHFC Covered Bonds to be issued, (v) matters concerning management, operation and disposition of the residential mortgage loans as cover assets, and (vi) matters concerning the covered bond administrator

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 issuance plan should include (i) the terms and conditions of the Covered Bonds, (ii) qualification requirements of the issuer pursuant to the Covered Bond Act such as equity capital, balance sheet, etc., (iii) the details of the Cover Pool, (iv) total valuation amount and details of such valuation of the Cover Pool, (v) the Required Overcollateralisation Ratio, (vi) details of the Cover Pool monitor and (vii) information relating to protection of debtors, details of further issuance of Covered Bonds if relevant, funding plans for redemption of Covered Bonds and other matters relating to issuance, distribution and redemption of Covered Bonds as prescribed by the FSC.

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 billion 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 securitization plan, and (ii) if mortgage loans in the KHFC Cover Pool are separately managed according to the applicable KHFC Act securitization 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 securitization 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 securitization 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) UCITS, in which case they may 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.

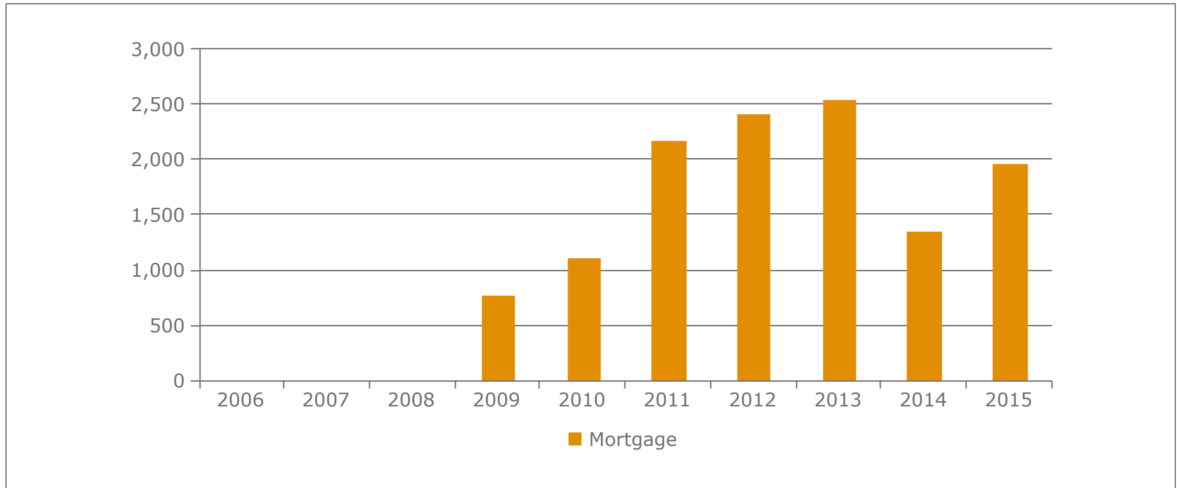
1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

X. ADDITIONAL INFORMATION

There have been 13 covered bond issuances by Korean issuers, seven of which were offshore issuances of foreign currency denominated covered bonds. To date, Kookmin Bank and KHFC are the only two issuers of covered bonds in Korea.

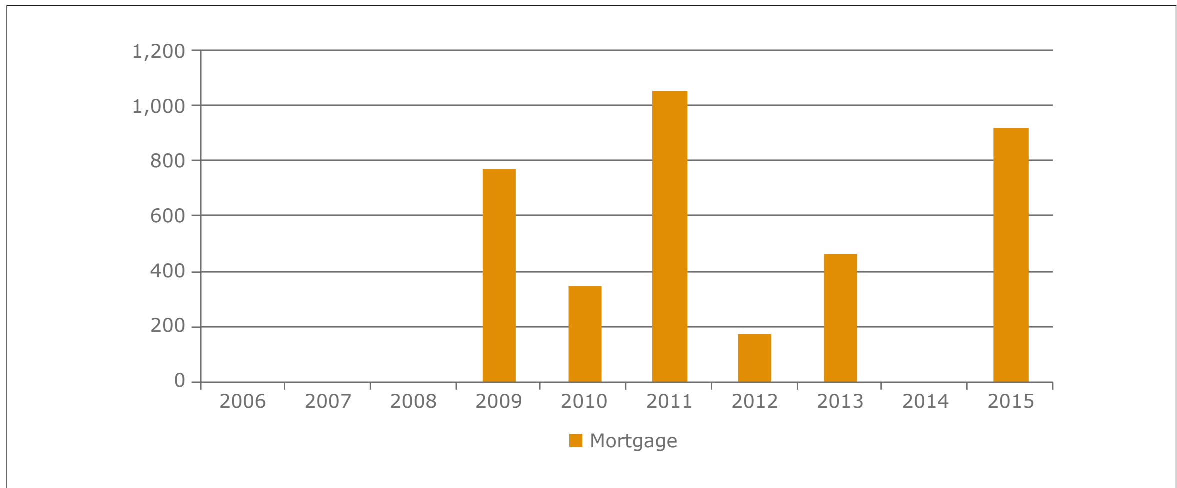
Issuer	Issue Date	Face Amount	Credit Rating	Market
Kookmin Bank	May 14, 2009	US$ 1 billion	AA/Aa2 (S&P/Moody's)	Offshore
	October 21, 2015	US$ 500 million	AAA/Aaa (Fitch/Moody's)	Offshore
	February 3, 2016	US$ 500 million	AAA/Aaa (Fitch/Moody's)	Offshore
KHFC	July 15, 2010	US$ 500 million	Aa3 (Moody's)	Offshore
	April 28, 2011	US$ 200 million	AAA (NICE/KIS)	Onshore
	June 17, 2011	KRW 250 billion	AAA (KR)	Onshore
	July 25, 2011	US$ 500 million	Aa3 (Moody's)	Offshore
	December 8, 2011	KRW 290 billion	AAA (KR)	Onshore
	December 29, 2011	KRW 250 billion	AAA (KR)	Onshore
	March 30, 2012	KRW 250 billion	AAA (KIS)	Onshore
	March 7, 2013	US$ 500 million	Aa1 (Moody's)	Offshore
	March 7, 2013	KRW 150 billion	AAA (KIS)	Onshore
	November 19, 2015	US$ 500 million	Aa1 (Moody's)	Offshore

> Figure 2: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 3: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: Korea Housing Finance Corporation, Kookmin Bank.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/107/South_Korean_Covered_Bonds.

3.32 SPAIN

By Gregorio Arranz, Spanish Mortgage Association

I. FRAMEWORK

The legal framework for Spanish covered bonds – "Cédulas Hipotecarias" (CHs) – is determined by the Law 2/1981 of 25 March on the regulation of the mortgage market (hereinafter, "Law 2/1981"), Law 41/2007 of 7 December, by which Law 2/1981 of 25 March, regulating the mortgage market and other rules of the mortgage and financial system are modified, reverse mortgages and long-term care insurance are regulated and certain tax regulations are established (hereinafter Law "41/2007") and the Royal Decree 716/2009 of 24 April, which develops certain aspects of Act 2/1981 and other rules of the mortgage and financial system (hereinafter "RD 716/2009"). In May 2013, a new Law on protection of mortgage debtors, restructuring of mortgage debt and rented social housing was approved and partially affected mortgage and procedural laws and some very specific points of Law 2/81 referred below.

Regarding bankruptcy regulation, Article 14 of Law 2/1981 (modified by the 19th final provision of Law 22/2003 of 9 July, hereinafter the "Insolvency Law", and by Law 41/2007) provides for a special treatment for the holders of the CHs in case of insolvency of the issuer. According to this article, CH holders have special privileged claims (*créditos con privilegio especial*) as established in Article 90 of the Insolvency Law.

Article 12 of Law 2/1981 defines that the capital and interests of the CH are secured by the entire mortgage loan book registered in favour of the CH issuer (excl. loans used in securitisations or loans securing mortgage bonds).

Moreover, Article 14 of Law 2/1981 determines that in case of issuer insolvency claims of CH holders shall be treated as privileged claims against the insolvency estate (*créditos contra la masa*). It shall be considered as credits against the mass: all the payments which correspond to the repayment of the capital and interest of the issued cédulas hipotecarias and, if any, to the substitution assets which backup the cédulas hipotecarias and the economic flows generated by the financial instruments linked to the issues (Article of 14 Law 2/1981). Pursuant to Article 84(2)(7), in combination with Article 154 of the Insolvency Law, claims against the insolvency estate have to be paid on their respective due dates without delay of payment, regardless of the status of the bankruptcy proceedings.

In addition, the second additional provision of the Insolvency Law, modified by Royal Decree – Law 3/2009 of 27 March, establishes that in case of insolvency of credit institutions, their specific legislation, specifically Article 10, Article 14 and Article 15 of Law 2/1981 of the mortgage market, shall be applicable. As a result, the mortgage market law supersedes the Insolvency Law.

II. STRUCTURE OF THE ISSUER

Issuers of CHs have to be credit institutions, entitled to participate in the mortgage market and thus, to grant the mortgage credits or loans that comply with the requirements of the Spanish mortgage market legislation. In practice, issuers of CH are mainly: commercial banks, saving banks and cooperative banks.

The issuer of the CHs holds the cover assets on his balance sheet and they are not transferred to a different legal entity.

The CHs, in addition to being direct, unconditional obligations of the issuer and without prejudice to the unlimited universal nature of the liability, comprise a special privileged credit right of its holder against the issuer, and if any, against the substitution assets which backup the cédulas hipotecarias and the economic flows generated by the financial instruments linked to each issue. This right is guaranteed by the entire mortgage loan book registered in favour of the issuer. The effectiveness of this right is also guaranteed by the existence of mandatory over-collateralisation.

Although in 2015 there was not any relevant change in the covered bonds legal framework, it is worth to mention that Spanish regulatory authorities (Treasury, Bank of Spain and CNMV) launched in Autumn of 2014 a public consultation on potential changes to the legal regime of CHs. The main topics of the consultation were the following:

a) Possible reduction of the levels of asset encumbrance.

b) Clarification of the rights of cédulas holders in case of insolvency.

c) Introduction of indexation of the cover pool assets.

d) Creation of the figure of the cover pool monitor.

e) Additional liquidity management tools.

A year and a half after the end of the consultation it seems no legislative measures could be adopted before general elections due by the month of June.

Although there is no direct link between the covered bonds and the underlying mortgaged properties, there is a direct link between CHs and the cover assets.

Due to the status of the issuer as a credit institution, one of the requirements to conduct business is to have adequate human and material resources pursuant to the credit institution legislation.

The degree of outsourcing covered bond issuance activities is quite low, almost irrelevant. Usually, the outsourced service has to be provided by a well-known servicer with an adequate rating. In any case, the issuer is responsible and liable for the performance of the service.

Additionally, several entities can group their CHs issuances in a CDO structure (called multi-seller structure). This is based on the issuance of securitisation bonds, backed by the cash-flow generated by such CHs, by an open vehicle that, under Spanish law, is created as a separate fund without legal personality, serviced by a securitisation fund trustee or management company. The bondholders of each of the series issued by the fund will bear the risk of default on the CHs backing the bonds. The holders of these securities, known as "cédulas multicedentes" enjoy all of the advantages of the covered bond but as well of a higher degree of risk diversification. Notwithstanding the latter, there have not been "cédulas multicendentes" issuances in the last years.

It is important to point out that there is another Spanish covered bond called Cédulas Territoriales (CTs) with the same special privilege claim status as CHs. In this case, the cover asset pool consists of all loans to the Spanish State, its autonomous communities and local authorities, as well as their entities and dependent public companies and entities of a similar nature in the European Economic Area. The credit institutions may issue CTs up to 70% of the eligible public loan portfolio, resulting in a minimum over-collateralisation of 43%. Later on, the Law 14/2013 of 27 September on support for and the internationalisation of entrepreneurs created the so-called "Cédulas de Internacionalización" and "bonos de internacionalización" which are covered bonds very similar to *cédulas hipotecarias and bonos hipotecarios* (see below) where the cover asset pool consists of loans and credits associated with the financing of export agreements. Secondary legislation was approved by Royal Decree 579/2014 of 4 July but no issuance has taken place yet. The total amount cannot exceed 70% of the eligible amounts. Last but not least, a last type of covered bonds is the Bonos Hipotecarios that, although contemplated in Law 2/1981, have not been used for the time being. These bonds have specific mortgages as collateral and not the whole portfolio.

III. COVER ASSETS

A distinction shall be made between cover assets and eligible assets.

Cover assets consists of the entire mortgage loan book registered in favour of the issuer. The special privileged claims of the holders of CHs are guaranteed by the cover asset pool and if any, by the substitution assets

which backup the cédulas hipotecarias and the economic flows generated by the financial instruments linked to each issue.

The Law 2/1981 does not establish specific requirements for mortgage loans that constitute the cover asset pool.

For issuance purposes and their limits, it shall be considered as eligible assets in order to determine the maximum amount of CH issued and outstanding for a particular issuer.

All mortgage loans which comply with the following criteria are taken into account for the calculation of the maximum amount of CH issued and outstanding:

> The object of the loan or credit must be the financing of the construction, reconstruction, or acquisition of residential premises, zoning works and social equipment, construction of agrarian buildings, tourist, industrial and commercial and any other activity or work and any other loan, regardless its purpose.

> The mortgage that guarantees the loan or credit must be a first-ranked mortgage.

> The loan or credit guaranteed may not exceed 60% (Article 5 of Law 2/1981 modified by Law 41/2007) of the mortgage lending value of the mortgaged asset, except for the financing of the construction, reconstruction or acquisition of residential premises, in which case it may reach 80% of such value.

> The 80% limit in the ratio between the guaranteed loan or credit and the value of the mortgaged home mentioned in the previous section can be exceeded, without under any circumstances exceeding 95%, if the mortgage loan or credit has a bank guarantee provided by a different credit institution to the creditor or is covered by credit insurance. The bank guarantee or insurance shall be direct and will cover at least the amount of the guaranteed loan or credit which exceeds 80% of the valuation of the mortgaged asset and interests (Article 5 of RD 716/2009). Although the latter is a theoretical possibility as a matter of fact Spanish issuers have never utilized it. Any possible usage should be under the stringent control of Bank of Spain.

  Notwithstanding, mortgaged loans or credits that initially exceed these percentages can be used as cover assets for the issuance of CHs when, as a consequence of the repayment of their principal amount or the modification of the market value of the mortgaged properties the values do not exceed said LTV, in relation to the initial or revised valuation of the mortgaged asset.

  The mortgaged properties must have been valued previously by the so-called "Sociedades de Tasación" or by the valuation services of the issuer.

> The mortgaged assets must be insured against damages.

> Residential mortgage loan cannot exceed 30 years.

  All mortgage loans that do not fulfil at least one of the above mentioned criteria cannot be taken into account for the calculation of the maximum amount of CH.

Excluded from cover asset pool are special types of mortgage credits or loans, such as:

> Those documented by way of registered securities, either to the order or bearer securities.

> Those which are partially or totally due.

> Those which have already been the subject of mortgage participations ("Participaciones Hipotecarias", i.e. loans used in securitisations).

> Those subject to senior mortgages or seizure.

The right to use and enjoy ("derecho de usufructo") administrative concessions, rights to extended areas ("derechos de superficie") and real estate properties which do not have building codes (i.e. those which are outside the zoning regime) are excluded as well.

The cover asset pool is defined as a dynamic cover pool. ABS/MBS or other assets are not allowed in the cover pool, but mortgages are allowed.

It has been a common practice for the issuer to hedge the interest rate risk by using the corresponding derivative instrument.

The institution issuing the cédulas hipotecarias will keep a special accounting register of the loans and credits that serve as collateral of the issues of cédulas hipotecarias and, if any, of the substitute assets fixed that cover them, as well as the derivative financial instruments linked to each issue. The annual accounts of the issuing institution shall contain the essential details of said register (Article 12 of Law 2/1981, Article 21 of RD 716/2009 and Circular 7/2010 of 30 November of the Bank of Spain).

In order to guarantee the transparency of the cover assets, the issuers have to provide the Bank of Spain with a monthly cover pool report. Moreover, there is a general duty of disclosure as a result of the continuous supervisory power of the Bank of Spain.

IV. VALUATION AND LTV CRITERIA

According to mortgage market legislation, the value of the mortgaged property has to be appraised prior to the issuance of the CHs by specialised companies, the so-called *Sociedades de Tasación or by the valuation services of the issuers*.

As said before, for eligible assets, the loan or credit guaranteed may not exceed 60% (Article 5 of Law 2/1981 modified by Law 41/2007) of the mortgage lending value of the mortgaged asset, except for the financing of the construction, reconstruction or acquisition of residential premises, in which case it may reach 80% of such value.

The mortgage markets legislation also determines the regulation for the appraisal service and the requirements with which the specialised companies have to comply, such as, an exclusive corporate object, minimum corporate capital requirement, registration with the corresponding registry at the Bank of Spain. The last legal reform as of May 2013 prevents credit institutions from owning more than a 10% of appraisal companies' capital. Moreover, those entities are supervised and subject to inspection by the Bank of Spain. These rules were developed by the Ministerial Order of 27 March of 2003 in relation to the appraisal of real estate goods.

V. ASSET – LIABILITY MANAGEMENT

The volume of CHs issued and outstanding by a particular Issuer cannot exceed 80% (Article 16 of Law 2/81) of the sum of the unpaid principal amounts corresponding to all the mortgage credits or loans included in the Issuer's portfolio that comply with the requirements mentioned above under section III on cover assets. The issuer cannot issue CHs beyond these percentages at any time.

The cédulas hipotecarias can be backed up to a limit of 5% of the issued capital by substitution assets (fixed income securities issued by the State and other EU Member States, cédulas hipotecarias, mortgage bonds, securities issued by Mortgage Securitisation Funds or Asset Securitisation Funds and other fixed-income securities listed on an official secondary market or on a regulated market, with a credit rating equivalent to that of the Kingdom of Spain – Article 15 and Article 17 of Law 2/1981)

Notwithstanding this general statement, if the limit is surpassed due to increases in the redemption of the Eligible Assets or any other event whatsoever, the Issuer shall re-establish due balance by means of any of the following actions:

- Cash deposit or deposit of government paper in the Central Bank of Spain.
- Acquisition of CHs in the relevant marketplace.

> Execution of new mortgage loans or acquisition of mortgage participations provided that they are eligible to cover CHs.

> Redemption of CHs by the pertinent amount until balance has been reinstated, which, if necessary, can be executed through early redemption and drawing the number of securities to be redeemed by lot.

As a general remark it should be noted that it has been a common practice for the issuer to hedge interest rate risk.

Moreover, regulation provides for some particular rules in this respect that can be summarised as follows: Issuers shall adopt the necessary measures to avoid inappropriate imbalances between the flows from the cover portfolio and those derived from the payments due for the cédulas that they issue (Article 17(6) of RD 716/2009).

Concerning foreign exchange risks, there is no legal provision in relation to the following areas:

> The currency of the covered bonds

> Limiting FX risks between cover assets and the CHs

> Limiting, managing or hedging the exchange risk as in the case of the interest rate risk. Notwithstanding, it is universal market practice to denominate the CHs in Euro if the currency of the cover assets is Euro.

Other risks such as early repayment, reinvestment, etc. are also mitigated by the 25% overcollateralisation as well as by the dynamic nature and structure of the cover pool.

VI. TRANSPARENCY

As mentioned above (Section III, Cover Assets) Spanish legislation obliges Spanish issuers of covered bonds to keep a special and very complete register of their loans and credits. The annual accounts have to contain additionally the essential details of said register.

On top of that, main Spanish issuers of CH, coordinated by the Spanish Mortgage Association, and since the end of 2011, have created a transparency template, consistent with the guidelines of the ECBC Label Initiative. This last version meets the requirements of Article 129(7) of the Capital Requirements Regulation (CRR).

VII. COVER POOL MONITOR AND BANKING SUPERVISION

The institution issuing the cédulas will keep a special accounting register. Please refer to Section III on cover assets. The Spanish legislation does not require a special pool monitor other than the supervision on a continuous basis by the Bank of Spain which includes the periodic disclosure of information regarding cover assets by credit institutions.

The Bank of Spain beyond its regular prudential supervision is responsible for specifically supervising compliance with the limits and regulatory requirements and is entitled to adopt measures in order to mitigate any breach or deviation from the regulation, including sanctioning such breach or failure in accordance with Article 5 of Law 26/1988 of 29 July.

The issuer is also responsible and liable for cover and eligible assets pool monitoring. The quantitative mandatory limits have to be maintained at all times, thus the monitoring is carried out continuously by the issuer as a part of the risk management and auditing of its activity.

The "special" supervision – as per reference to Article 52(4) UCITS – is also carried out by the *Comisión Nacional del Mercado de Valores* (hereinafter, "*CNMV*"). The CNMV may also monitor and supervise compliance with statutory requirements and limits upon approval of the issuance and clearly supervise the placing process

The role of the rating agencies shall be decided by the issuer on a case-by-case basis, either for commercial or market reasons, although as matter of fact most issues are rated.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Identification of the cover assets

Any mortgage that is originated in Spain must be registered in the Land Registry. Consequently, the Land Registry is the cover registry which records all the mortgages serving as the collateral for the CHs. The institution issuing the cédulas will keep a special accounting register.

Asset segregation from the insolvency's estate

Article 14 of Law 2/1981 of the regulation of the mortgage market stipulates that the institution issuing the cédulas will keep a special accounting register. This provides the legal framework regarding the position of the rights of the holders of the CHs in case of insolvency of the Spanish issuer.

In this respect, it is worth pointing out the following relevant issues:

1. According to Article 14 of Law 2/1981 claims of CH holders have to be treated as privileged claims against the insolvency estate (*créditos contra la masa*). Article 84(2)(7) and Article 154 of the Insolvency Law require that claims against the insolvency estate have to be paid by the insolvency administrators on their respective due dates without delay of payment, regardless of the status of the bankruptcy proceedings.

   In the case of CH, the claims of the CH holders are secured by the entire mortgage loan book registered in favour of the CH issuer (Article 12 of Law 2/1981) and if any, by the substitution assets which backup the cédulas hipotecarias and the economic flows generated by the financial instruments linked to each issue. The definition as stated by the Insolvency Law implies the application of the special rule of payment without enforcement of the collateral.

   The Insolvency administration is not entitled to adopt any decision against said legal provision and has to use the proceeds from the issuer's mortgage loan book to satisfy CH principle and interest payments on their respective due dates without delay of payments.

2. The Insolvency administrators are obliged to pay such amounts as long as the cash flows produced by the cover assets are sufficient to meet the CHs payments pursuant to Article 84(2)(7) of the Insolvency Law.

   In this respect, the Insolvency Law provides a clear definition of the claims of CH holders as special privileged claims without enforcement of the collateral. It also provides an unequivocal classification of the claims of CH holders, as claims against the insolvency estate and clear identification of the cover assets, which are reserved to meet the claims of the CH holders.

   Thus, the clarity of the provision leaves no room for a different interpretation. In other words, the same legal provision that states the privilege, states the extent and limits of the same.

   All of the holders of cédulas hipotecarias, whatever their date of issue, shall have the same preference over the loans and credits covering them and if any, to the substitution assets which backup the cédulas hipotecarias and the economic flows generated by the financial instruments linked to each issue.

3. The payments to be effected by the debtor comprise all those deriving from principal and interest of the issued and outstanding CHs on the date on which the Insolvency is declared. All CH payments have to be met on their respective due dates, regardless of the status of the bankruptcy proceedings. In the case where the cover assets are insufficient to meet the CH payments, the claims of the CH holders will be realised. The payment to all of the cédulas hipotecarias owners shall be done on a pro rata basis, regardless of the issue date of their securities. (Article 14 of Law 2/1981). In the case of insufficient cover assets, all CH holders' claims will be met on a pro-rata basis together with ordinary claims (Article 157(2) of the Insolvency Law).

   A judicial stay (moratorium) on the insolvency's estate cannot delay the cash flows from the cover assets and, therefore, endanger the timely payment of interest and the principle on CHs.

In case of insolvency of the issuer, liquidity is ensured by the means discussed above, by the flows derived from the cover assets.

In order to comply with the payment obligations to the holders of the cédulas hipotecarias in the event of a temporary gap in the revenue received by the debtor, payments shall be made by means of liquidating the substitution assets serving as collateral of the issue. If this was insufficient, payments shall be made by means of funding operations via subrogation of the debtor in the position of the holder of the cédulas (Article 14 of Law 2/1981).

Administration of the cover assets

In case of insolvency, it is the normal insolvency administrator who administrates the cover assets. In this respect, under Spanish Insolvency Law, the bankruptcy is directed by commercial court of competent jurisdiction and managed by a specific body called the "bankruptcy authority" ("administración concursal") normally comprising a single person.

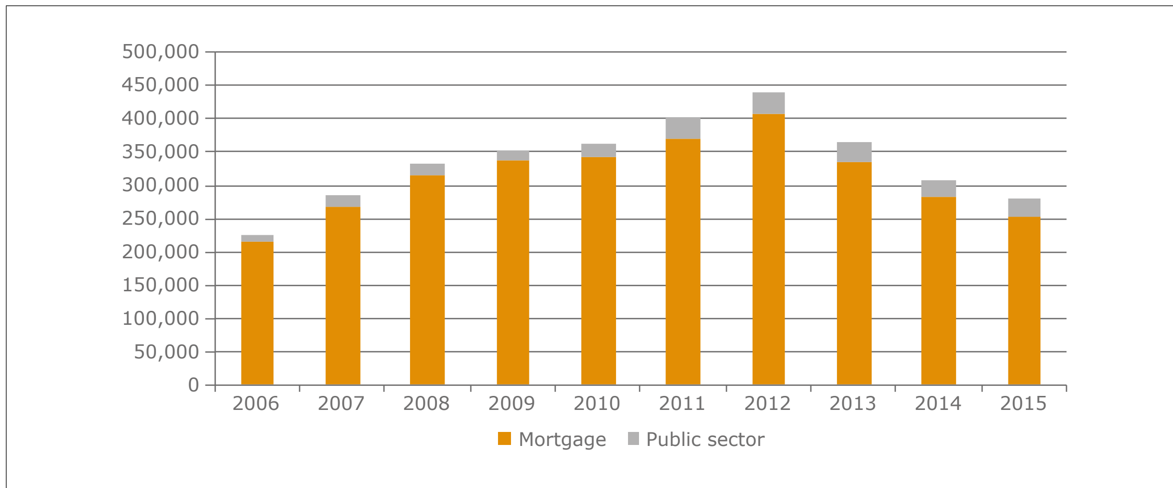
IX. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

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). The Spanish covered bonds fulfil the criteria of Article 52(4) UCITS and Article 129 CRR.[1]

Finally, the CHs upon being listed or applied for listing are eligible for: i) investment by insurance companies of their technical provisions obligations; ii) the investment by mutual guarantee companies; iii) investment by Pensions Funds.

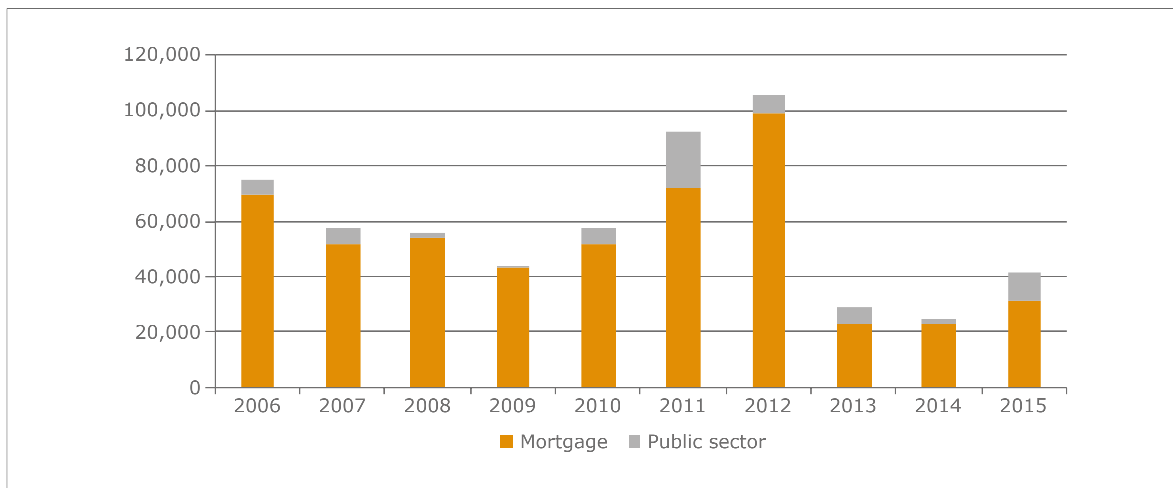
1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> FIGURE 1: COVERED BONDS OUTSTANDING, 2006-2015, EUR M



Source: EMF-ECBC

> FIGURE 2: COVERED BONDS ISSUANCE, 2006-2015, EUR M



Source: EMF-ECBC

Issuers: Banca March, Banco Caja Castilla La Mancha, Banco Caminos, Banco de Sabadell S.A., Banco Mare Nostrum, Banco Popular, Banco Popular e.com, Caja Rural de Granada, Banco Santander S.A., Banesto, Bankia, Bankinter, Bankoa, Barclays Bank, BBVA, BES SA, C. Pollença, CaixaBank SA, Caja Laboral, Caja Rural Navarra, Cajas Rurales Unidas, Cajasur, Catalunya Bank, CEISS, Deutsche Bank SAE, Ibercaja, Kutxabank S.A., Liberbank, NCG Banco, Santander Consumer Finance, Unicaja Banco.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/45/C%C3%A9dulas_Hipotecarias.

COVERED BOND · LABEL · : Banco de Sabadell, S.A.; Banco Popular Español; Santander Mortgage Covered Bonds; Bankia Mortgage; Bankinter, S.A.; BBVA Covered Bond Programme; BBVA Public Sector Covered Bond Programme; Mortgages Loans Caixabank S.A.; Public Loans CaixaBank S.A.; Kutxabank S.A.; Unicaja Banco Mortgage Covered Bonds; Banco Mare Nostrum, S.A.; Caja Rural de Castilla La Mancha; Ibercaja Banco S.A.

3.33 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, which came into force on 1 July 2004 (Lag 2003:1223 *om utgivning av säkerställda obligationer*, hereinafter the 'CBIA')[1]. The CBIA supersedes the general bankruptcy regulation and grants covered bond investors a priority claim on eligible cover assets (CBIA: Chapter 4, Section 1). A new regulatory provisions (FFFS 2013:01, hereinafter 'CBR')[2] established by the Swedish Financial Supervisory Authority (Finansinspektionen, hereinafter 'SFSA') complement the legislation. These regulations define in more detail the criteria for obtaining an issue licence, 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 CBIA does not apply the specialised banking principle but allows all banks and credit institutions to issue covered bonds provided they have obtained a special licence from the SFSA (CBIA: Chapter 2, Section 1). The issuer must meet certain criteria to qualify for the licence. These criteria include the submission of a financial plan proving the issuer's financial stability for the next three years, the conversion of outstanding mortgage bonds into covered bonds, and the conduct of business in compliance with the CBIA. The SFSA has the right to withdraw the licence should the institution be in material breach of the CBIA or have failed to issue covered bonds within one year of receiving the licence (Figure 1). If the SFSA withdraws a licence, the authority may determine a plan to wind down the operation.

> Figure 1: Licence needed to issue covered bonds

Requirements for issuance licence:

- 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.
- Outstanding mortgage bonds to finance loans that may be included in the covered pool must be converted into covered bonds or administered in an equivalent manner with respect to the creditors.
- The issuer must submit a financial plan for the next three financial years indicating that it is sufficiently stable so that the interest of other creditors is not jeopardised when it issues covered bonds. The report must be substantiated by auditors.
- The issuers must submit an operational plan that calls for sound management and supervision of the covered bond business (including information of the IT business).

The SFSA may withdraw a licence if:

- The institution is in material breach of its obligations pursuant to the CBIA; and/or
- The institution has failed to issue a covered bond within one year of receiving the licence.

Source: Lag 2003:1223, FFFS 2013:01

1 Lag 2003:1223 om utgivning av säkerställda obligationer [Covered Bonds Issuance Act].
2 FFFS 2013:01 Finansinspektionen's Regulations and Guidelines regarding covered bonds.

Prior to the CBIA, commercial banks were restricted on their mortgage lending activities, and mortgage loans were extended by specialised mortgage institutions, which were allowed to issue mortgage bonds. Most of the Swedish mortgage credit institutions have a strong affiliation with Nordic universal banking groups, outsourcing their activities to their respective parent. The degree of outsourcing varies among issuers. The SFSA has published general requirements regarding outsourcing.

The cover assets represent claims of the covered-bond-issuing entity 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 single cover assets and 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 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 and public-sector assets (CBIA: Chapter 3, Section 1). The CBIA does not specify separate cover pools for mortgage and public sector cover assets. Both asset classes are mixed in one cover pool. However, the main emphasis of Swedish issuers is on mortgage covered bonds (more than 90 percent of cover pools).

Eligible assets are mortgages:

- on real estate intended for residential, agricultural, office or commercial use;
- on site-leasehold rights intended for residential, office or commercial use;
- pledged against tenant-owner rights; and
- against similar foreign collateral.

The CBIA restricts mortgages against offices and commercial property to 10% of the total cover pool. Mortgage loans can be secured only with collateral comprising property located in Sweden and the European Economic Area (EEA)[3]. Neither asset-backed securities nor mortgage-backed securities are permissible as cover assets. The mortgage loans must meet valuation procedures and certain loan-to-value ratios defined by the CBIA and the CBR (see section IV).

Eligible public-sector assets are defined as securities and other claims:

- issued by or guaranteed by the Swedish state, Swedish municipality or comparable public body;
- issued by or guaranteed by a foreign state or central bank, where the investment is in the foreign state's currency and is refinanced by the same currency[4];
- issued by or guaranteed by the European Communities, or any of the foreign states, or central banks as prescribed by the Swedish government; or guaranteed by a foreign municipality or public body that has the authority to collect taxes.

The cover pool is a dynamic pool, and non-performing loans due over 60 days cannot be recognised for the purposes of meeting the matching requirements set forth by the CBIA (CBR: Chapter 3, Section 4).

3 Countries belonging to the European Economic Area are the 27 EU countries plus Norway, Iceland, Liechtenstein.
4 The law does not provide for any explicit geographic restriction.

Derivative contracts

The CBIA provides for 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 on demand of the counterparty. Derivative counterparties must have a minimum long-term rating of A3/A-/A- (Moody's/ S&P/Fitch) at the time the agreement is entered into. The law stipulates asymmetrical collateralisation, in that it requires collateral, a guarantee or replacement language in the event that the counterparty's rating falls below the minimum rating level. There is no reciprocal requirement by the covered bond issuer, given that derivative counterparties have a priority claim on the cover pool (CBR: Chapter 4, Sections 5 to 7). The use of derivatives is not limited to a maximum percentage of the cover pool since they are not included in the nominal matching calculation. Their use is limited to serve the balance between cover assets and outstanding covered bonds when creating a balance in respect of net present value of assets and liabilities.

Substitute assets

Highly liquid assets can serve as substitute assets for up to 20% of the mortgage cover pool. The SFSA can temporarily raise the limit to 30%. Eligible substitute assets include eligible public sector assets plus cash, cheques and postal money orders. These assets qualify for a 0% risk weighting. The SFSA has the discretion to extend the universe to eligible substitute assets (CBIA: Chapter 3, Section 2).

IV. VALUATION AND LTV CRITERIA

The CBIA defines valuation principles for properties that act as collateral for mortgages in the cover pool (CBIA: Chapter 3, Section 4). The valuation relating to residential properties may be based on general price levels. The valuation of any other eligible property class must be based on the market price, which must be determined by individual appraisal 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 must monitor the market value of the property regularly, and in the case of serious decline must review the valuation, and ensure that the loan to value (LTV) of the related mortgage loan remains within the defined maximum limit (CBR: Chapter 3, Section 7, Chapter 5, Section 4). The valuer is normally an employee of the issuer, but external valuers are also used.

For the various mortgage types eligible as cover, the following maximum LTV ratios apply (CBIA: Chapter 3, Section 3):

> 75% of the value for real estate, site-leasehold rights and tenant-owner rights where the property is intended for residential use;

> 70% of the value for real estate intended for agricultural use;

> 60% of the value for real estate, site-leasehold rights and tenant-owner rights where the property is intended for office or commercial use.

These LTV limits are relative, not absolute, limits. A loan with a higher LTV ratio can be included in the cover pool up to the legal threshold. The balance must be refinanced with other funding instruments (e.g., senior unsecured funding) (CBR: Chapter 5, Section 3).

An issuing institution shall test and analyse how changes in property values may affect LTV ratios and the value of the cover pool. These tests shall at least be performed once a year. The tests should be based on conservative assumptions.

V. ASSET – LIABILITY MANAGEMENT

The CBIA requires that the nominal value of the cover assets all times exceeds at the aggregate nominal value of claims arising from outstanding covered bonds against the issuer (CBIA: Chapter 3, Section 8). 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 SFSA. The SFSA defines the stress test for interest-rate risk as a sudden and sustained parallel shift in the reference swap curve by 100bps in an unfavourable direction, and a twist in the swap curve. 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 (CBR: Chapter 4, Section 3-5). The CBIA will from this summer (21 of June) have a minimum overcollateralization (OC) requirement of two percent. In addition to this, the issuer can still adhere to a self-imposed OC level for structural enhancement, as the CBIA protects any OC in the cover pool in the event of issuer insolvency.

The CBIA will from this summer (on the 21st of June 2016) have a minimum overcollateralisation requirement of two percent.

Finally, the issuing institution shall ensure that the cash flow with respect to the assets in the cover pool, derivatives agreements and the covered bonds are such that the institution is always able to meet its payment obligations towards holders of covered bonds and counterparties in derivatives agreements (CBIA: Chapter 3, Section 9). The issuer should be able to account for these funds separately.

VI. TRANSPARENCY

The issuers are presenting information regarding their cover pool and outstanding covered bond every quarter in line with the national transparency template. The information is today on every issuers' websites. Some of the issuer report more frequent then quarterly. The content of the national transparency template (posted on the Covered Bond Label website[5]) will be expanded if there are requests for it. Adaptations have been made to the requirements in the Capital Requirements Regulation (CRR). The information in the national transparency template will at least be what is required in CRR. Most of the issuers in Sweden have a special company that issue bonds. Those companies present quarterly or semi-annual reports. Those reports have information regarding the company and its business. The issuer is required to feed the independent inspector with all kinds of information with a rather tight frequency. According to the new regulation from the Swedish FSA this year that information will be more detailed.

VII. COVER POOL MONITORING AND BANKING SUPERVISION

The covered bond issuers fall under the special supervision of the SFSA. The financial regulator monitors the institutions' compliance with the CBIA and other related regulatory provisions (e.g., CBR). If the covered bond issuer is in material breach of its obligations under the legal framework, the SFSA can issue a warning or revoke the issue license altogether. The SFSA may also revoke a license if the institution has declared that it waives the license 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 SFSA must determine how the operations should be wound up (CBIA: Chapter 5, Sections 2 to 6).

For each issuing institution, the SFSA must appoint an independent and suitably qualified cover pool inspector (cover pool trustee), who is paid by the covered bond issuer. The duties of the cover pool inspector are to monitor the register and verify that covered bonds, derivatives agreements and the cover assets are correctly recorded.

5 https://www.coveredbondlabel.com/issuers/national-information-detail/24/.

The inspector also ensures compliance with matching and market risk limits in accordance with the CBIA. The inspector must also, nowadays, review the revaluations of underlying collateral that has been conducted during the year. The institution is obliged to provide the covered bond inspector with any information requested relating to its covered bond operations. The cover pool monitor must submit a report of the inspection to the SFSA on an annual basis, and must notify the SFSA as soon as he/she learns about an event deemed to be significant to the supervisory authority (CBIA: Chapter 3, Section 12 to 14, and CBR: Chapter 6).

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Cover register

The issuer must keep a register of eligible cover assets, substitute assets, derivative contracts, and outstanding covered bonds (CBIA: Chapter 3, Section 10). The law specifies the form and content of such a register, which must be easily accessible for the SFSA and the cover pool inspector. The registration legally secures covered bondholders and derivative counterparties a priority claim on the cover pool in the event of issuer insolvency (CBIA: Chapter 4, Section 4). 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 flows accruing from the cover assets after issuer insolvency must be registered in the cover pool register.

Issuer is a subsidiary

Under the Swedish bankruptcy code, the mere insolvency of the parent company does not automatically trigger the insolvency of a subsidiary.

Issuer insolvency

In the event of issuer insolvency, the registered cover assets and the respective 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, notwithstanding the existence of 'only temporary, minor deviations' (CBIA: Chapter 4, Section 2).[6] Also, mere 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 CBIA. However, the cover pool does not constitute a separate legal estate. According to legal opinion, the bankruptcy of the issuer should not lead to a debt moratorium on covered bonds.[7]

Cover pool insolvency and preferential treatment

In the event that the cover pool breached eligibility criteria, covered bonds would be accelerated. Covered bond investors and derivative counterparties would have a priority claim on the proceeds from the sale of the cover assets, ranking pari passu among themselves but prior to any tax claims and salary payments (pursuant to Section 3a of the Rights of Priority Act [SFS 1970:979]). If the proceeds are insufficient to repay all liabilities on 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 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 would be available to satisfy claims on unsecured creditors.

6 According to preparatory works to the Act, this would be, for example, "temporary liquidity constraints".

7 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.

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 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.[8] 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 issuer insolvency, the law does not enable the receiver-in-bankruptcy to refinance maturing covered bonds of the issuing institution by issuing new covered bonds against the cover pool. Likewise, the receiver is not able to substitute ordinary cover assets for alternative assets. However, the receiver can use available liquid substitute assets included in the pool. In addition, the receiver can sell part of the cover pool in the market to create the necessary liquidity without raising debt.

The receiver-in-bankruptcy has – as of the 1 June 2010 – also got an express mandate, on behalf of the bankruptcy estate, to take out liquidity loans and enter into other agreements for the purpose of maintaining matching between the cover pool, covered bonds and derivative contracts. The receiver has an extensive mandate to enter into agreements, not only to achieve a liquidity balance but also to achieve a balance in respect of currencies, interest rates and interest periods. The receiver should only enter into agreements if, on the date of execution of the agreement, the agreement is deemed to favour bondholders and derivative counterparties and if the assets in the cover pool are deemed to fulfil the terms and conditions imposed in the Act. When the receiver enters into an agreement, the contracting party receives a claim against the bankruptcy estate that ranks ahead of the secured creditors and creditors with rights of priority.

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. Swedish covered bonds comply with the criteria of article UCITS 52 (4) UCITS and with the covered bond criteria defined in article 129 in CRR.[9] Because of the bonds compliance with article 129 in CRR, the risk- weight for the Swedish covered bonds will be as is stated in article 129 for banks that use the standard method. The CBIA 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. However, general opinion of the parties involved is that the EU CRR's term "commercial real estate" should be interpreted in a broader sense, including agricultural property. In addition, issuers can impose self- restrictions to ensure that their covered bond issues comply with the CRR. Swedish covered bonds are eligible for repo transactions with the Riksbank (the Swedish Central Bank). The share of the total collateral in relation to the payment system that can be comprised of covered bonds is 100 % per cent. This applies to covered bonds issued by the borrower or by an institution with close links to the borrower.

The Riksbank's collateral requirements are harmonised with those applied within the Eurosystem. Moreover, Swedish covered bonds denominated in euros are likely to qualify as Tier 1 assets with the ECB.[10]

Foreign covered bonds enjoy the same preferential capital treatment in Sweden, if the foreign supervisory authority of that covered bond issuing institution has also assigned those covered bonds preferential risk-weightings (principle of mutual recognition).

8 According to 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.

9 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

10 In general, the ECB grants marketable debt instruments the status of Tier 1 assets, if the security is denominated in euros, compliant with UCITS Art. 552 (4) and issued by a credit institution situated in the EEA area (ECB: "Implementation of Monetary Policy in the Euro Area", Feb, 2005).

The law regulating insurance companies in Sweden (Försäkringsrörelselagen 1982:713) makes no distinction between mortgage bonds and covered bonds. Swedish insurance companies can invest up to a maximum of 25% in the covered bonds of a single issuer. Swedish legislation on investment funds (Lag 2004:64 om investeringsfonder) allows mutual funds to invest up to 25% of their assets in Swedish covered bonds, instead of the 10% generally applicable to other asset classes.

X. ADDITIONAL INFORMATION

Issuing and trading of Swedish domestic covered bonds

In order to issue covered bonds mortgage companies and banks need an authorisation by the Swedish Financial Supervisory Authority (SFSA). Normally the bonds are registered at the Nordic Exchange Stockholm (NASDAQ OMX Group), although no actual bond trading takes place there. Offering circulars with the detailed issue conditions are following a standard based on the Prospectus Directive with acceptance from the SFSA, OMX and the market makers. The normally used technique for issues is "on tap".

The Swedish bond market investors appreciate liquidity. Because of these "requirements" the large issuers issue their bonds as benchmarks which mean that large amounts (SEK 3 billion and more) are issued and that a number of dealers, under normal circumstances, show both bid and offer prices. Also, only benchmarks are deliverable in the future contracts. When a new benchmark-loan 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 size he requires to match the lending.

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 spread 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. T-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 mortgage bonds is SEK 200-500m. Of course, prices are given for other lots as well.

Sweden has a liquid and smoothly operating repo market with almost all banks and broker firms involved in the trading. The repo market in Sweden started in the late 1980s, and has developed fast. The Swedish Debt Office offers a repo-facility in government bonds and treasury bills and mortgage companies 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. There are no standard conditions for a repo transaction and the counterparties have to agree on maturity, settlement day and delivery for each deal. Most often, though, repos are settled two banking days after the trading day. Repo rates are quoted as a spread vs the Riksbank repo rate.

Almost all public listed securities in Sweden are registered at the Euroclear Sweden. In general, Swedish bonds are domestically settled via the Euroclear. Domestic settlement requires a custodian account with one of the Swedish banks or securities firms. Foreign investors can either have a custodian service with a Swedish bank or securities firm or settle via Euroclear or Cedel.

Accrued interest is calculated from the previous coupon date to the settlement day. The interest rate is calculated by using ISMA's 30E/360 day count – "End-of-month" convention.

Swedish government and covered bonds have five ex-coupon days which means that there is negative yield when settlement occurs within five business days before the coupon date.

Most Swedish bonds pay coupon annually. There are, however, bonds that pay coupon semi-annually. All domestic banks act as paying agents.

Swedish krona bonds redeem at par upon maturity.

The activities of ASCB

The Association of Swedish Covered Bond issuers (ASCB), which was established in 2009, has an ongoing work to further improve the conditions for the Swedish covered bonds. Two recent results of these efforts are firstly an amendment of the law with the purpose to grant the receiver-in-bankruptcy access to short-term liquidity in case of insolvency (see chapter VII) and secondly an agreement on the method of calculating the LTV for the cover pool.

Further information concerning the road show, the LTV-method as well as the Swedish covered bond market is accessible at the website of ASCB (www.ascb.se).

Essential terms and conditions of a typical Swedish market maker agreement

The market maker 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.

These obligations apply to a limited number of the issuer's loans – the benchmark-loans. Typically 5 to 8 loans of a big issuer have this status with respect to outstanding volume. Using the on-tap issuing technique a loan typically reaches bench-mark status when the outstanding loan amount is SEK 3-5 bn. (At the peak of the life of the bond it typically has a volume of SEK 50 to 70 bn. After that the volume falls 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 bid ask spread shall be in line with present market conditions and the trading lots shall typically exceed SEK 500 million.

The obligations of a market maker are conditional upon a number of things of which the following could be mentioned:

> that no change in the economic, financial or political conditions have occurred which in the reasonable opinion of the market maker would create a major obstacle to the fulfilment of the obligations;

> that the bonds, in the reasonable opinion of the market maker, cannot be placed in the primary or secondary market on normal market conditions.

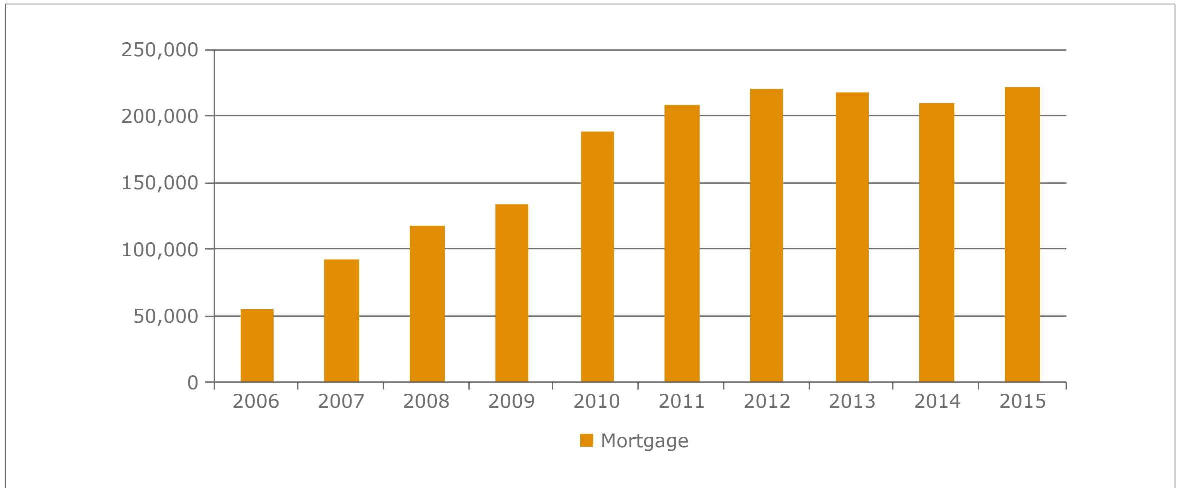
If so, the market marker shall notify the issuer and may withdraw from the duties wholly or in part for a shorter or longer time.

The market maker also has an obligation to trade two futures (2 and 5 year) of the issuer in a similar way as that of the benchmark bonds.

The issuer on his side has an obligation to (under normal market conditions) supply the market maker with a repo facility in the outstanding benchmark bonds. (This facility used to be unlimited. Today, however, the limit is set by the available cover in the cover pool of the issuer.)

With respect to transparency, the issuer shall make public at the end of each week figures on outstanding benchmark loans as of the last day of the previous week.

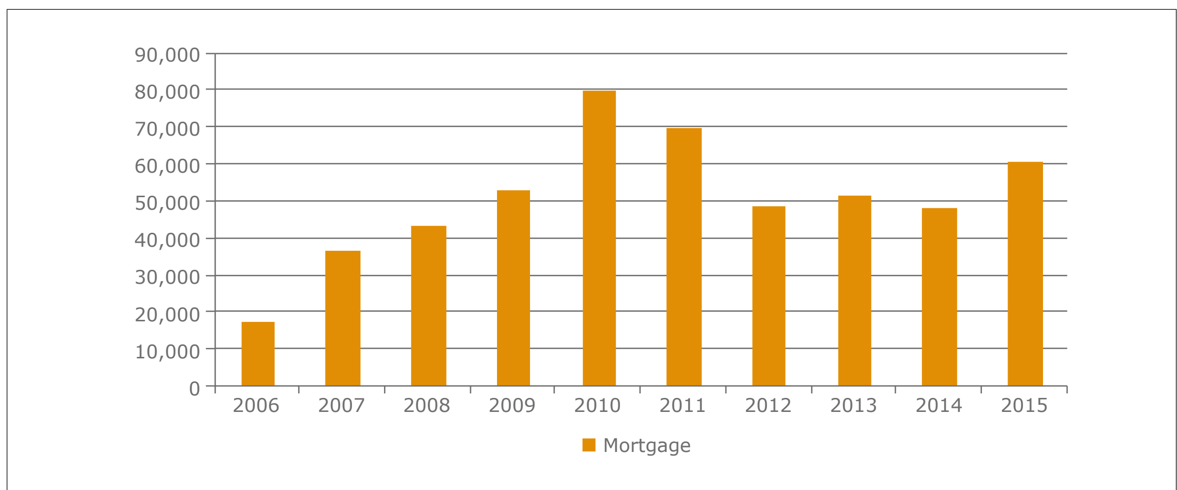
> Figure 2: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

Notes: The first covered bonds were issued in 2006 with the application of the Covered Bond Issuance Act. Prior to 2006 only mortgage bonds were issued in Sweden and as they are not directly comparable to covered bonds they are not included in the figures. In the graph only covered bonds are present.

> Figure 3: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: Stadshypotek, Swedbank Mortgage, Nordea Hypotek, Swedish Covered Bond Corporation (SCBC), SEB, Skandiabanken, Länsförsäkringar Hypotek and Landshypotek. The market is dominated by the first five of them and the majority of their exposure is to domestic residential mortgages, with the remainder consisting of commercial property loans and public sector loans.

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/47/Swedish_Covered_Bonds.

Covered Bond · Label · : Länsförsäkringar Hypotek AB; Nordea Hypotek cover pool; SEB Cover Pool; Stadshypotek Swedish Pool; Stadshypotek Norwegian Pool; Swedbank Mortgage cover pool; The Swedish Covered Bond Corporation.

3.34.1 SWITZERLAND – SWISS PFANDBRIEFE®

By Robert Horat, 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 statutes of the Pfandbrief institutes and the valuation regulations. These 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). These 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.

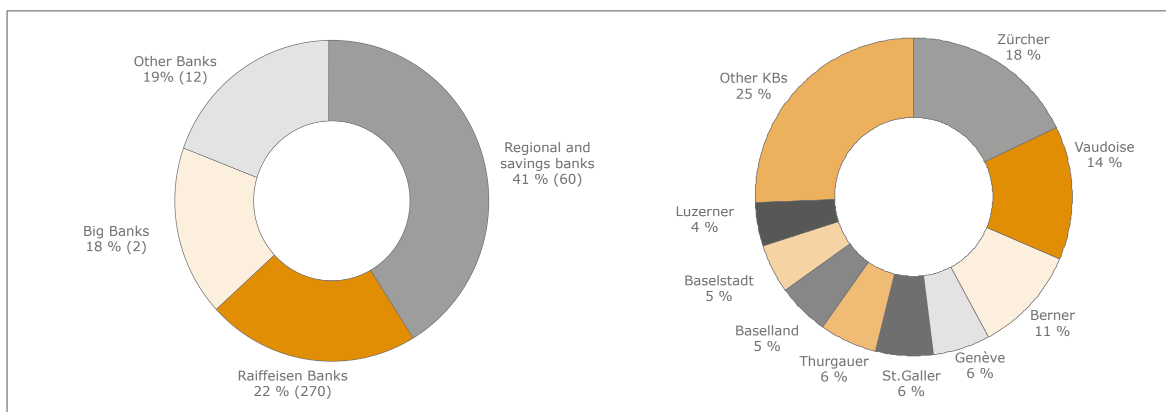
PfG came into effect in 1930. Its 52 articles are well balanced and the PfG had to be modified only marginally in the meantime. The fact that the Swiss Pfandbrief has a special legal basis, provides legal certainty as well as stability and predictability.

Pfandbrief institutes have a strictly limited scope.

II. STRUCTURE OF THE ISSUER

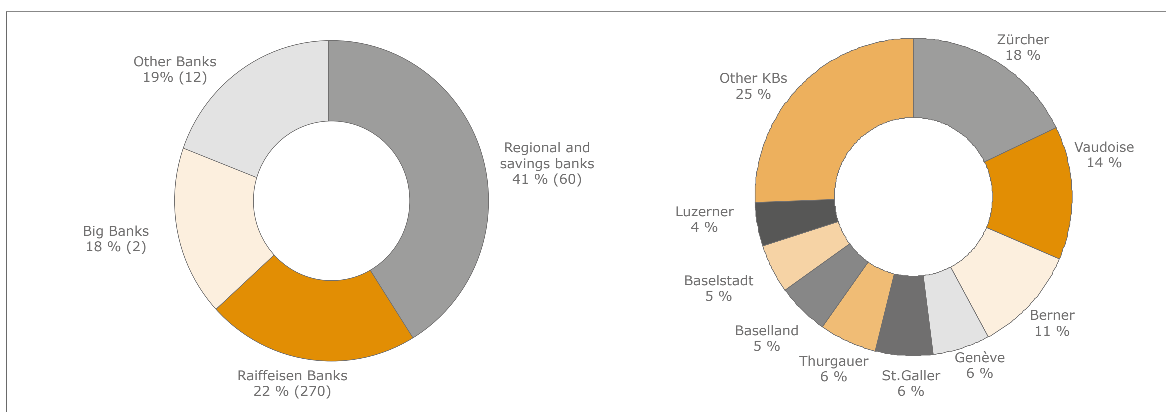
Pfandbriefzentrale operates as the Pfandbrief issuing vehicle of the Swiss cantonal banks and Pfandbriefbank of all other Swiss banks. Both are special institutions with their business scope limited to the issuance of Swiss Pfandbriefe, to granting Pfandbrief loans to their member banks and to investing 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 1: Shareholders of PB



Source: PB as of 31.12.2015

> Figure 2: Shareholders of PZ



Source: PZ as of 31.12.2015

The two Pfandbrief institutes are self-help-organizations, or, in other words, the bond issuing departments and cover pool of their member banks outsourced to the Pfandbrief institutes.

PB was founded in 1931 and counts 344 member 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. As of 31 December 2015 the total outstanding Swiss Pfandbriefe of PB amount to CHF 61.1 billion (EUR 56.4 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 2015 the total outstanding Swiss Pfandbriefe of PZ amount to CHF 42.9 billion (EUR 39.6 billion).

The total volume of all outstanding Swiss Pfandbriefe as of 31 December 2015 amounts to CHF 104.0 billion (EUR 96.0 billion). For years the two Swiss Pfandbrief institutes have been the major bond issuers in Switzerland, even more important than the government. In 2015 they issued Swiss Pfandbriefe amounting to CHF 17.2 billion (EUR 15.8 billion).

Swiss Pfandbriefe are standardised to a great extent. They are a commodity, denominated only in Swiss francs, with an original time to maturity 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 segment of the domestic bonds in Swiss Francs public sector (Swiss sovereign, cantons, cities) amount to 34%, followed by Swiss Pfandbriefe with 31%, the banking sector with 13% and other industries with 22%.

In total about 11% of all Swiss mortgages are refinanced through Swiss Pfandbriefe (10/2015).

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. 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 authorized 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 LTV of two thirds (Article 5 PfG). 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, member bank 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. 160'000 mortgages all over Switzerland, which provides a good diversification. 99% of the properties are residential and 1% commercial.

If macro economic conditions change materially, 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 and 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 total of the pledged mortgages of a member bank is smaller than its total Pfandbrief loan interest, the asset cover pool must be increased (Article 20 PfG).

Overcollateralisation

Additionally to eligibility and valuation principles (LTV legally at maximum 2/3, for PB the average LTV is less than 50%), the cover value of the cover register assets have to exceed the Pfandbrief loans given to member banks by at least 8% for PB und by 15% for PZ. The higher overcollaterisation of PZ compensates for the fact that PZ does not have an 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 participate in the 'Covered Bond Label' self-certification programme, PB publishes the 'Pfandbriefbank Pool' report (incl. 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 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 by-laws 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, analysts of CS, UBS and ZKB publish research reports and last but not least capital market values Swiss Pfandbriefe on a daily basis.

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 over indebted, 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, it is to mention that FINMA can order deferment of payments or payment extension, except for mortgage-secured receivables of the Pfandbrief institutes (Article 26 h BankG).

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). The approval of the bank's General Assembly is not necessary (Article 31 BankG).

c) the member bank's liquidation due to bankruptcy pursuant to BankG art. 33 – 37 g: 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 Banking Insolvency Ordinance (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). FINMA can also order the delivery of the cover assets and then act as fiduciary (Article 40 PfG) or arrange for a sale of the cover assets to other banks. In such a case Pfandbriefe would accelerate and Pfandbrief investors would rank pari passu among themselves on the proceeds of the asset sales (Article 29 PfG).

IX. RISK-WEIGHTING & COMPLIANCE WITH INTERNATIONAL LEGISLATION

The Bank for International Settlements regularly assesses the consistency of implementation of Basel III standards. Switzerland passed with an overall "C" or "compliant" grade (source Basel Committee on Banking Supervision, June 2013, Regulatory Consistency Assessment Programme (RECAP), Assessment of Basel III regulations – Switzerland).

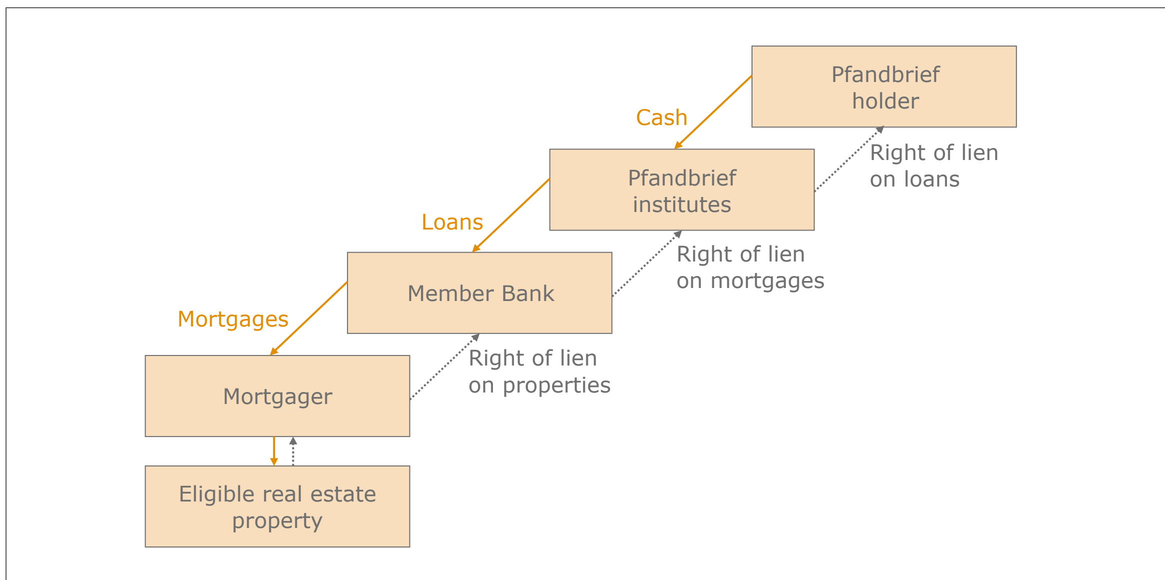
Basel III capital

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. Under the BIS standard approach Swiss Pfandbriefe have a 20% risk weighting.

Basel III liquidity

Switzerland implements Basel III liquidity requirements by means of the 'Banking Act' and the 'Liquidity Ordinance' (LiqO) into national law. Swiss Pfandbriefe are on the SNB GC basket list and are therefore eligible for SNB repo transactions. As Swiss Pfandbriefe fulfil the criteria for high-quality liquid assets (HQLA) they are not affected by the redefinition of collateral eligible for SNB repos effective 1 January 2015.

> FIGURE 3: THE SWISS PFANDBRIEF® MODEL



Source: Credit Suisse AG

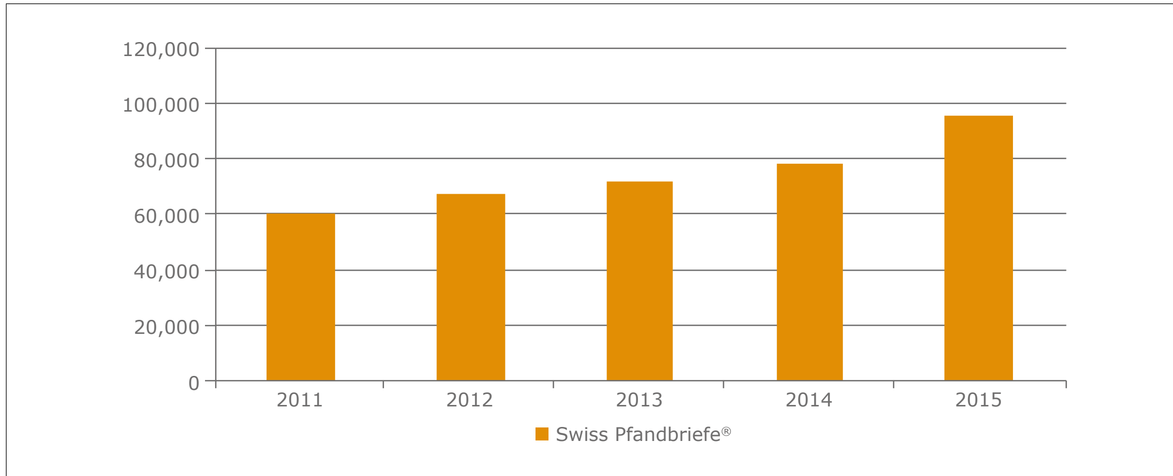
X. INVESTORS BENEFITS

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 proprietor of the property 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.

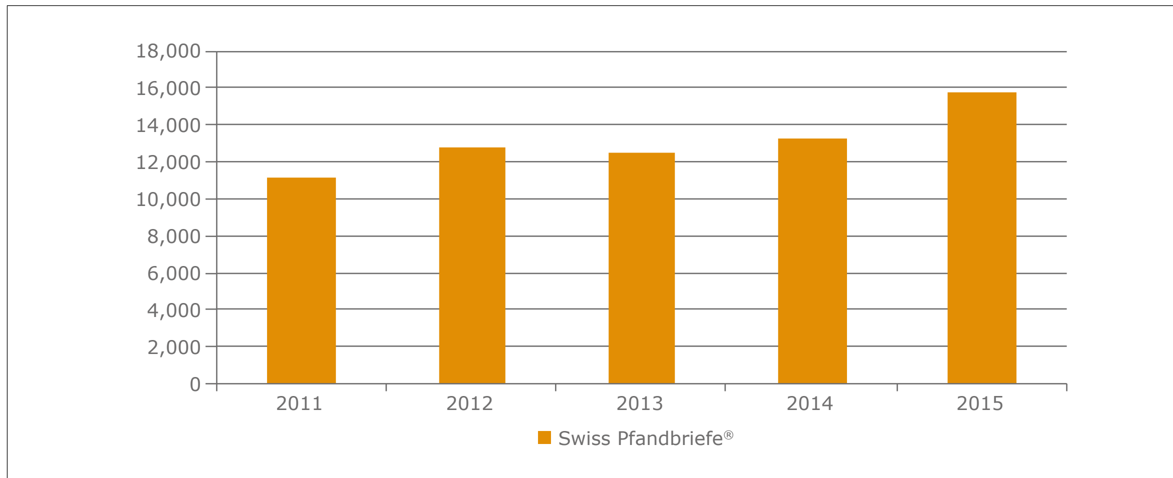
1 Three of PZ's member banks do not benefit from a cantonal guarantee or have a limited guarantee, namely Banque Cantonale de Genève AG (limited guarantee until end of 2016), Banque Cantonale Vaudoise AG (no guarantee) and Berner Kantonalbank (no guarantee).

> FIGURE 4: SWISS PFANDBRIEFE OUTSTANDING, 2011-2015, EUR M



Source: EMF-ECBC

> FIGURE 5: SWISS PFANDBRIEFE ISSUANCE, 2011-2015, EUR M



Source: EMF-ECBC

Issuers: Pfandbriefbank schweizerischer Hypothekarinstitute AG (PB) and Pfandbriefzentrale der schweizerischen Kantonalbanken AG (PZ).

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/82/Swiss_Pfandbriefe.

3.34.2 SWITZERLAND – STRUCTURED COVERED BONDS

By Michael McCormick, Credit Suisse

Credit Suisse AG (Credit Suisse) and UBS AG (UBS) established structured covered bond programmes in order to access covered bond funding outside of the Swiss Franc market. These programmes are not subject to the Swiss covered bond act, and instead rely on contractual agreements to achieve a dual recourse covered bond structure. In line with legislative Swiss Pfandbriefe, both programmes are backed by prime Swiss domestic residential mortgage collateral.

I. FRAMEWORK

Both programmes use Swiss and English law contractual provisions to implement structural features that are standard in the covered bond market, including direct recourse to the issuer, a privileged claim on a bankruptcy remote cover pool, periodic asset coverage tests, and stringent eligibility criteria for the cover pool assets. These programmes have also adopted very similar structures, with some minor differences as highlighted below.

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. 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. The guarantee comes into operation following an issuer event of default, subject to certain conditions. All covered bonds issued under the respective programme 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 (both guarantors are majority-owned by their respective issuer).

II. STRUCTURE OF THE ISSUER

Both issuers today are large financial institutions regulated by the Swiss banking regulator, Swiss Financial Market Supervisory Authority (FINMA).

The covered bonds issued by Credit Suisse and UBS are direct, unsubordinated, unsecured and unconditional obligations benefiting from a guarantee given by their respective guarantor vehicles. Before an issuer event of default, the issuers must make all payments of interest and principal due on the covered bonds.

In June 2015, UBS transferred its residential mortgage business to UBS Switzerland AG, a newly established domestic subsidiary of UBS. Concurrently, a joint and several liability arrangement has was put in place, under which UBS Switzerland AG assumes a contractual joint and several liability for all contractual obligations of UBS under the programme, including UBS`s covered bonds. UBS will no longer be issuing from its programme.

III. COVER ASSETS

In both programmes, the collateral consists of Swiss mortgage loans to private individuals and the related mortgage certificates securing such mortgage loans.

Substitution assets can be included in the cover pool. Their aggregate value is limited to a maximum of 15% of the cover pool and may consist of cash and high quality investments such as bank deposits, domestic pfand-briefe and highly government debt.

IV. VALUATION AND LTV CRITERIA

The eligibility criteria for initial inclusion in Credit Suisse's cover pool limits mortgages to those with loan-to-value (LTV) of less than or equal to 100%, while the UBS programme limits eligible mortgages to those with LTV of less than or equal to 80%.

Certain provisions within the programmes' asset coverage test (ACT) implement additional LTV limits by capping the value of each mortgage loan at a specified current LTV, thereby ensuring that the value given to mortgage loan is prudently measured when comparing assets to liabilities. This limit is 70% LTV in the Credit Suisse programme and 80% in the UBS programme.

For both programmes, the mortgages' LTV is regularly calculated using current market values. Credit Suisse undertakes an appraisal of the market value of a relevant property for new and existing customers upon an initial application for a mortgage loan and periodically thereafter (not less than every 15 years or based on relevant new information and/or obvious changes). Such appraisal is undertaken for each mortgage loan application by a hedonic valuation model (the IAZI) or internal appraisers or authorised external appraisers, using the construction value method or the capitalised earnings model. UBS conducts an estimate of the collateral value for all residential mortgages based on the Wuest & Partner valuation model, which is also a hedonic regression model. If other valuation methods are available, UBS takes these into consideration and generally uses the lowest of the estimated values as its assessed market value. This resultant value is intended to provide a realistic valuation applicable for a twelve month period and is subject to annual review.

V. ASSET – LIABILITY MANAGEMEMT

The ACT drives asset coverage requirements in both programmes and is run on a monthly basis. 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.

Both programmes include maximum APs under the programme in order to commit their pogrammes to a minimum overcollateralisation. These are 85% and 90% for Credit Suisse and UBS, respectively.

Both covered bond programmes benefit from a number of additional safeguards:

- In practice, exposure to interest rate and currency risks are mitigated by use of derivatives;
- Liquidity risk is mitigated by the requirements to establish reserve funds, maintenance of pre-maturity liquidity for hard bullet covered bonds and the inclusion of 12-month extension periods for soft bullet covered bonds;
- Cash flow adequacy is maintained by periodic interest coverage tests;
- Commingling risk is mitigated by the requirement of all collections arising from the cover assets to be swept into guarantor accounts after loss of specified ratings;
- Minimum rating requirements are in place for the various third parties that support the transaction, including the swap counterparties and account banks;
- There are also independent audits of the calculations undertaken on a regular basis by an asset monitor.

Following the default of the issuer, an amortisation test is run instead of the ACT. The amortisation test mitigates time subordination between the covered bonds series and will be failed if the aggregate loan amount falls below the outstanding balance of all the covered bonds. Upon failure of the test, all bonds accelerate against the guarantor.

VI. TRANSPARENCY

Both issuers have committed to publishing monthly investor reports on a timely basis. These reports provide various information relevant to investors including:

> the monthly calculations of the ACT and the interest coverage test;

> 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 loan to value, 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 results of investor reporting are checked and verified by an independent asset monitor who advises the trustee upon their breach. The cover pools themselves are audited by independent professional auditors at regular intervals.

In addition, rating agencies regularly monitor the programme and re-affirm the ratings on a regular basis.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Upon transfer for security purposes of the mortgage loans and the related mortgage certificates, each of the guarantors (Credit Suisse Hypotheken AG and UBS Hypotheken AG) becomes the legal holder of the mortgage loans as well as the legal owner of the mortgage certificates.

Upon the insolvency of the issuer, the mortgage loans and the related mortgage certificates 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 Credit Suisse or UBS.

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 asset coverage or interest coverage test.

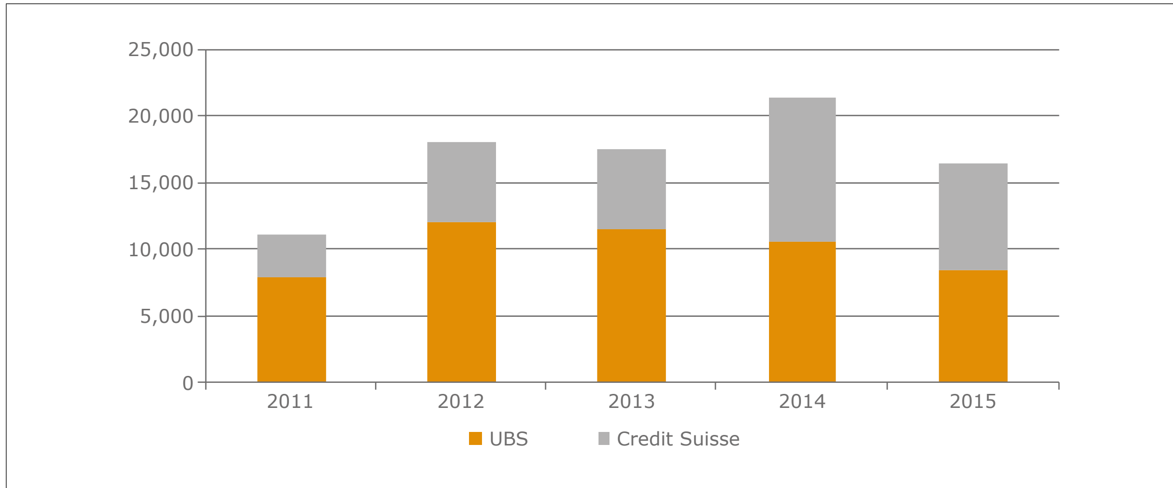
An issuer event of default would not accelerate payments to covered bondholders, but would allow the trustee to activate the guarantee.

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

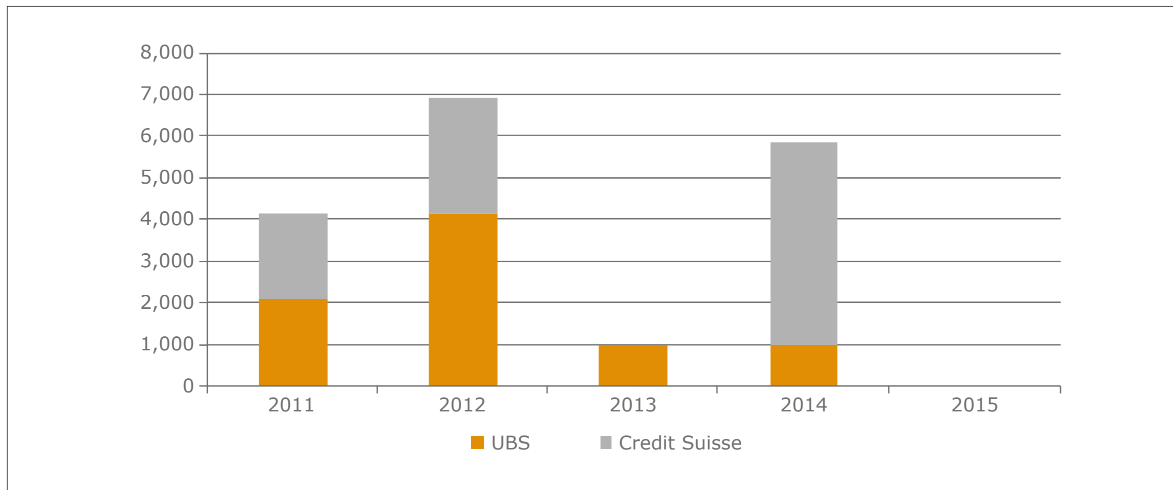
Swiss general-law based covered bonds have a 20% risk-weighting in accordance with the Capital Requirements Regulation (CRR). They may qualify for Liquidity Category III (structured covered bonds) of the ECB eligible assets criteria.

> Figure 1: Covered Bonds Outstanding 2011-2015, EUR m



Source: EMF-ECBC

> Figure 2: Covered Bonds Issuance, 2011-2015, EUR m



Source: EMF-ECBC

Issuers: Credit Suisse AG and UBS AG.

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/92/Credit_Suisse_CB and http://www.ecbc.eu/framework/78/UBS_CB.

3.35 TURKEY

By Özlem Gökçeimam, 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 ("CML") and the secondary legislation is the Communiqué on Covered Bonds[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.cmb.gov.tr/apps/teblig/index.aspx?lang=E&ps=N&submenuheader=-1.

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 150,000.

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; 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 75% 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 http://www.kap.gov.tr/en/about-pdp/general-information.aspx 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 and 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.

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/50/Turkey.

3.36 UNITED KINGDOM

By Jussi Harju, Barclays and John Millward, HSBC

The UK covered bond market has been established since 2003, initially based on general English law structured finance principles prior to the introduction of a dedicated covered bond regulatory framework by HM Treasury in March 2008 (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")[1] and thereby provided 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"[2]. The amendments became effective for regulated programmes from 1 January 2013.

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[3]. The Regulations only apply to those covered bonds which have been admitted to the register. In practice, all programmes which are still being used for new primary issuance are regulated under the RCB Regulations, with only a small number of legacy programmes remaining unregulated. In the past year, programmes from both Bradford & Bingley and Northern Rock have seen their bonds redeemed in full.

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. The Regulations do, however, prescribe certain key structural principles and requirements, including the requirements 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.

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.

1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

2 All UK regulated covered bond key documents are available at the following link: http://www.fca.org.uk/firms/systems-reporting/register/use/other-registers/rcb-key-documents.

3 The register may be found at http://www.fca.org.uk/firms/systems-reporting/register/use/other-registers/rcb-register.

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 interest 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.

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 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 Halifax or Nationwide real estate price index, 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 applied.

The LTV limit for mortgages varies across the different programmes (see Figure 1), 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 1).

V. ASSET – LIABILITY MANAGEMENT

For UK regulated programmes, over-collateralisation (OC) levels are determined according to the higher of: (i) the regulatory minimum amount specified in the Regulations of 8% on a nominal basis (however, no credit is given to liquid, or "substitution" assets while hedging agreements are taken into account), (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, in many programmes, the contractual minimum amounts specified are already in excess of this regulatory minimum requirement, and in any case the OC required by the rating agencies and/or FCA are significantly 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 minimum 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 if it deems the collateral to be insufficient.

The principal contractual requirement under UK structures is the presence of a dynamic ACT which must be 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.[4] 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 1).

4 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.

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 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 in practice.

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 in comparison to many other jurisdictions. 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, which were updated in December 2011 and became effective in January 2013, 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 twelve UK regulated covered bond issuers (Abbey National Treasury Services, Clydesdale Bank, Coventry Building Society, Lloyds Bank, Nationwide Building Society, Royal Bank of Scotland, 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 FSA 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 two internationally recognised rating agencies 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 1st 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 and therefore benefit from the same preferential treatment as covered bonds from other EU jurisdictions. 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 do not qualify for the preferential risk weightings.

> FIGURE 1: OVERVIEW – REGULATED UK COVERED BOND PROGRAMMES

At the time of writing there are 12 regulated covered bond issuers in the United Kingdom: Abbey National (ABBEY); Barclays Bank Plc (BACR); Bank of Scotland Plc (HBOS); Clydesdale Bank Plc (CLYDES); Co-operative Bank (COOPWH); HSBC Bank (HSBC), Leeds Building Society (LEEDS), Lloyds TSB Bank (LLOYDS), Nationwide Building Society (NWIDE); Royal Bank of Scotland (RBS); Coventry Building Society (COVBS) and Yorkshire Building Society (YBS).[5]

	ABBEY	BACR	CLYDES	COOPWH	COVBS	HBOS	HSBC	LEEDS	LLOYDS	NWIDE	RBS	YBS
Programme volume (bn)	€ 35	€ 35	€ 10	€ 3	€ 7	€ 60	€ 25	€ 7	€ 60	€ 45	€ 25	€ 7.5
LTV cap	75%	75%	75%	75%	75%	60%	75%	75%	75%	75%	75%	75%
House price index	Halifax	Halifax	Nation-wide	Halifax	Nation-wide	Halifax	Halifax	Halifax	Halifax	Nation-wide	Halifax	Avg. of Halifax & Nation-wide
Maximum asset percentage	91.0%	94.0%	90.0%	93.5%	90.0%	92.5%	92.5%	93.5%	93.0%	93.0%	90.0%	92.5%
Minimum OC*	10%	6%	11%	7%	11%	8%	8%	7%	8%	8%	11%	8%
Current asset percentage	89.3%	74.4%	86.2%	77.5%	87.0%	86.0%	87.0%	83.0%	90.0%	87.0%	83.3%	87.0%
Current OC (Adj. Loan balance/CB outstanding)	20%	18%	37%	44%	19%	10%	3094%	52%	12%	19%	49%	30%
Credit for loans in arrears (>3 months)	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%	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%	<3M: 75%, >3M: 40%	LTV<75: 40% LTV>75: 25%
Can issue hard bullets? **	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No
Asset monitor	Deloitte	PWC	E&Y	PWC	E&Y	KPMG	KPMG	Deloitte	PWC	PWC	Deloitte	Deloitte

* OC = Over-collateralisation, minimum OC calculated as 1/maximum asset percentage.
** Hard-bullets possible only if pre-maturity test is in place and passed / soft-bullets issued with 12-months extension.

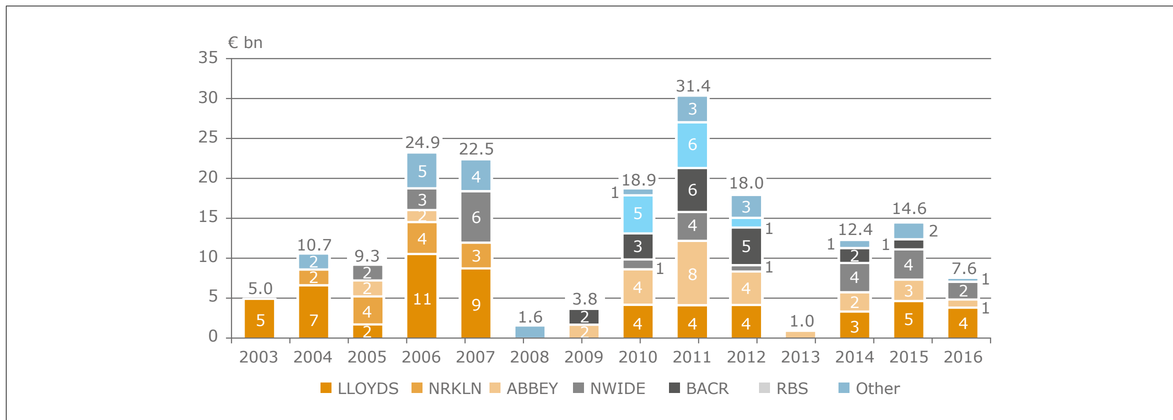
Source: Barclays Research, transaction documents.

5 http://www.fca.org.uk/firms/systems-reporting/register/use/other-registers/rcb-register.

X. ADDITIONAL INFORMATION

The current outstanding volume of regulated, publicly placed fixed and floating rate benchmark covered bonds and respective taps (benchmark covered bonds hereafter) amounts to EUR 92 bn (all amounts in EUR bn equivalent). Although gross supply continued robust in 2015 the market shrank by approximately EUR 7 bn due to elevated redemptions (EUR 24.2 bn). Supply in 2016 has continued at a slightly subdued pace with EUR 7.6 bn equivalent issued by the end of May, mostly in EUR. Redemptions in 2016 remain elevated at EUR 18.2 bn, of which EUR 7.4 bn had matured by end of May.

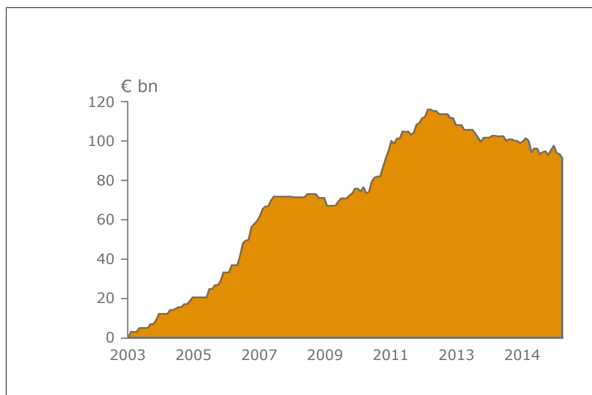
> FIGURE 2: ANNUAL SUPPLY OF UK BENCHMARK COVERED BONDS BY ISSUER (BY END MAY 2016)



Source: Barclays Research

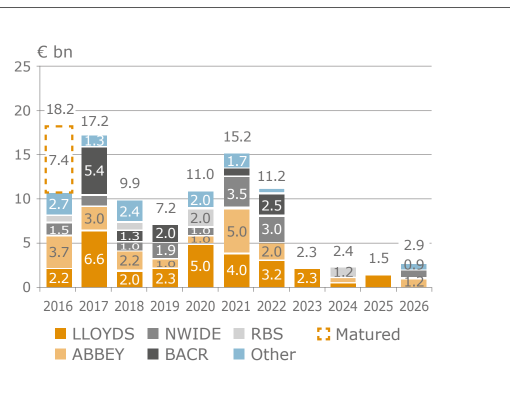
Figures 3 and 4 show the development of total outstanding benchmark UK covered bonds and the annual redemptions per issuer. Figures 5 and 6 show the market share (as measured by covered bonds outstanding) per issuer and the currency distribution for outstanding issuances.

> FIGURE 3: DEVELOPMENT OF OUTSTANDING VOLUME (BENCHMARK COVERED BONDS)



Source: Barclays Research

> FIGURE 4: ANNUAL REDEMPTION PER ISSUER (BENCHMARK COVERED BONDS)

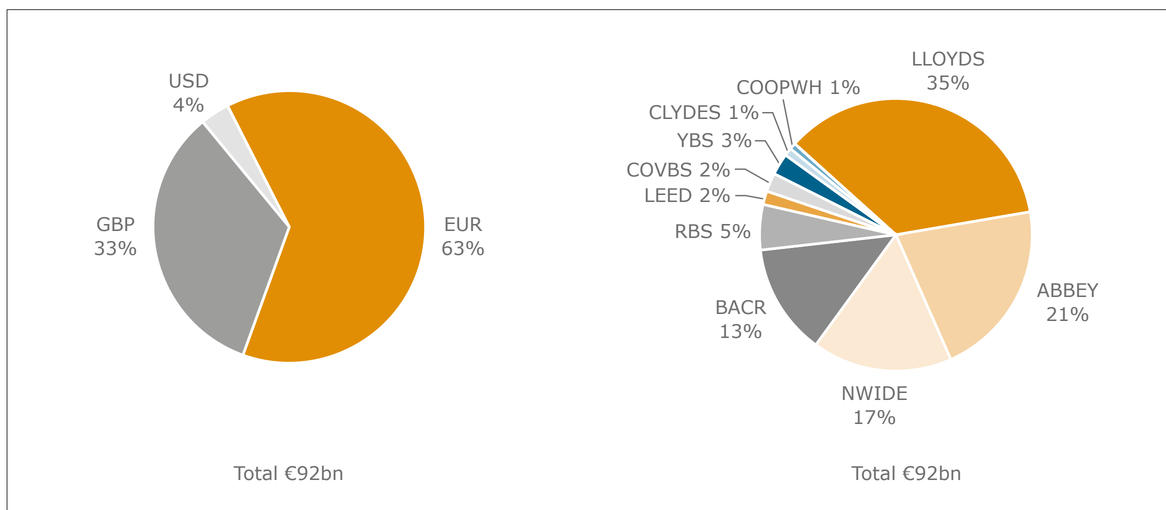


Source: Barclays Research

The UK covered bond market still remains predominantly denominated in EUR: at the time of writing 63% of all UK benchmark covered bonds were denominated in EUR while GBP covered bonds make up a third of the market (28% last year) with the remaining 4% of the benchmark covered bonds are denominated in USD. GBP transactions are mainly 3-5 year floating rate bonds, with only one issuance (from Lloyds) in GBP fixed rate format in the last several years.

> FIGURE 5: MARKET SHARE OF OUTSTANDING, MAY 2016 (BENCHMARK ISSUANCES)

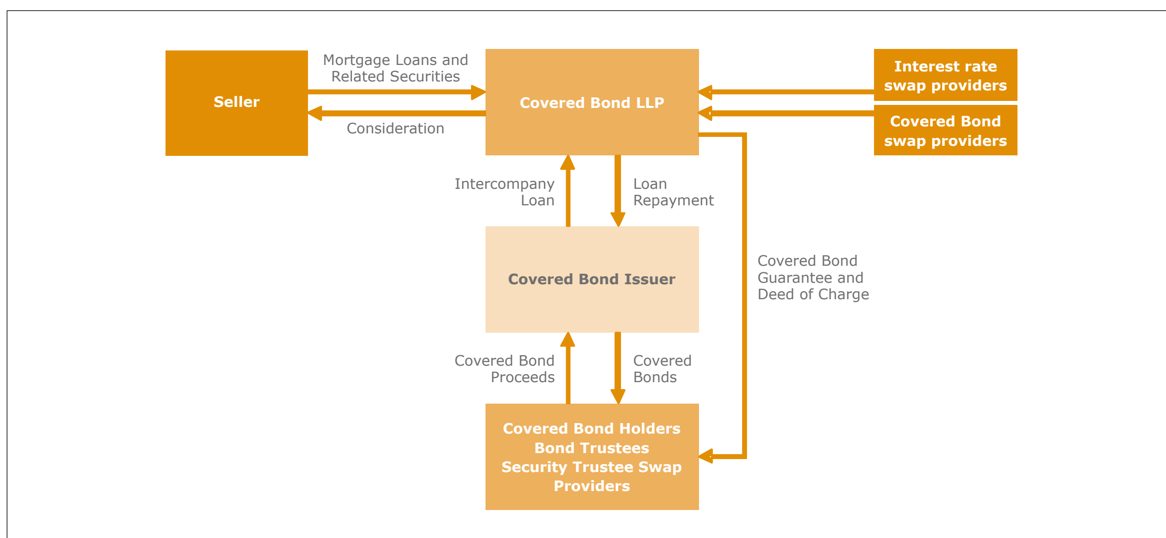
> FIGURE 6: OUTSTANDING BENCHMARK ISSUANCES BY CURRENCY, MAY 2016



Source: Barclays Research

Source: Barclays Research

> FIGURE 7: GENERIC UK COVERED BOND PROGRAMME STRUCTURE

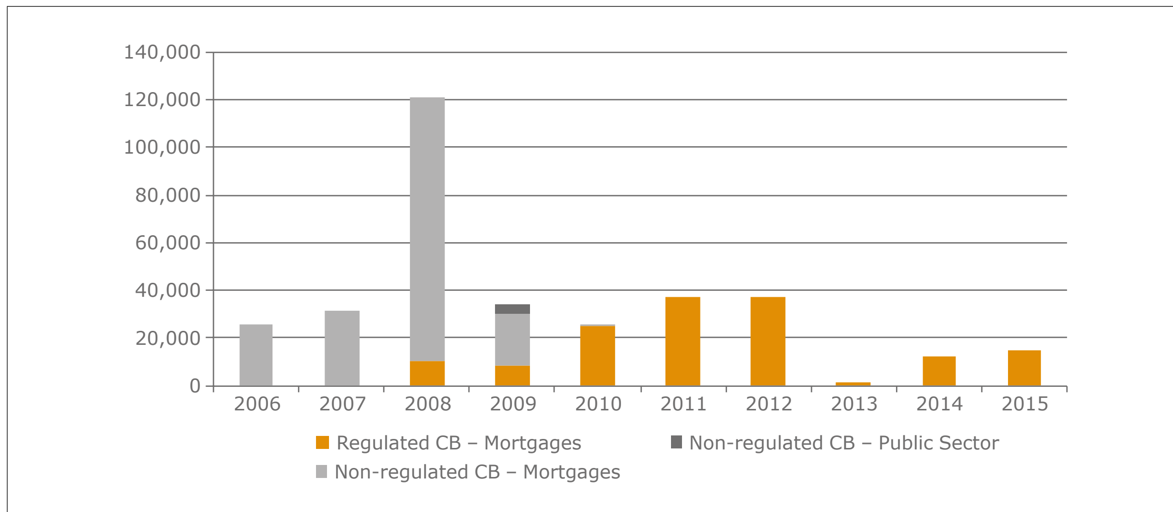


Source: Barclays Research

> FIGURE 8: COVERED BONDS OUTSTANDING, 2006-2015, 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 9: COVERED BONDS ISSUANCE, 2006-2015, 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 12 regulated issuers each with one regulated mortgage programme, 3 more unregulated programmes from regulated issuers as well as 1 un-regulated issuer with 1 unregulated mortgage programme.

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/52/Regulated_Covered_Bonds_-_RCB.

COVERED BOND LABEL : Santander UK plc; Clydesdale Bank PLC; Coventry Building Society; Lloyds Bank plc; Nationwide Building Society; Royal Bank of Scotland; Yorkshire Building Society.[6]

6 https://coveredbondlabel.com/issuers/issuers-directory/.

3.37 UNITED STATES

By Alexander Batchvarov and Anne Caris, Bank of America Merrill Lynch

No covered bond legislation has been passed yet in the US despite several attempts in recent years. As such, the two outstanding bonds by Bank of America and Washington Mutual (acquired by JP Morgan) maturing in 2016 and 2017, respectively, are structured 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 latest two legislation attempts, the United States Covered Act in 2011 and the Protecting American Taxpayers and Homeowners (PATH) Act in 2013, aimed to address this concern together with other details but none so far made it through the full legislative process. Within PATH, covered bonds have been discussed as part of the Government Sponsored Enterprises (GSEs) reform being considered as a secondary priority to the latter.

Covered bonds were mentioned twice since then by legislators still suggesting the possibility of US covered bond legislation in the future. First, a speech on 26 June 2014 by Jack Lew, the US Treasury secretary, suggested possible new avenues where covered bonds could have a role to play alongside GSEs. Second, the oversight plan of the Committee on Financial Services for the 114th Congress mentions explicitly the examination of covered bonds.

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 authorised 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 emphasised 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 authorisation must be provided by the IDI's primary federal regulator. Only well-capitalised 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.
- **Over-collateralisation (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 recognised, 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 LEGISLATION ATTEMPTS SO FAR

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 has to be signed by the President to become law. 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 administration; (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).

> **Over-collateralisation:** 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 programme which comprises all related cover assets 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 has aimed notably to reform GSEs in order to prevent any future liability to taxpayers and increase mortgage competition, enhance transparency and maximise consumer choices. Details related to covered bonds in the PATH Act have been 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, has lacked bipartisan support unlike the previous one, notably as it foresees the wind-down of GSEs, and has been thus another unsuccessful attempt so far.

III. WHERE DO WE STAND?

Covered bonds were mentioned twice by legislators since these attempts. First, a speech made in the summer 2014 by the 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 private 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.

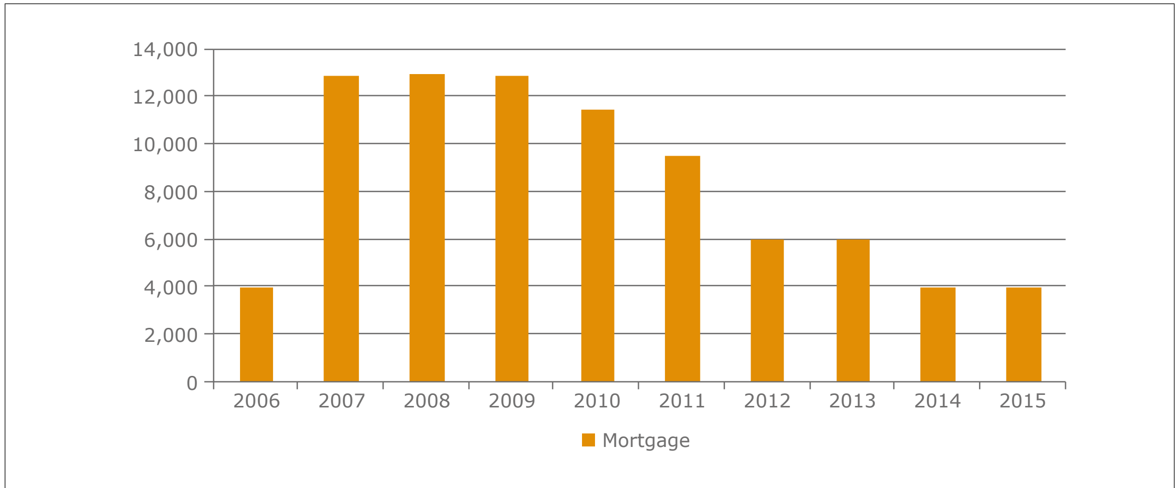
Second, more recently, the oversight plan of the Committee on Financial Services for the 114th Congress, which was released in January 2015, mentions covered bonds. As stated in the document, "The Committee will examine the potential for covered bonds to increase mortgage and broader asset class financing, improve underwriting standards, and strengthen U.S. financial institutions." As such, covered bonds might still have a role to play in the US, although this examination is part of a much longer agenda including the examination of Governments Sponsored Enterprises (GSEs) to which covered bonds have been tied to until now.

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 Standardised Approach, they are treated similarly to senior unsecured bank debt. That said, if denominated in €, 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.

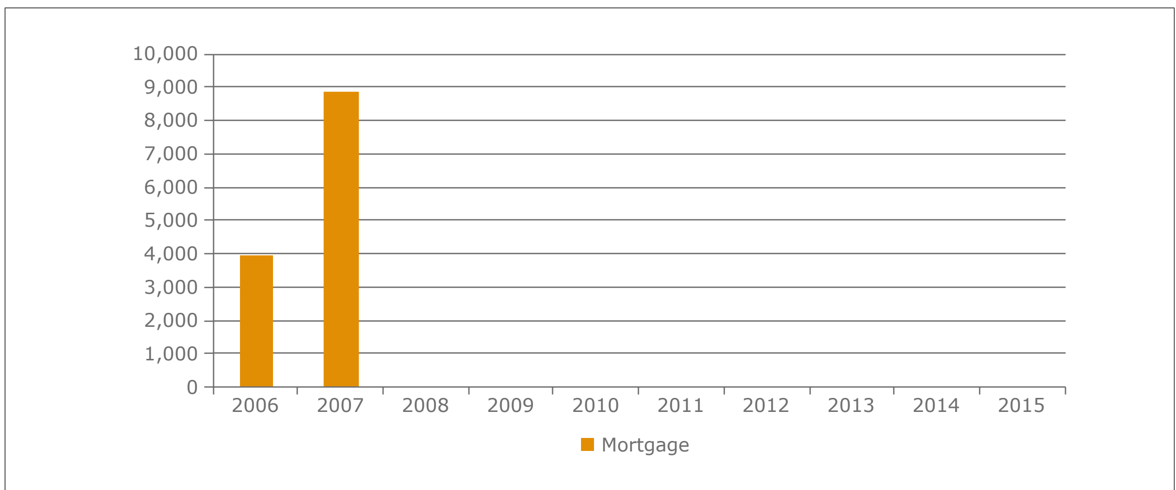
1 Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): http://ecbc.hypo.org/Content/default.asp?PageID=504#position.

> Figure 1: Covered Bonds Outstanding, 2006-2015, EUR m



Source: EMF-ECBC

> Figure 2: Covered Bonds Issuance, 2006-2015, EUR m



Source: EMF-ECBC

Issuers: JP Morgan, Bank of America Corporation.

ECBC Comparative Database: http://www.ecbc.eu/framework/57/US_Covered_Bonds.

CHAPTER 4 - RATING AGENCIES & METHODOLOGY

4.1 CREDIT RATING AGENCY APPROACHES: INTRODUCTION

By Boudewijn Dierick, BNP Paribas, Moderator of the ECBC Long-Term Financing Task Force & Chairman of the ECBC Rating Agency Approaches Working Group

The biggest change in the last 12 months is undoubtedly the unexpected Brexit vote in June 2016. This impacted only the UK issuers in terms of spread and some early warning signs from credit rating agencies about potential impact on UK programmes in the future, but this seems to be limited to programmes with concentration to UK public sector exposure in cover pool.

Other factors impacting the covered bond market like the European Central Bank's covered bond purchase programme (CBPP3), the Bank Recovery and Resolution Directive (BRRD) have had limited impact on covered bonds. The main topics related to rating agencies in the period from August 2015 to August 2016 that are worth highlighting are the following:

> **The covered bonds' rating methodology by the different rating agencies largely remained the same, with the exception of Fitch Ratings** that produced an exposure draft on the covered bonds rating criteria in June 2016 proposing several changes, including abolition of the Discontinuity Cap (D-cap) in their approach (for more details, please refer to the section below).

> Moody's and S&P did not make any changes in their covered bond criteria in the last 12 months.

> DBRS published their new methodology for rating covered bonds unchanged from their proposal published in May 2015. Like the others, DBRS also gives more weight to the covered bond legal framework in light of the BRRD and the importance of the product at national level resulting in an uplift of their covered bond attachment point up to two notches above the senior unsecured rating.

> The second main building block of the covered bond ratings, used by all rating agencies, still remains the collateral support. The focus continues to be on giving additional notches uplift mainly for high recovery prospects and the mitigation of credit risk.

> **Conditional pass-through covered bonds** (CPTCB) continue to attract a lot of attention and are becoming more widely accepted by investors. Aegon Bank joined the ranks of CPTCB issuers in the Netherlands while Van Lanschot and NIBC successfully issued new series with longer maturities in the market. In other markets, more CPT programmes were set up but some of these programmes have retained their issuances for repo-purposes.

> **Hard-bullet continues to lose ground**. The trend of issuing soft-bullets has continued to gain momentum as none of the new issuers issued hard-bullet covered bonds series. Various existing issuers have switched to soft-bullets for the new series and even switched their outstanding series of covered bonds into soft-bullets via consent solicitations (e.g. CA).

> **Reduction of counterparty linkage and dependence on rating agency triggers**. The (potential) risks of collateral posting required in case of a downgrade, as well as the costs of these risks driven by new LCR requirements, have resulted in various issuers trying to minimise the impact by reducing the number of hedges in their programmes. Various French and Dutch issuers have switched from perfect hedging using a cover pool swap and covered bonds swaps into 'natural' hedging without interest rate swaps or only swapping FX risk and IR risk of part of the cover pool.

Summary of changes in the covered bonds rating methodology proposed by Fitch Ratings:

> Payment Continuity Uplift (PCU) to replace D-cap assessment. The payment Continuity Uplift will assign uplifts to programmes with strong liquidity provisions. The PCU will focus on whether once recourse against the cover pool is enforced, the liquidity mechanisms are sufficient to protect against payment interruption risk, which is derived from maturity mismatches between the cover assets and the covered bonds.

- Other components of the D-cap will continue to be assessed by Fitch.
- Issuer Default Rating (IDR) uplift will consider the degree of integration of an issuing subsidiary into a banking group. With uplifts assigned to programmes that have support-driven IDR that are highly integrated into a parent.
- Recovery Uplift will move towards a loss-driven assessment of recoveries given default. This would mean that fully collateralised programmes secured by standard assets should generate good level of recoveries and will be eligible for recovery uplifts.
- New Refinancing Spread Level (RSL) to make mortgage and public-sector spread assumptions more comparable. A heavier focus on liquidity risk and profit margin demanded by the buyers and less focus on the cover pool's equivalent credit risk premium.
  Removal of automatic link of mortgages' RSLs to Fitch's sovereign ratings through the pre-determined scaling factors linked to sovereign ratings. Revised approach may result in substantially lower RSL assumptions for public-sector assets in countries rated "A" or lower. Sovereign RSLs proposed for some countries in high-investment-grade category are higher as a result of qualitative overlay assessment.
- These changes proposed by Fitch Ratings could result in possible upgrades for issuers in low-investment–grade and sub-investment-grade countries, due to higher IDR uplifts and/or higher PCUs. Whereas a few programmes in high-investment-grade countries could be downgraded due to the removal or lowering of IDR uplift and new recovery approach risk if not compensated by higher overcollateralisation.

In addition to the proposed changes by Fitch Ratings, the European Commission has also raised the issue of potentially creating a pan-European covered bond framework, or the so-called 29th Regime. This is a harmonised framework that is believed to help eradicate current covered bond framework issues as it could facilitate the transition of contractual regulatory regimes to a uniform set of rules and regulations. Following the proposal, there have been various contentions raised by different stakeholders with regards to the 29th regime being unnecessary and possibly counter-productive. Once further information regarding the 29th regime is released near the end of 2016, we could again anticipate a wave of adjustments on various covered bonds' rating methodologies by the different rating agencies.

> Figure 1: Covered Bonds Rating Methodologies

Building Block Towards Rating	Fitch	Moody's	S&P	DBRS	Scope
Minimum Rating (Starting Point):	IDR (Issuer Default Rating)	Counterparty (CR) Rating (SUR + 0-2)	ICR (Issuer Credit rating)	CB AP (Covered Bond Attachment Point = SUR)	ICSR (Issuer's Credit Strength Rating)
Additional Notches via: CB Law					
EU's BRRD or equivalent	uplift 0-2 notches	uplift 1 notch	uplift 1-2 notches = RRL (Rating Reference Level)	–	Taken into account in Recovery Regime
segregation/ bankruptcy remote systemic importance/ jurisdictional support	D-Cap (Discontinuity Cap) (max +6 notches)	TPI (Timely Payment Indicator) (max +6 notches)	RRL + max 3 notches (systemic importance; legal framework; sovereign credit capacity)	LSF (Legal Strength Framework) (max +6 notches) (A(low) needed)	Legal Framework (+2 notches) Recovery Regime (+4 notches)
Cover Pool/ Asset Quality	credit given for recovery (+0-2 notches) (max 3 for non-IG)	no additional credit given	uplift of 1-4 notches +2 for credit risk; +2 for refinancing costs	CPCA (Cover Pool Credit Assessment) +0-2 notches for high recovery prospects	Cover Pool Analysis +0-3 notches
5-7 Maximal Rating Possible above Starting point: *(achievable with CPT Delinkage or appropriate liquidity mitigants)*	8+2 notches	6+3 notches	7+2 notches	6+2 notches	6+3 notches
Capped by Country Ceiling	✓	✓	✓	NO	NO (Macroeconomic factors & credit quality main factors)
OC Commitment/ counterparty risk/ hedging	published *breakeven OC* for given CB rating (= percentage below which CB would be downgraded) gives credit for *contractually committed OC* might be penalised (-1 notch) by *OC stress testing*	gives credit for contractually committed OC above min level required by legislation	*uncommitted OC:* max 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	*ICSR BBB or more:* currently available OC; *below BBB:* take into account the robustness of communication of OC to market

Source: EMF-ECBC

4.2 DBRS COVERED BOND RATING METHODOLOGY

By Vito Natale and Claire Mezzanotte, DBRS

INTRODUCTION

As described in the rating methodology "Rating European Covered Bonds", DBRS covered bond ratings are composed of the following four building blocks:

1. Covered Bonds Attachment Point (CBAP);
2. Assessment of each covered bond programme's Legal and Structuring Framework (LSF);
3. Cover Pool Credit Assessment (CPCA), and
4. Credit for high recovery prospects provided by the cover pool.

DBRS assigns a rating to a covered bond issuance using a step by step process. The first step is to determine the LSF-implied Likelihood (LSF-L) for a covered bond programme based on the CBAP, LSF assessment and CPCA. Once the LSF-L is determined, a rating can be assigned to the covered bond issuance incorporating any credit for the ability of the cover pool (CP) to provide substantial support following an assumed default of the covered bonds (CBs).

THE FOUR BUILDING BLOCKS

1. Covered Bonds Attachment Point (CBAP)

CBs are characterised by dual recourse. The payment obligation falls initially on the debtor of first recourse, called the Reference Entity (RE), and failing that on the CP as a source of payment on the CBs.

The CBAP designates the credit strength of the RE as the source of payment for the CB programme or, in other words, the probability that the source of payment will switch from the RE to the CP. The CBAP is composed of a reference rating and a notching uplift schedule (when applicable) from the reference rating. The following defines the setting of the CBAP under three possible regimes:

A. For all European CB programmes where the RE is subject to the Bank Recovery and Resolution Directive (BRRD), DBRS determines the CBAP as follows:

   1. For REs that have a Critical Obligations Rating (COR) associated to them:

      a. Should DBRS either (i) regard the CB, as an instrument, as important for the host jurisdiction or (ii) regard the CB programme as strategic for the funding of the primary activity of the RE, then the CBAP is equalized with the COR.

      b. If the conditions under (a) above do not hold, the CBAP is set at up to one notch below the COR, but floored at the Senior Unsecured Rating of the RE (RE-SUR).

   2. For REs which do not have a COR assigned:

      a. Should DBRS regard the CB, as an instrument, as important for the host jurisdiction, then the CBAP would be set up to one notch above the RE-SUR.

      b. If the condition under (a) above do not hold, the CBAP would be set at the RE-SUR.

      The COR addresses the risk of default of particular obligations/ exposures at certain banks that have a higher probability of being excluded from bail-in and remaining in a continuing bank in the event of the resolution of a troubled bank than other senior unsecured obligations. In the immediate aftermath of a successful resolution, when the RE has a COR assigned to it, the COR is expected to reflect the greater probability of the relevant liability not being bailed in and its likelihood of remaining in a continuing bank in resolution. The COR is therefore generally expected to display a smoother transition

than the RE-SUR in the event of the failure of the RE. 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 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 expects that the CBAP would decouple from the RE-SUR. At that point, the CBAP is set at a level that DBRS considers consistent with the ability of the new RE to continue to be the source of payments for the CBs. This takes into account any possible guarantee or operational support to the CB, and can be in the investment grade category if circumstances warrant. The CBAP determination also considers the rating of the sovereign.

B. For all European CB programmes where the RE is subject to a resolution regime that DBRS deems equivalent to the BRRD, DBRS determines the CBAP as follows:

1. For REs that DBRS deems systemically important:

   a. Should DBRS either (i) regard the CB, as an instrument, as important for the host jurisdiction or (ii) regard the CB programme as strategic for the funding of the primary activity of the RE, then the CBAP would be set up to two notches above the RE-SUR.

   b. If the conditions under (a) above do not hold, the CBAP would be set up to one notch above the RE-SUR.

2. For REs DBRS does not deem systemically important:

   a. Should DBRS regard the CB, as an instrument, as important for the host jurisdiction, then the CBAP would be set up to one notch above the RE-SUR.

   b. If the conditions under (a) above do not hold, the CBAP would be set at the RE-SUR. The CBAP also considers the rating of the sovereign.

C. For all European CB programmes where the RE is not subject to the BRRD nor to a regime that DBRS deems equivalent, DBRS equalizes the CBAP with the RE-SUR:

2. Legal and Structuring Framework (LSF) assessment

The LSF assessment is programme-specific and limits the number of notches a covered bond rating can achieve above the CBAP.

Qualitatively, DBRS's assessment of the LSF captures the likelihood that payment obligations under the CB could be smoothly and efficiently transferred from a troubled bank to another bank or to the CP, administered by a third party. This assessment takes into consideration the following three areas:

- Robustness of the CP segregation for the benefit of 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; and
- 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.

CP segregation

DBRS recognises that CB legislation is written to supersede the bankruptcy and insolvency laws within a jurisdiction. CB legislations generally give CB holders a special privilege over the CP assets, which takes preference over claims of any other creditor in the case of issuer insolvency. In the event of an insolvency, legislation typically allows for the segregation of the CP from the bankruptcy estate. DBRS expects CB programmes that are not

structured based on specific CB legislation to typically address the issue of segregation. As such, DBRS does not expect CP segregation to be a major constraining factor for CB ratings. If there were serious doubts about the CP segregation being effective to an acceptable extent, the dual recourse principle might be undermined and the structure may not be rated according to DBRS covered bonds methodology. Instead, DBRS generally expects that the issue of segregation will largely be addressed, either by operation of law or by structural features, and there may be residual sources of concern which can have a limited impact on DBRS's assessment. DBRS will draw a decreasing degree of comfort from a legal framework and structures where such sources of leakages in the segregation mechanism are prominent or are not effectively mitigated.

Timely access to the CP 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 carries out a qualitative analysis of the legal framework, structural features and specific characteristics of each CB programme, as well as expectations of systemic support, in order to achieve this comfort.

In general, and in particular in the case of a CP composed of mortgage loans, the cover assets amortise over a time horizon that is 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 not of importance, as the RE will use its own sources of funds to meet maturing liabilities. Upon the failure of the RE, the source of payment switches to the CP. Therefore, DBRS carries out an analysis to understand 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 sources of financing could become available to fund such needs. Some issues considered as part of the analysis are the type of assets that may need to be liquidated and the time it takes to liquidate them; maturity extension or prematurity test or other features which may allow for more time to explore alternative solutions and how the programme structure foresees the CP detaching from the influence of the RE in this timeframe.

Contingency plans and supervision

DBRS 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 to assess a regulator's involvement and contingency plans 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 assigns the CB one of the five LSF assessments: Very Strong, Strong, Adequate, Average and Modest.

3. Cover pool credit assessment and overcollateralisation

Once a CBAP and an LSF assessment have been assigned to a CB programme, it is necessary to assess the quality of the CP in order to determine the LSF-L of the programme. This represents the likelihood that the CBs issued under a programme will be repaid according to their terms, provided there is sufficient overcollateralisation (OC) to which DBRS could give credit.

DBRS models the wind-down of the CP and the repayment of the liabilities according to their conditions. The aim is to determine whether CBs can be paid timely interest and principal solely from the CP (including any structural enhancement) for a given rating scenario.

The CP credit assessment is similar to the analysis of a securitisation (for a pool of similar assets) such as RMBS, and SME CLOs. It begins with an estimate of the probability of default (PD) and loss given default (LGD) 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 manner in which the cash flows are allocated to the liabilities based on the transaction documents.

Additionally, the CP credit assessment 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 level of interest and exchange rates 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 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 CP credit assessment is the rating stress scenario that the structure can withstand given the overcollateralisation (OC) to which DBRS 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 speaking, 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 relies on the minimum level of OC required by the national legislation or the secondary regulation and regulators' guidelines. This point seems to be supported by the Bank Recovery and Resolution Directive (BRRD). However DBRS's conclusion might be affected by the implementation of the BRRD in the local legislative framework. DBRS considers the form of commitment by the issuer or the RE to maintain the OC when considering the level of OC it gives credit to in its analysis, and may apply scaling factors to observed OC levels in certain cases. For instance, when a contractual undertaking of the issuer or RE is in place to maintain a certain level of OC, and non-compliance with such undertakings would cause the RE to be in breach of contract under the programme documentation, DBRS gives full credit to such contractual undertaking. However, if there is no public announcement, then DBRS determines a sustainable level of OC by reference to the minimum observed OC level during the past 12 months, adjusted by any increase that DBRS judges to be persistent. This figure is then reduced by the following scaling factors, which vary with the CB's rating:

CBs rating	Scaling factors (x) to observed OC
AAL and above	0.85x
AL to AH	0.90x
BBBL to BBBH	0.93x
Below investment grade	0.95x

Some issuers may publish a public announcement for a target OC level (e.g., in the form of a press release, or a statement in the investors' report or on the RE website). DBRS views such announcements as less strong compared to an issuer's legal or contractual obligation. Therefore, the analysis will typically apply the above-detailed scaling factors to the publicly announced level of OC. However, when DBRS holds the view that the announced level of OC 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 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 runs a wind-down cash flow simulation aimed at covering the cost of funding under a stress scenario in line with the CB rating. Then DBRS determines the percentage of principal payments received under the CBs versus their nominal amount, and assign a CB rating with an uplift from the LSF-L according to the following scale:

% of principal recovered	Notches uplift
>= 80%	+2
>= 60% but < 80%	+1
< 60%	0

SOVEREIGN STRESS

A sovereign downgrade may impact the individual factors considered in a CB rating and may result in a potentially amplified impact on the rating of the CBs:

1. CBAP: the RE-SUR as well as the COR (where applicable) take into consideration the operating environment of a banking organisation (including regulatory and supervisory regime). As a result, a sovereign downgrade may have an impact on the CBAP in terms of a more challenging operating environment. This can lead to a downgrade on the 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 not a systemic banking crisis. A systemic banking crisis will 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 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 factoring in higher levels of market value spreads into its cash flow modeling. This would in turn increase the pass-OC level for a given rating scenario. DBRS may then downgrade the CB even if the level of OC to which DBRS can give credit is unchanged, but it is now lower than the new pass-OC level.

4. Support provided by the CP: for reasons similar to those expressed under point (3) above, a downgrade of the domicile sovereign may affect the notching granted above the LSF-L.

DBRS LSF MATRICES

DBRS considers the probability of default of a CB as a function of the joint probability of the RE discontinuing its payment obligations and the CP's inability to meet the payments. DBRS also assumes that there will usually be a correlation between these two instances. Separately, DBRS also 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. The five categories are assigned so as this probability of not receiving the CP's full benefit) increases as the LSF weakens.

Based on these, DBRS 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). (See Figure 1 for an example of the five matrixes). The output of the DBRS matrixes (or the LSF-L) points to the CB rating level for each one of the CBAP and CP credit assess-

ment 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 generally applies to European CB the same counterparty criteria as stated under *Legal Criteria for European Structured Finance Transactions* (counterparty criteria) and *Derivative Criteria for European Structured Finance Transactions* (derivative criteria), with certain noticeable differences that reflect the nature of the product, that are detailed in the methodology.

COVERED BONDS SURVEILLANCE

Once DBRS assigns a rating on CBs issued under a programme, the surveillance process begins and is continued for as long as DBRS maintains a rating on the CBs, via a periodic review and a more frequent monitoring.

In cases where ongoing information is no longer deemed reliable or of sufficient quality, and DBRS is unable to properly monitor the transaction, DBRS may discontinue the existing rating(s).

RELATED RESEARCH

- "Rating European Covered Bonds", March 2016.
  http://www.dbrs.com/research/291636/rating-european-covered-bonds.pdf.
- "Derivative Criteria for European Structured Finance Transactions", February 2016.
  http://www.dbrs.com/research/290397/derivative-criteria-for-european-structured-finance-transactions.pdf.
- "Legal Criteria for European Structured Finance Transactions". February 2016.
  http://www.dbrs.com/research/290396/legal-criteria-for-european-structured-finance-transactions.pdf.
- Commentary: "The Effect of Sovereign Risk on Securitisations in the Euro Area". May 2011.
  http://dbrs.com/research/239786/the-effect-of-sovereign-risk-on-securitisations-in-the-euro-area.pdf.
- Commentary: "Spanish Mortgage Covered Bonds: Legal and Structuring Framework Review". December 2014.
  http://www.dbrs.com/research/275018/spanish-mortgage-covered-bonds-legal-and-structuring-framework-review.pdf.
- Commentary: "Portuguese Covered Bonds: Legal and Structuring Framework Review". December 2014.
  http://www.dbrs.com/research/275026/portuguese-covered-bonds-legal-and-structuring-framework-review.pdf.
- Commentary: "Italian Obbligazioni Bancarie Garantite Legal and Structuring Framework". December 2014.
  http://www.dbrs.com/research/275023/italian-obbligazioni-bancarie-garantite-legal-and-structuring-framework.pdf.
- Commentary: "Irish Covered Bonds Legal and Structuring Framework". December 2014.
  http://www.dbrs.com/research/275028/irish-covered-bonds-legal-and-structuring-framework.pdf.
- Commentary: "French Covered Bonds: Legal and Structuring Framework Review". March 2015.
  http://www.dbrs.com/research/277383/french-covered-bonds-legal-and-structuring-framework-review.pdf.
- Commentary: "Belgian Covered Bonds: Legal and Structuring Framework Review". May 2015.
  http://dbrs.com/research/279970/belgian-covered-bonds-legal-and-structuring-framework.pdf.
- Commentary: "Austrian Covered Bonds: Legal and Structuring Framework Review". October 2015.
  http://dbrs.com/research/285343/austrian-covered-bonds-legal-and-structuring-framework-review.pdf.

> FIGURE 1: ADEQUATE LSF

COVERED BOND ATTACHMENT POINT	COVER POOL CREDIT ASSESSMENT											
	AAA	**AA (high)**	**AA**	**AA (low)**	**A (high)**	**A**	**A (low)**	**BBB (high)**	**BBB**	**BBB (low)**	**BB (high)**	**BB**
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

4.3 FITCH RATINGS COVERED BOND RATING METHODOLOGY

By Carmen Muñoz and Beatrice Mezza, Fitch Ratings

Fitch Rating's criteria described in this section relates to the agency's Covered Bonds Rating Criteria of 11 March 2016. On 29 June 2016, Fitch published an Exposure Draft where it states its proposals to amend its Covered Bonds Rating Criteria with the aim of making some rating steps more focused on the most relevant credit aspects. The agency is proposing to modify the different uplift factors above a bank's Long-Term Issuer Default Rating (IDR) leading to the potential maximum covered bond rating. These consist of the IDR uplift, the payment continuity uplift and the recovery uplift. Fitch is also proposing new refinancing spread level assumptions for mortgage and public-sector cover pools, making them more comparable between asset types and jurisdictions. The exposure draft is available at www.fitchratings.com.

INTRODUCTION

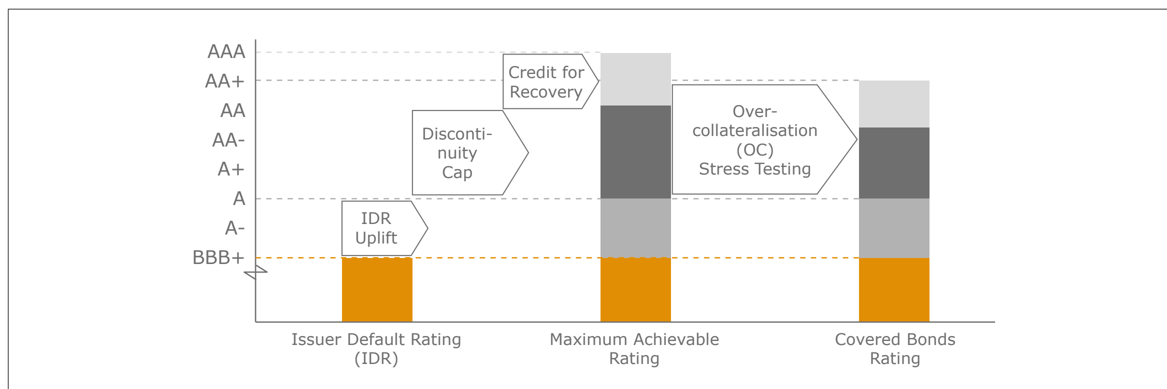
Fitch Ratings' covered bond rating methodology mainly addresses the instrument's probability of default (PD), but also incorporate recovery given default via the following steps.

1. **Setting the floor for the covered bond rating:** Covered bond holders have full recourse against an issuing financial institution and, as long as the issuer is solvent, it will pay covered bonds when due on a pari passu basis with its senior unsecured liabilities, irrespective of the performance of the cover assets. Hence, the covered bond rating on a PD basis will not be lower than the Long-Term Issuer Default Rating (IDR) of the issuing institution. An IDR uplift is assigned to covered bonds from jurisdictions where they are exempt from bail-in. A restoration of an issuing bank to a going concern would avoid the source of covered bonds payments switching from the issuer to the cover pool, as covered bonds would continue to be serviced by their issuer even if they defaulted on their senior unsecured debt. The IDR, adjusted by the applicable IDR uplift, constitutes a floor for the covered bonds rating in terms of PD regardless of the level of protection through overcollateralisation (OC).
2. **Determining the maximum achievable covered bond rating:** Fitch's Discontinuity (D-Cap) analysis evaluates the obstacles that may hinder a smooth transition from the issuer to the cover pool as the source of covered bond payments. The D-Cap conveys the maximum number of notches above the financial institution's IDR, as adjusted by any IDR uplift, that the covered bonds can achieve on a PD basis. The covered bond rating can further reflect stressed recoveries from the cover pool in the event of a covered bond default. The covered bond rating can in theory exceed the IDR by the number of notches corresponding to the sum of the IDR uplift, the D-Cap and the credit for recovery. However, the covered bond rating may be lower; at a level corresponding to the stress scenario that can be withstood taking into account the OC that Fitch gives credit to in its analysis.
3. **Stress-testing OC:** Fitch models the wind-down of the cover pool following a hypothetical change in payment source from the issuer to the cover pool. Stressed, static asset cash flows are compared to the payments due on the covered bonds and privileged swap liabilities. Stresses include credit losses and prepayments of the assets, the cost of bridging maturity mismatches by disposing of assets and adverse interest and exchange rate movements.

   The agency determines the OC level which supports the timely payment of covered bonds at the tested rating on a PD basis level and that also meets a minimum percentage of recoveries given default at the covered bond rating level. Fitch publishes the breakeven OC for a given covered bond rating; it is the percentage below which the covered bonds rating would be expected to be downgraded. The breakeven OC for the rating is compared with the percentage of OC which the agency gives credit to in its analysis.

Figure 1 illustrates the steps Fitch takes in rating covered bonds, which are detailed below.

> FIGURE 1: FITCH COVERED BONDS RATING STEPS



IDR: Issuer Default Rating; OC: Overcollateralisation; PD: Probability of Default

Source: Fitch Ratings

STEP 1: SETTING THE FLOOR FOR THE COVERED BOND RATING

Issuer Default Rating

Covered bond ratings are linked to the credit risk of the issuing financial institution, as measured by its Long-Term IDR. This is because of the dual recourse nature of covered bonds and the fact that assets and liabilities are dynamic and programmes can be affected by an issuer's decisions regarding cover pool composition, asset and liability mismatches and maintenance of OC.

IDR Uplift

Fitch can assign uplifts above the IDR of up to two notches if the issuer is rated in the 'BB' category or above, and up to three notches if the issuer is rated below. This is dependent on the following factors:

- **Relative ease and motivation for resolution methods other than liquidation:** There is greater motivation for alternative resolution tools than liquidation to be applied if a bank is systemically important, with a high degree of economic interconnectedness within a country, or if it is a large, complex institution. The liquidation of such banks would be complicated, drawn out and risk wider financial market instability, while it could prove easier to liquidate smaller banks and specialised financial institutions without threatening financial stability.
- **Importance of covered bonds to a country's financial markets:** If covered bonds are important to a country's financial markets, Fitch expects that the greater political and regulatory incentives to avoid financial contagion will make alternative resolution more likely than liquidation. Fitch considers Denmark, France, Germany, Norway, Spain and Sweden to be covered bond intensive countries, based on measures such as the ratio of covered bonds to banking assets and domestic covered bonds in proportion to the total covered bonds market.
- **Level of an issuer's senior unsecured debt available for bail-in:** Long-term, wholesale distributed, senior unsecured debt that could be bailed-in serves as an additional buffer for covered bonds, if equity and other junior instruments prove insufficient to absorb losses. Where this is substantial, it further reduces the likelihood of the cover pool becoming the direct source of payment for the covered bonds. Fitch checks if the level of outstanding senior unsecured debt represents at least 5% of the total balance sheet, adjusted for insurance assets and derivatives.

A two-notch uplift will be granted if at least two of the three factors are present; a one-notch uplift will be granted if at least one of the three factors is present; and no uplift will take place if none of the three factors is present.

STEP 2: DETERMINING THE MAXIMUM ACHIEVABLE COVERED BONDS RATING

Setting Discontinuity Caps

Fitch's D-Caps are a qualitative assessment of payment interruption risk in the transition to the cover pool as a source of covered bond payments. The assigned D-Cap reflects the highest risk assessment between asset segregation, liquidity gap and systemic risk, alternative management and privileged derivatives. The possible D-Caps and their associated risk assessments, are as follows: 8 (Minimal discontinuity; for cases with no liquidity gaps), 6 (Very low), 5 (Low), 4 (Moderate), 3 (Moderate high), 2 (High), 1 (Very high) and 0 (Full discontinuity; for cases where a covered bond default is expected upon the enforcement of recourse against the cover pool).

- **Asset segregation:** Fitch analyses the strength of the asset segregation mechanism. It considers whether OC is beyond the reach of other creditors until all covered bonds have been repaid in full. Other identified risks relate to the potential claw back of cover pool assets, commingling with the issuer's other cash flows and borrower set-off rights.
- **Liquidity gap and systemic risk:** Incoming cash flows from the cover pool do not exactly match payments due on the privileged liabilities for most programmes. The analysis of this component considers liquidity risks, principal payment risks and systemic risks.

  Short-term liquidity shocks may arise from interest payments due shortly after the recourse to the cover pool has been enforced. Fitch expects programmes to provide protection that covers at least covered bond interest payments over the next three months on a rolling basis (after swaps if compliant with Fitch's counterparty criteria), plus a buffer to cover senior expenses.

  In terms of principal payment risks, Fitch first compares the time needed to monetise cover assets in a stress scenario to the length of time granted by the programme's protection mechanism and also considers the strength of this mechanism. Protection against this risk can be offered via a maturity extension; pre-maturity tests; mandatory liquidity requirements; and access by the alternative manager to central bank market operations.

  Fitch also considers within systemic risk how a stressed macroeconomic environment would likely make it more difficult and time consuming to refinance cover assets.
- **Systemic alternative management:** The agency studies the legal or contractual provisions for replacing an insolvent institution as manager of the covered bonds and servicer of the cover assets. In particular the timing of the appointment of a substitute manager or government administrator is considered, as well as the scope of their responsibilities — whether exclusively focused on the interests of the covered bond holders or also encompassing other creditors, and if the alternative manager has all powers and means to take the necessary actions.
- **Cover-pool specific alternative management:** The cover pool-specific assessment focuses on the transferability of relevant data and IT systems to an alternative manager and buyer. Fitch evaluates the quality and quantity of data provided to the agency, whether cover assets, debtors' accounts and privileged swaps can be clearly identified within the issuing bank's IT systems, whether third-party rather than custom-made IT systems are used, the degree of automation and speed of cover pool reporting, as well as recordkeeping standards on loan documentation for cover assets and attached security. Dormant or wind-down programmes may attract a worse risk assessment.

> **Privileged derivatives:** Fitch considers programmes encompassing privileged hedging agreements to be more vulnerable to a potential issuer insolvency. Unlike non privileged swaps entered into by the issuer, which would terminate upon an issuer event of default, privileged swaps remain obligations of the cover pool and swap counterparties generally rank pari passu with covered bonds. The agency differentiates between intra-group and external counterparties in its assessment as well as whether termination payments to swap counterparties rank pari passu with covered bonds.

Defining Recovery Uplift

Should covered bonds suffer a default after primary recourse switches to the cover pool, they may still benefit from high recoveries stemming from the remaining cover assets. Fitch recognises this through a potential uplift above the tested covered bonds' rating on a PD basis. For stressed recoveries estimated in the 91-100% range, the uplift can reach up to two or three notches depending on whether the tested rating on a PD basis is in the investment grade or speculative grade range (see Figure 2 below).

> Figure 2. Maximum notching above covered bond rating on a PD basis

Recovery prospects	Recovery range (%)	Investment grade	Non-investment grade
Outstanding	91-100	+2	+3
Superior	71–90	+1	+2
Good	51-70	+1	+1
Average	31-50	-	-
Below average	11-30	-1	-1
Poor	0-10	-1/-2	-2/-3

Source: Fitch Ratings

In its recovery analysis, Fitch disregards any potential recourse to the bankruptcy estate of the issuer, because enforcement may be challenging if it starts substantially after the liquidation of the bank and it is difficult to predict the quality of non-cover-pool assets and the issuer's capital structure at the time of its liquidation.

Sovereign related risk may also limit the maximum rating that the covered bonds can achieve. Public sector programmes are more exposed to sovereign-related risk than mortgage programmes due to the greater link between the sovereign and public sector debtors from the same country.

STEP 3: STRESS-TESTING OC

Fitch's cash flow model compares stressed incoming cash flows to payments due, assuming that the cover pool becomes static under the care of a third party manager, and that cash flows are trapped if not needed to pay covered bonds. The agency generally models the point at which recourse against the cover pool is enforced up to six quarters after the pool cut-off date and potentially shortly ahead of the next major upcoming maturity. The stress testing determines the breakeven OC for a given covered bond rating.

Two major sources of risk are assessed when testing the cash flows for timely payment assuming recourse has shifted to the cover pool: i) the credit risk of cover assets inferred from default probabilities and recovery expectations (credit loss component) and ii) the cost of bridging maturity mismatches. Within this second risk, Fitch separates two aspects: the impact of interest rate and foreign exchange (FX) movements on the net present value (NPV) of assets and liabilities (cash flow valuation component) and; the application of a refinancing spread above the interest rate curve when calculating the price of assets sold or refinanced to meet covered bond maturities in the event of a cash shortfall or, in the event of excess of cash, the application of a negative carry margin to account for re-investment cost (asset disposal loss component).

Fitch regularly reviews its stressed refinancing spread levels for mortgage and public sector assets. The agency also discloses foreign currency stresses applied when currency risk represents a residual risk for a programme. In Fitch's view, large unhedged FX exposures are not consistent with high, stable ratings on covered bond programmes given the uncertain magnitude of changes in FX rates. In the event of a large open position on the asset side, Fitch may disregard foreign currency cash flows in its analysis. If the excess exposure is on the liability side, Fitch may adopt a limited rating uplift approach. The agency defines two 10% limits to determine whether FX mismatches form a residual risk for the covered bond programme rating: the first considers the sum of post swap open positions between assets and liabilities in the same currency other than a base currency, after netting depending on differences between residual weighted average life; the second considers the proportion of cover assets backed by a security based in a country with a different currency than the loan, whereby lower exposure is assumed if the borrower's income is in the same currency than the loan.

Recoveries from the cover pool represent a valuation of future cash flows irrespective of whether an actual buyer is found for the cover assets shortly after a default of the covered bonds. Since there would be less pressure for an administrator to conduct a fire-sale of the assets in a recovery situation than in a situation where covered bonds have to be paid on a timely basis, Fitch applies one-half of its usual refinancing spread for a given rating scenario and does not apply a price cap when computing the stressed NPV of assets. Contrary to the modelling of cash flows for timely payment, refinancing spreads are applied to calculate the stressed NPV of the entire cover pool rather than solely the portion of assets in an amount sufficient to bridge maturity mismatches.

RELATIONSHIP BETWEEN OC AND RATINGS

The level of OC in covered bond programmes can change over time, as assets pay down and/or as issuers actively manage their pools. Fitch gives credit — in decreasing order of comfort — to the following (when available) in its cash flow analysis:

- Contractual commitments, if legally binding and enforceable against the issuer; and
- Non-contractual public statements and/or covenants — such as undertakings given in the programme's investor reports including AP used in asset coverage tests, the bank's annual reports, or published on the investor relations section of the issuer's web site; or
- The lowest level of OC recorded during the preceding 12 months, provided that the issuer's Short-Term IDR is at least at 'F2' and the programme is not in wind-down.

Fitch will assess how reliable and sustainable the OC is in the future. For issuers with a short-term IDR below 'F2', or for programmes Fitch considers to be in wind-down or dormant, in the absence of valid contractual or otherwise public statements, the cash flow analysis will be run by giving credit only to the minimum level of OC, if any, required by the relevant covered bond legal or contractual framework.

COVERED BONDS SURVEILLANCE

Fitch's covered bonds surveillance platform constitutes a single, comprehensive source of periodic information on key covered bond credit characteristics. It gives an overview of the IDR, the IDR uplift, the D-Cap and the covered bond ratings, including Outlooks, for all programmes publicly rated by the agency. A rating history window lists all past rating actions at programme level since rating inception. Users will further find the amount of outstanding covered bonds and corresponding cover assets, highlighting available nominal OC as of each reporting date, as well as the breakeven percentage of OC (or asset percentage) for the assigned rating.

The platform enables users to follow the composition of cover pools, such as geographical distribution for public sector assets or loan-to-value ratios for mortgage loans, among others. Furthermore, the surveillance pages display indicators of maturity, interest rate and currency mismatches between the cover pools and the covered bonds.

In addition, the agency publishes a periodic snapshot which presents statistics about the universe of covered bonds publicly rated by Fitch, including country-based sheets within the associated excel file.

Fitch Ratings' Main Criteria Applicable to Covered Bonds

- Covered Bonds Rating Criteria (11 March 2016).
- Exposure Draft: Covered Bonds Rating Criteria (29 June 2016).
- Exposure Draft: Fitch's Cover Assets Refinancing Spread Level (RSL) Assumptions – Excel file (29 June 2016).
- Fitch's Foreign Currency Stress Assumptions for Residual Foreign Exchange Exposures in Covered Bonds – Excel File (11 March 2016).
- Covered Bonds Rating Criteria – Mortgage Liquidity and Refinancing Stress Addendum (23 September 2015).
- Covered Bonds Rating Criteria – Public Sector Liquidity and Refinancing Stress Addendum (29 January 2015).
- Counterparty Criteria for Structured Finance and Covered Bonds (14 May 2014).
- Exposure Draft: Counterparty Criteria for Structured Finance and Covered Bonds (14 April 2016).
- Counterparty Criteria for Structured Finance and Covered Bonds: Derivative Addendum (14 May 2014).
- Exposure Draft: Counterparty Criteria for Structured Finance and Covered Bonds: Derivative Addendum (14 April 2016).
- Criteria for Interest Rate Stresses in Structured Finance Transactions and Covered Bonds (17 May 2016).
- EMEA RMBS Rating Criteria (18 May 2016).
- Criteria for the Analysis of Commercial Real Estate Loans Securing Covered Bonds (10 December 2015).
- Asset Analysis Criteria for Covered Bonds and CDOs of European Public Entities (20 January 2016).

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 the covered bond methodology currently used by Moody's Investors Service. For a full explanation of the methodology, please refer to "Moody's Approach to Rating Covered Bonds", 6 August 2015, 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*) that the issuer will cease making payments on the covered bonds (a *CB anchor event*) and (2) the value of the cover pool should the issuer cease to make payments on the covered bonds.

> Timely Payment Indicator *(TPI) Framework*: We then use the TPI framework to determine the maximum covered bond rating achievable based on (1) the issuer's credit strength as expressed by the CB anchor and (2) the TPI assigned to the programme. We assign TPIs based on the probability of timely payments continuing on the covered bonds if the issuer, or a rated entity supporting the issuer, ceases to make payments on the covered bonds.

The final covered bond rating is the lower of (i) the rating output of the EL model and (ii) the maximum rating permitted under the TPI framework.

Ratings are assigned by a rating committee that further takes into account other credit-relevant features. For example, ratings are subject to sovereign risk considerations and thus limited by the sovereign ceiling[1], and also to legal risk considerations such as the risks of comingling of funds on issuer default and claw-back of cover pool loans by the issuer's insolvency estate.

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 accordingly calculates the expected loss as a function of (1) the probability the issuer will default, leading to a CB anchor event; and (2) after a CB anchor event, the losses (if any) incurred on the cover pool.

Following a CB anchor event, the level of losses on the cover pool will be determined assuming a stressed environment where, most likely, the bank that originated the cover pool assets has failed. The key factors that determine our cover pool loss assumptions include:

> The credit quality of the assets in the cover pool;

> Refinancing risk, which arises when funds need to be raised to refinance the cover pool following a CB anchor event; and

> Any interest rate and currency mismatch risks that the cover pool is exposed to.

Moody's EL model calculates expected loss on a month-by-month basis, from the point of covered bond issuance to the final maturity of the bond. For each period, the model calculates the probability of a CB anchor event on the basis of (1) the issuer's credit strength, as expressed by 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 a net present value to give the overall expected loss on the covered bond.

1 See "How Sovereign Credit Quality Can Affect Other Ratings", 16 March 2015 at www.moodys.com.

MOODY'S EL MODEL – ROLE OF THE ISSUER

CB anchor is based on the issuer's credit strength. The issuer's role is key to 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 expresses the risk that the issuer will cease performing its covered bond obligations. We typically base the CB anchor on the issuer's counterparty rating (CR) assessment. For the majority of covered bonds in Europe, the CB anchor is the CR assessment plus one notch.

CR assessment measures whether the issuer will continue to pay on covered bonds. The CR assessment[2] recognises that, in a bank resolution[3], certain issuer obligations are likely to be honoured even while losses are imposed on senior unsecured debt or non-preferred deposits. Therefore the CR assessment expresses a probability of default on such obligations, taking into account the effect of resolution. For European covered bonds, we typically position the CB anchor at the CR assessment plus one notch, and may do so elsewhere where the legal / regulatory framework means authorities are particularly likely to take steps to support covered bonds. In the majority of other cases, the CB anchor is at the same level as the CR assessment.

In exceptional cases we may not add a notch of uplift to the CR assessment of a European covered bond, or may reduce the CB anchor below the CR assessment (or use a different measure instead of the CR assessment). For example, we may make this kind of adjustment if the covered bond did 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, 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 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. In our analysis, there are three key factors affecting the value of the cover pool: (1) the credit quality of the collateral; (2) refinancing risk; and (3) interest rate and currency risks. Taken together, refinancing risk and interest rate and currency risks are referred to as market risks.

Credit quality of the collateral in the cover pool

We determine the credit quality of the cover pool by estimating the level of borrower loan losses that will accrue after a CB anchor event in a highly stressed environment. The collateral score measures the level of loss, whereby the lower the collateral score, the stronger the credit quality of the cover pool. Factors that affect the collateral score vary, but for mortgage loans they will normally include (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. Factors most relevant for public-sector loans include the credit strength of the public-sector borrowers and the concentration levels of those loans. The credit quality of the cover pool may vary over time, as issuers typically have discretion to add and remove assets, but we monitor this by re-calculating on a quarterly basis the collateral score for most programmes.

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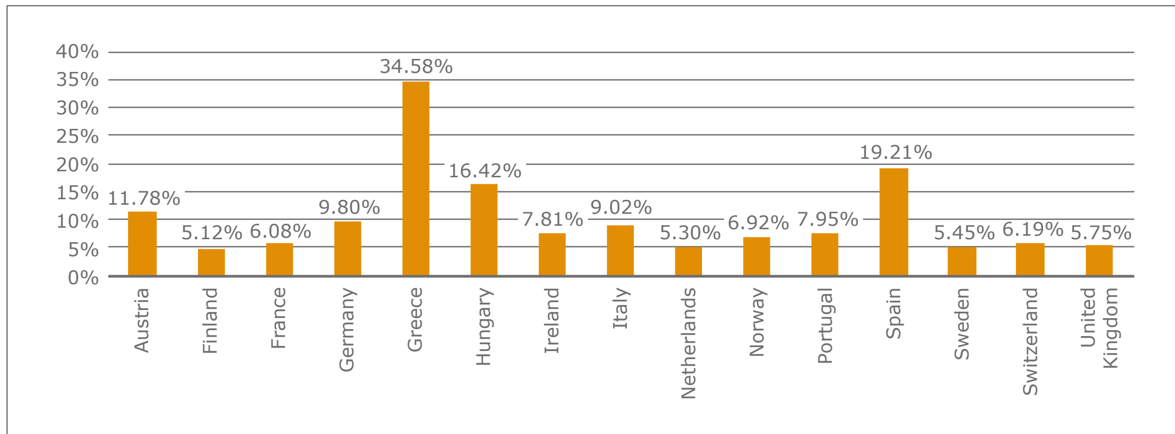
2 For European banks the CR assessment is typically positioned at the issuer's adjusted baseline credit assessment (BCA) plus zero to three notches. For more details see the "Banks" methodology referenced at the end of this article. If the issuer has no CR assessment, we may use the CR assessment of another group entity provided it has a sufficiently robust obligation to provide financial support to the issuer.

3 In the context of Europe 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.

> FIGURE 1: SIMPLE AVERAGE COLLATERAL SCORE BY COUNTRY: MORTGAGE BACKED COVERED BONDS



Source: Moody's European Covered Bonds Monitoring Overview, Q3 2015

Refinancing risk in the cover pool

The expected maturity of the assets in the cover pool is generally longer than that 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 credit enhancement assumptions.

The credit enhancement necessary to address refinancing risk is based on three factors:

(1) The level of discount required to sell or refinance the assets (referred to as refinancing margin);

(2) The portion of the cover pool exposed to refinancing risk; and

(3) The average life of the refinancing risk, i.e., the average duration of the refinancing risk for assets in the cover pool at the time of a CB anchor event.

For (2) and (3), we typically assume that the portion of the cover pool exposed to refinancing risk is a minimum of 50% and, at time of a CB anchor event, the average duration of the refinancing risk is a minimum of five years.

For (1), the 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 risks 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, the duration of these rates, and different currency denominations of cover pool assets compared with the covered bonds.

Under Moody's EL model, the potential mismatches are estimated by taking into account:

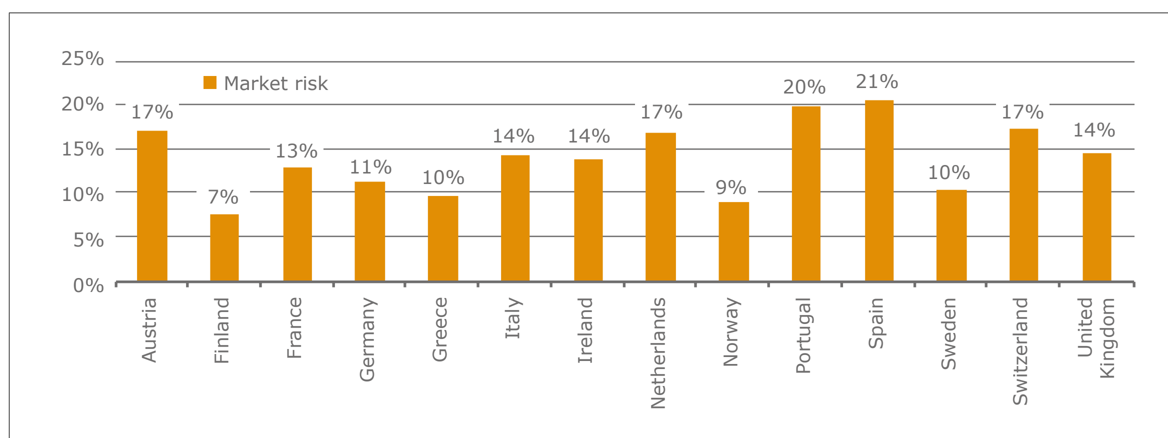
(1) The size of the possible interest rate (or currency) movement over the relevant period, for example looking at the impact of increasing and decreasing interest rates and taking the path that leads to the harshest expected loss on the covered bonds;

(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.

Moody's 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. The transaction may become unhedged following either swap counterparty default or issuer payment default due to insufficient proceeds from the cover pool. We assess the risk of counterparty default by applying the principles outlined in our cross sector methodology for assessing swap counterparties in structured finance cash-flow transactions.[4] We assess the risk of payment default by assuming that the risk of the issuer having insufficient cover pool proceeds to pay the swap will be equivalent to the risk that such proceeds will also be insufficient to pay the covered bonds. The risk of non-payment can therefore be estimated by the TPI. 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.

> FIGURE 2: WEIGHTED AVERAGE MARKET RISK BY COUNTRY: MORTGAGE BACKED COVERED BONDS



Source: Moody's European Covered Bonds Monitoring Overview, Q3 2015

MOODY'S TIMELY PAYMENT INDICATORS (TPIs): LINKAGE AND DE-LINKAGE

TPIs link the issuer, via the CB anchor, to the covered bond rating

Following a CB anchor event, the issuer can no longer be relied on to make timely payments on the bonds and bondholders must therefore rely on external support, liquidity and the legal/contractual framework of the bonds to provide for timely payment. A "timely payment indicator" or "TPI" is Moody's assessment of the likelihood that timely payment would continue to be made to covered bondholders following a CB anchor event. TPIs range from "Very High" to "Very Improbable".

TPIs indicate a ceiling for the rating of a covered bond that limits it to a certain number of notches above the CB anchor. We determine TPIs on a jurisdiction-by-jurisdiction basis as many of the factors we analyse are common to the relevant jurisdiction. TPIs may then be adjusted at the programme level to reflect particular features of a programme. We publish a TPI Table setting out the expected maximum covered bond ratings for different CB anchor/TPI combinations (see Moody's rating methodology report referred to at the end of this chapter). We will normally determine the rating ceiling based on the TPI table. However, for some programmes

4 "Approach to Assessing Swap Counterparties in Structured Finance Cash Flow Transactions", 16 March 2015, available at www.moodys.com.

the actual rating ceiling may be higher or lower, particularly if the issuer has a low investment grade rating, or is rated below investment grade.

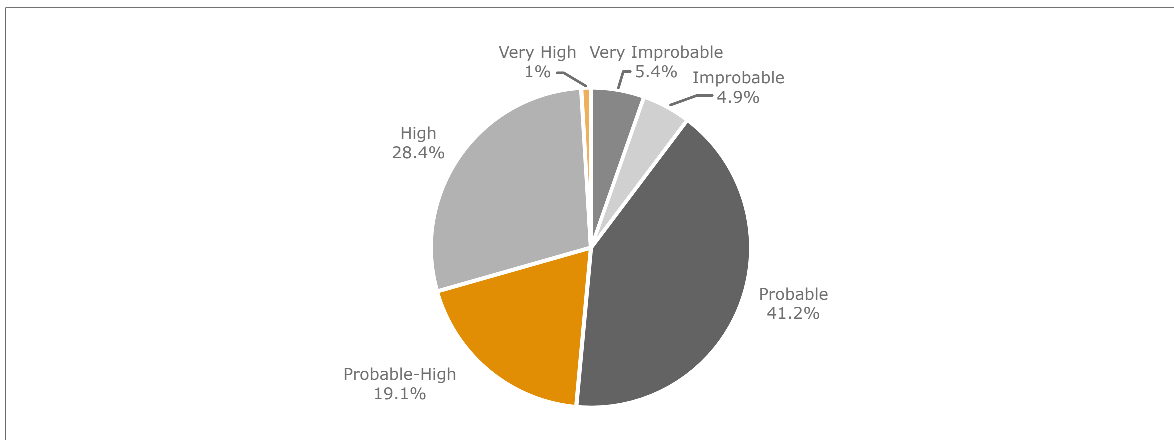
We consider a range of qualitative factors to determine TPIs. The most important of these – and the biggest risk to timely payment for most covered bonds – is the existence of refinancing risk. This risk is highly volatile, which is why our highest ratings cannot be maintained on covered bonds that are subject to material refinancing risk, unless they are also backed by a highly-rated issuer. A key TPI factor relevant to refinancing risk is whether other market participants or the authorities might act to avoid default on the covered bonds despite the issuer failing. Important considerations in this regard are the strength of the covered bond market and regulatory framework.

On a programme level, factors that we consider relevant to TPI levels include (1) 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) over-collateralisation levels; and (5) the issuer's ability to change the programme (in particular to add new assets and enter into new hedging arrangements).

TPI de-linkage

Covered bonds can be TPI de-linked. TPI de-linkage would typically imply a level of de-linkage equivalent to the de-linkage of a securitisation note from the rating of the originator. For a covered bond to achieve TPI de-linkage we would consider whether refinancing risk and the risks around the role of the issuer have been sufficiently neutralised to negate their impact on the covered bonds. One method of removing refinancing risk would be to replace a hard or soft bullet principal repayment on the bonds with a pass-through or conditional pass-through repayment from asset cash-flows.

> FIGURE 3: TPI DISTRIBUTION



Source: Moody's European Covered Bonds Monitoring Overview, Q3 2015

References (all available at www.moodys.com):

> Moody's Global Covered Bonds Monitoring Overview: Q3 2015 (updated quarterly).

> Moody's Approach to Rating Covered Bonds; 6 August 2015.

> Banks; 7 January 2016.

> How Sovereign Credit Quality Can Affect Other Ratings; 16 March 2015.

> Upgrades Dominated Covered Bond Rating Actions in 2015; 11 February 2016

> 2016 Outlook Stable Credit Quality and Positive Regulatory Environment; 10 December 2015.

> European Covered Bond Legal Frameworks: Moody's Legal Checklist; 9 December 2005.

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4.5 S&P GLOBAL RATINGS COVERED BOND RATING METHODOLOGY

By Roberto Paciotti and Antonio Farina, S&P Global Ratings

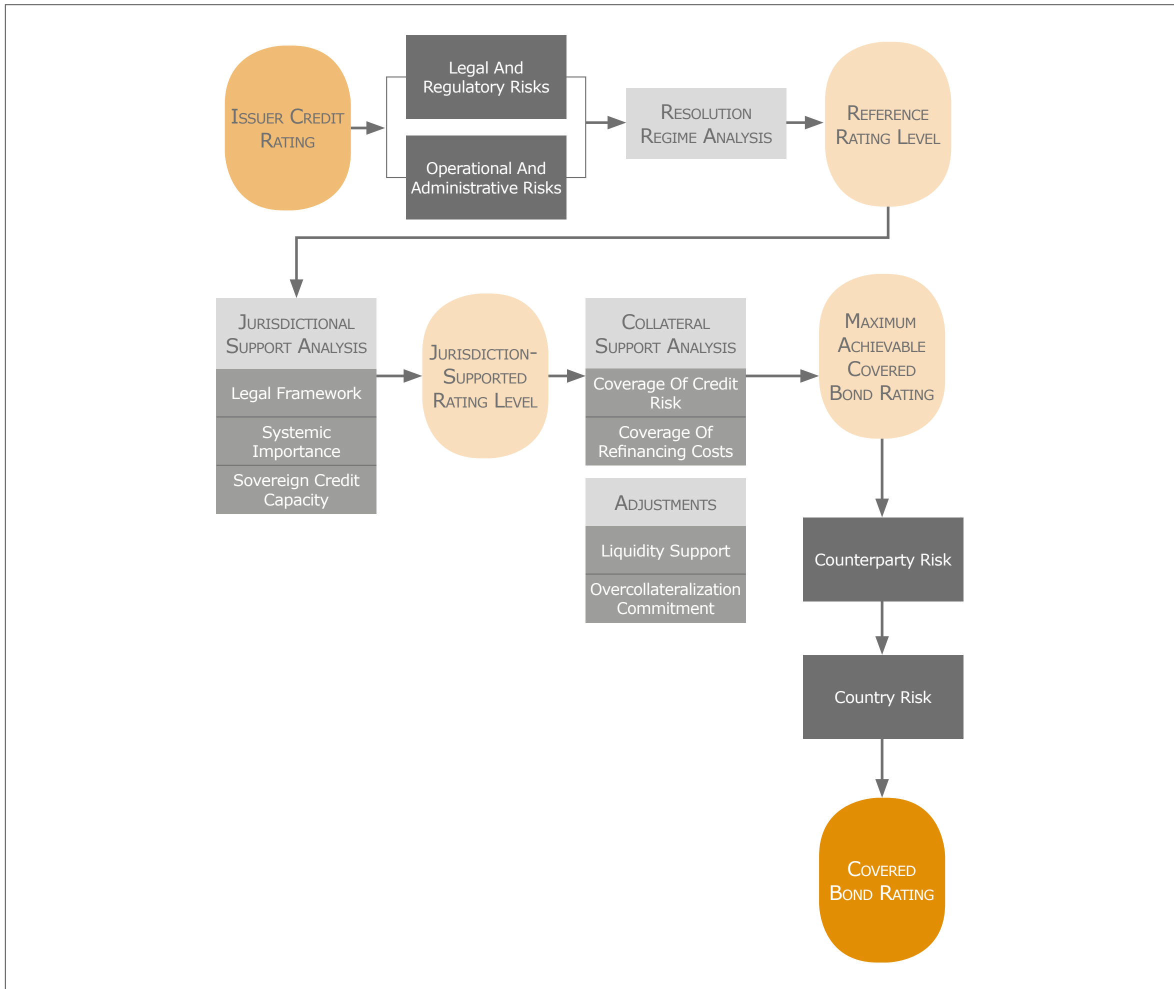
S&P Global Ratings' covered bonds rating approach is explained in the criteria "Covered Bonds Criteria," published on 9 December 2014, and "Covered Bond Ratings Framework: Methodology and Assumptions," published on 30 June 2015. These articles are available on the Global Credit Portal and at www.spratings.com/coveredbonds. 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 Characteristics And Rating Summary" 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/coveredbonds).

> 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.

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 is why we perform a risk analysis on its origination, underwriting, and servicing operations.

RESOLUTION REGIME ANALYSIS

Our criteria recognise that resolution regimes 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 the BRRD, or having similar resolution regimes, depending on the systemic importance of the covered bond programmes to that country, our criteria provide that we may add one or two notches above the ICR, after adjustments to remove any uplift allocated to reflect any extraordinary support provided to the issuer from the relevant government. This RRL reflects our view of the increased likelihood that the issuer will service its covered bonds even if insolvent. For countries without resolution regimes like the BRRD, 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 overcollateralization, and sets out a dedicated public supervision and eligibility criteria for high-quality cover pool assets. The framework rests solely on the spercific 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 overcollateralization 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 overcollateralization 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 country risk and the asset portfolio's diversification by jurisdiction. For covered bonds exposed to refinancing risk and issued from within the European Monetary Union (EMU), we assign up to four 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 (see "Methodology and Assump-

tions for Ratings Above the Sovereign – Single-Jurisdiction Structured Finance," published on 29 May 2015). 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 (see "Use of CreditWatch and Outlooks," published on 14 September 2009). 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.

S&P Global Ratings' Covered Bonds Criteria and Research

- 09-Jun-2015 Credit Rating Model: Covered Bond Monitor Support Model
- 19-Jun-2015 Global Covered Bond Characteristics And Rating Summary Q1 2015
- 26-Jun-2015 Credit Rating Model: Covered Bond Monitor
- 30-Jun-2015 Criteria | Structured Finance | Covered Bonds: Covered Bond Ratings Framework: Methodology And Assumptions
- 12-Aug-2015 Danish Covered Bond Index Report H1 2015: Collateral Performance Improves
- 12-Aug-2015 Covered Bond Monitor: Technical Note
- 09-Sep-2015 A Review Of Austria's Covered Bond Framework And Its Implications For S&P Ratings
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- 08-Dec-2015 Covered Bond Ratings In Sweden Reflect Current Risks In The Housing Market
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- 21-Dec-2015 Criteria | Structured Finance | Covered Bonds: Counterparty Risk Analysis In Covered Bonds
- 22-Dec-2015 Assessments For Jurisdictional Support According To Our Covered Bonds Criteria
- 22-Dec-2015 Assessments For Target Asset Spreads According To Our Covered Bonds Criteria
- 29-Dec-2015 Global Covered Bond Characteristics And Rating Summary Q4 2015
- 04-Jan-2016 New Romanian Law May Support Higher Ratings For Covered Bonds Than On Issuers
- 11-Jan-2016 Credit FAQ: The U.K. Covered Bond Market Explained
- 11-Feb-2016 European Covered Bond Ratings Withstand The Economic Downturn
- 23-Feb-2016 Singapore's Covered Bond Framework Supports Higher Ratings On Covered Bonds Than On The Issuer
- 04-Mar-2016 Could Tighter Credit Conditions Open Up New Covered Bond Markets?
- 22-Apr-2016 Soft Bullet Proposal For German Covered Bond Law Is Unlikely To Affect Ratings
- 19-May-2016 Spanish Multicedulas Scenario And Sensitivity Analysis

4.6 SCOPE RATINGS COVERED BOND RATING METHODOLOGY

By Karlo Fuchs and Guillaume Jolivet, Scope Ratings

Scope Ratings explains in detail its covered bond rating methodology in 'Rating Methodology: Covered Bonds' available at www.scoperatings.com/methodologies/list.

SUMMARY

Scope's covered bond rating methodology (the methodology) reflects the stronger prudential metrics and the new regulatory and supervisory framework for banks created after the crisis (bail-in). Our methodology reflects that the scenario where an insolvent issuer would rely solely on a cover pool for repayments has become extremely remote. As a result, our covered bond rating reflects:

- the importance of the issuer's credit-strength rating (ICSR) as the fundamental anchor for the covered bond analysis;
- how applicable legal and bank resolution frameworks affect the fundamental credit strength of the covered bond. Our analysis reflects elements specific to the country, to the issuer's liability structure and resolvability, and the importance of covered bonds to market stakeholders;
- the credit benefits provided by the cover pool as a second recourse when the issuer becomes insolvent after resolution.

Scope's bank ICSR represents a credit opinion on a bank's ability to meet its contractual financial commitments on a timely basis, and in full, as a going concern. For banks, regulatory action mostly leads to default-like situations. Therefore, Scope's bank ratings reflect to what extent credit fundamentals and other factors assessed through the rating process influence the probability that regulatory action leads to default-like events.

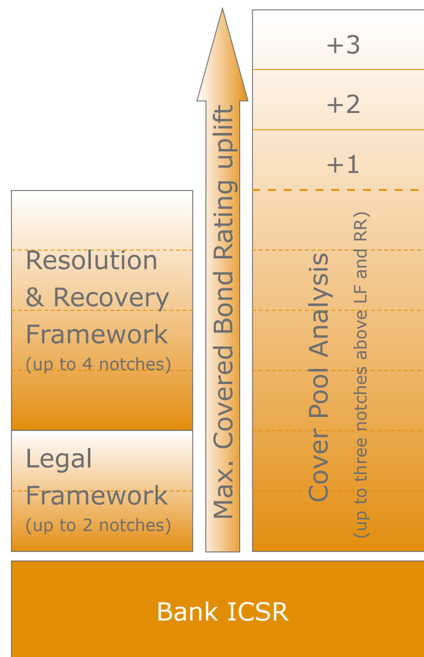
Once a regulated bank has passed the resolution trigger – the point of non-viability – and the regulator has intervened in an issuer, the bank's unsecured investors become directly exposed to a potential bail-in. Covered bonds, however, are one of the few bank liabilities not subject to bail-in, and are expected to continue to perform and benefit from the continuation of the issuer. The need to rely on the second recourse (cover pool) only arises when: i) early supervisory intervention has not helped to stabilise the bank, ii) regulatory capital is fully depleted, and significant amounts of bail-inable debt converted into capital or written down are insufficient to ensure continuation of the issuer, and iii) the restructured or resolved bank becomes insolvent. The rating of a covered bond must therefore reflect this high degree of protection, unique within the liability structure of banks.

Scope's covered bond rating methodology reflects the crucial importance of the legal and regulatory frameworks governing the instrument. This analysis also establishes an anchor for a covered bond's credit risk. Scope considers that fundamental credit factors can support a credit enhancement of up to six notches above the ICSR of a resolvable bank that has sizeable bail-inable debt and issues in a covered-bond-supportive country.

Scope's quantitative analysis incorporates the benefits of the second recourse, the cover pool. Under our approach, the cover pool adds stability to the rating, but cannot elevate it by more than three notches above that suggested by the fundamental credit strength of the covered bond (regulatory frameworks applicable to the issuer and its covered bonds).

Scope recognises that the credit quality of cover pools can differ significantly across issuers and covered bond types. In addition, covered bond specific risk management varies and remains at the discretion of the issuer. For the analysis on the robustness of the second recourse and the instrument's expected loss we not only need to take into account information about the current composition of the cover pool but also incorporate likely developments.

> FIGURE 1: BUILDING BLOCKS OF SCOPE'S COVERED BOND METHODOLOGY



Source: Scope Ratings

In general, covered bond ratings are linked to the bank's ICSR, except when features similar to a structured finance transaction offset how an issuer can influence a covered bond's risk and refinancing structure. For example, the cover pool benefit for covered bonds that become pass-through after hitting specific trigger events is not likely to be capped at three notches above our fundamental view on the supporting frameworks.

For highly rated banks, covered bond ratings are driven primarily by the fundamental benefits from regulatory frameworks applicable to banks and their covered bonds. Therefore, benefits from the cover pool only become relevant for the covered bond rating when a bank's credit quality and ratings start to shift down. For lower-rated banks that aim to achieve ratings that are higher than those supported by our fundamental view, prudent management of the covered bond programme and the extent to which remaining credit, market and refinancing risks are mitigated are more important for the credit risk of their covered bonds.

LEGAL FRAMEWORK AND RESOLUTION REGIME ASSESSMENT

The legal framework analysis in our methodology covers relevant aspects before and after an issuer becomes insolvent. It 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 to understand incentives for market-led solutions. We also reflect the track record of the proactive and transparent use of available resolution and restructuring tools to determine their likely impact on the credit quality of covered bonds.

Legal framework analysis

In the legal framework assessment we primarily identify whether the covered bond structure can transition smoothly away from the insolvent issuer. The transition should avoid acceleration and allow the issuer to maintain the cover pool. Preserving the cover pool helps the issuer, upon restructuring or insolvency, to continue making full and timely payments on outstanding covered bonds. Programme enhancements, in particular overcollateralisation, should remain available, valid and enforceable to other 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 risk before insolvency. Proactive liquidity management before and after insolvency, which helps timely payment to covered bond holders, should also be possible. Further, 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 analyse whether a supervisor or special trustee monitors the programme's structure independently and regularly (asset composition/structural risk).

If the above elements only partially apply, credit differentiation will be limited. For instance, if covered bonds were to accelerate upon the issuer's insolvency, either because of contractual or statutory provisions, the legal framework analysis only warrants a potential maximum uplift of one notch for the covered bond rating. Similarly, the absence of a dedicated covered bond oversight will likely prevent it receiving the highest credit differentiation. The limitation reflects that some main assumptions for a covered bond are unmet, i.e. uninterrupted payment of bonds after insolvency or special oversight.

Regulatory definitions of covered bonds address some aspects relevant for the rating analysis. The legal framework assessment does not follow regulatory designations mechanistically, but focuses on aspects relevant to the credit differentiation.

Resolution regime analysis

We believe it is extremely unlikely that an investor would need rely solely on the cover pool if its issuer operates in a framework similar to the Bank Recovery and Resolution Directive (BRRD). Scope analyses the factors that prevent an issuer's regulatory intervention from affecting the covered bond's credit quality:

- whether statutory provisions in resolution regimes explicitly address the going-concern status of covered bonds upon a regulatory intervention on the issuer;
- whether the issuer's business model and balance sheet structure allow regulators to use available resolution tools to restructure the issuer to keep the covered bond programme as a going concern;
- whether covered bonds are: a systemically important funding tool used by most banks in the country; this specific covered bond type is used mainly to refinance cover pool assets that are both important for the economy and those covered bonds have a significant share of domestic investors; 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. To do this, we assess the clarity and predictability of relevant statutory provisions and their interpretation, and the track record of relevant authorities.

We believe these aspects are important for understanding whether an issuer can maintain their covered bonds as a going-concern funding instrument – even during resolution. If we believe regulatory action on the issuer is unlikely to impact this, we assign up to four notches of uplift to reflect this lower likelihood of default as such a supportive resolution framework exists.

In combination, the qualitative assessment of the legal and resolution framework for covered bonds allows a credit differentiation of up to six notches. If the above elements apply only partially, benefits will be limited as it is more likely that covered bonds will need to solely rely on the cover pool.

Cover pool analysis

Covered bonds issued by high investment grade resolvable banks that operate in covered-bond-supportive countries generally already exhibit a credit quality in line with an AAA, thanks to the bank's credit strength and the covered bond's preferential status when a regulator intervenes.

The lower the credit strength of the issuer, the more likely recourse to the cover pool is needed to fulfil payment obligations on covered bonds. The cover pool analysis informs on how specific characteristics of the covered bond structure, including the supporting overcollateralisation, may affect the instrument's probability of default and loss given default, as well as informing on the rating stability the cover pool adds to the instrument.

A cover pool with a strong credit profile may add to the credit differentiation of the covered bond of up to three additional notches above that in the fundamental framework analysis. The credit differentiation between the bank's ICSR and the covered bonds can thus be as high as nine notches, meaning low investment grade issuers (BBB-) with a strong cover pool could in principle achieve the highest covered bond ratings.

Asset analysis

In our cover pool analysis, we develop a detailed understanding of the credit and cash flow risks a covered bond is exposed to. Our goal is to take into account issuer-specific performance of the relevant assets in the cover pool. Our base case credit analysis therefore reflects the actual credit performance of the cover pool assets originated by the issuer.

Scope relies on market-standard modelling approaches such as simulating asset default (Monte Carlo) to assess concentrated cover pools. Scope analyses homogenous, granular cover pools, which are typical in residential-mortgage loan portfolios using a large homogeneous portfolio approximation (LHPA) approach. Assumptions used are determined not only using issuer-specific performance data, but also reflect generic, country- and asset-specific aspects. To identify the level of credit differentiation a cover pool can support, we increase the severity of stresses applied to the cover pool in accordance with the maximum distance between the covered bond rating and the ICSR.

Cash flow analysis

In our cash flow modelling, we determine the scheduled cash flows based on the cover pool assets, outstanding covered bonds and related derivatives, and also take available overcollateralisation into account. We then apply stresses to the credit, market, and, in particular, refinancing risks to determine the credit differentiation a cover pool can support. We also consider various levels of overcollateralisation to gain insight into how well the cover pool supports the credit differentiation. We complement our static cash flow analysis with forward-looking views on the potential evolution of risk factors.

Assessing repayment risk is important for covered bond ratings, as repayment of bullet maturities is generally the highest risk covered bonds can be exposed to. Structural features may mitigate this, but in most cases will not fully eliminate this 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 a well-established covered bond market, compared to countries where covered bonds are only used occasionally.

Availability of overcollateralisation

Overcollateralisation is the variable managed most actively by issuers to support and maintain covered bond ratings above the bank's ICSR. The assessment of an issuer's ability and willingness to provide such funding is essential and must be reflected in the rating analysis. In the absence of contractual commitments, we assume that the lower its ICSR falls, the more likely an issuer's management no longer provides adequate overcollateralisation.

If the issuer has an ICSR of at least BBB, our analysis considers 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, which also falls in line with expectations. We adjust the level of overcollateralisation downward if there are no such statements, reflecting past volatility and our forward-looking view on expected levels. We only take into account the legal minimum for issuers rated BB and below if there are no public contractual commitments.

Counterparty risk

Our rating methodology for counterparty risk in structured finance transactions is the basis for assessing the dependency on key counterparties and how this could impact the cover pool analysis. The guiding principles are the materiality of counterparty risk (excessive, material or immaterial), differentiation between financial and operational risk exposure, and the analysis of risk remedies in the specific context of the covered bond transactions.

The covered bond counterparty analysis informs us whether the inadequate credit strength of external counterparties could also impact the performance and creditworthiness of a covered bond. This could constrain the potential benefit from the cover pool analysis. An effective replacement framework or other structural risk-mitigating mechanisms for key agents can typically avoid a negative impact. Ineffective remedies result in quantifying counterparty risk, which can ultimately constrain the benefit of the cover pool analysis for the covered bond rating. This is especially relevant for counterparty obligations that are very significant or bespoke, potentially resulting in an 'excessive' classification as per our counterparty methodology. An excessive counterparty exposure may result in a direct link of the cover pool benefit to the providing counterparty.

Sovereign risk

Scope does not mechanistically limit the maximum rating achievable by a covered bond to the sovereign credit assessment of the issuer's country, or to the country cover pool assets are originated in. Imposing a mechanistic rating cap, particularly in eurozone countries, does not adequately allow for a relative ranking of covered bonds' credit quality, in our view.

Macroeconomic factors are important in Scope's rating analysis, however. We analyse the impact of sovereign and macroeconomic developments to ensure Scope's view on the credit fundamentals of the relevant home sovereign is 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.

Regular surveillance

Scope continuously monitors its covered bond ratings. In particular, we monitor the development of the bank's ICSR and regularly assess observed changes to the cover pool and cash flow structure against the level and availability of overcollateralisation. We also monitor factors relevant to the assessment of the fundamental support from the legal and resolution frameworks.

Related research:

> 'Rating Methodology: Covered bonds', July 2015;

> 'Bank Rating Methodology', 18 May 2016;

> 'Rating Methodology for Counterparty Risk in Structured Finance Transactions', 10. August 2015;

> 'Scope Covered Bond Framework Analysis – Analytical Considerations', 31. July 2015.

The above research is available at www.scoperatings.com/methodologies/list.

CHAPTER 5 - COVERED BOND STATISTICS

5.1 INTRODUCTION AND METHODOLOGY

By Florian Eichert, Crédit Agricole CIB and Chairman of the ECBC Statistics & Data Working Group

The ECBC Statistics and Data Working Group has been collecting statistics on the outstanding volume and annual gross supply of covered bonds at year end for 13 years now. From the start its aim has been to provide a complete set of numbers that can serve as guidance for interested parties from issuers and investors to regulators.

The collection of statistics is a significant undertaking each year which is only possible thanks to the cooperation of the Working Group members, covered bond issuers and banking associations. One representative per country (the list of country representatives can be found on the ECBC website) 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 2015 numbers were cross checked by Agustin Martin from BBVA, Alexandra Schadow from LBBW as well as myself and Adam Krawiec from Crédit Agricole CIB.

GENERAL REMARKS ON THE 2015 STATISTICS

The aim of the ECBC statistics is to paint as realistic a picture of the actual market and picture relevant trends as accurately as possible. After the methodology changes in 2012 (more realistic public vs. private placement buckets) and 2013 (introduction of the number of programmes) we have kept the framework unchanged in 2015.

We have tried in the past and will 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 realise that there was a mistake in last year's data we amend the numbers. As a result of this, there are some slight differences in the numbers for 2015 compared to what was published last year. In our view, these adjustments are perfectly normal and we would rather adjust historic data to reflect a more realistic picture than mechanically hold on to data that was once published but proven incorrect wherever we have sufficient information to make the change.

Before going into the actual statistics, we want to make some general remarks about the figures which are necessary 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 exchange rate used to convert all outstanding volumes at the end of 2015 in non-EUR-denominated bonds is the end-of-year 2015 rate published by the European Central Bank.
- For the purpose of counting the number of issuers and of new issuers the following applies. Issuers are entities with at least one outstanding covered bond at year-end. 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. 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 USD denominated Cédulas issued under Reg/S or 144a documentation that are not listed in the AIAF as well as 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. Up to 2011, the number of issuers provided by AIAF included the new financial institutions established as part of the restructuring of the Spanish banking sector as well as all the former financial institutions with outstanding covered bonds at the end of 2011 – even if as a consequence of the aforementioned

restructuring they were integrated into a new institution. Because of this the number of issuers had been going up rather than down which is what one would have expected. When adjusting for the merger activity, the number of issuers at the end of 2011 was 42 rather than 64. From 2012 we have changed the way we calculate the number of Spanish issuers to only include those that are separate legal entities and disregard any previous entities that have by now been merged.

- Canada: Covered bonds backed by mortgages insured against borrower default by the Canada Mortgage and Housing Corporation are classed as mortgage covered bonds.
- 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).

Before we dive into the numbers, we have one last comment. The ECBC Covered Bond Label has become a widely used tool by issuers. It covers more than 57% of the covered bond market at the end of 2015. Part of the Covered Bond Label is the Label database which lists all labelled covered bonds. When comparing the label statistics to those presented in the ECBC Covered Bond Fact Book there are discrepancies in the public-private classification in especially Nordic countries such as 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 Covered Bond Label as well as the ECBC statistics definitions require a bond to be listed as well as syndicated to be classified as public and while Danish and Swedish covered bonds are listed, the way they are issued does not comply with the syndication requirement. In the ECBC Covered Bond Fact Book 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 Covered Bond Label database are classified as private as public as long as we are talking about liquid benchmarks by these two countries' standards.

EVOLUTION OUTSTANDING VOLUMES 2015

Covered bond markets had been a growth story ever since we started collecting data for the ECBC Covered Bond Fact Book statistics in 2003. Even the first crisis years did not put an end to this trend as there was sizeable public issuance even during those days and issuers used retained covered bond issuance to secure central bank liquidity. This trend did however come to an end in 2013 when the market contracted by 8% for the first time. 2014 was still characterised by a slight fall in volumes but the speed slowed down quite substantially (-4%). In 2015 the downward trend in outstanding volumes has virtually come to a complete stand-still. At EUR 2,498 bn, global covered bond markets contracted by a mere EUR 6 bn equivalent or 0.25%.

Compared to 2014 we can welcome one new market to the covered bond family – Singapore. This shows yet once more how global a product covered bonds have become over the years and brings the number of countries that had covered bonds outstanding at the end of 2015 to 30. The number of issuers remained broadly stable in 2015. At 317 active issuers (that operate a total of 434 covered bond programmes), the net number has gone up by 5. In gross terms we had new issuers appear in Austria (1), Germany (2), Italy (1), Korea (1), Netherlands (2), Norway (2), Poland (1), Singapore (1) and Spain (2).

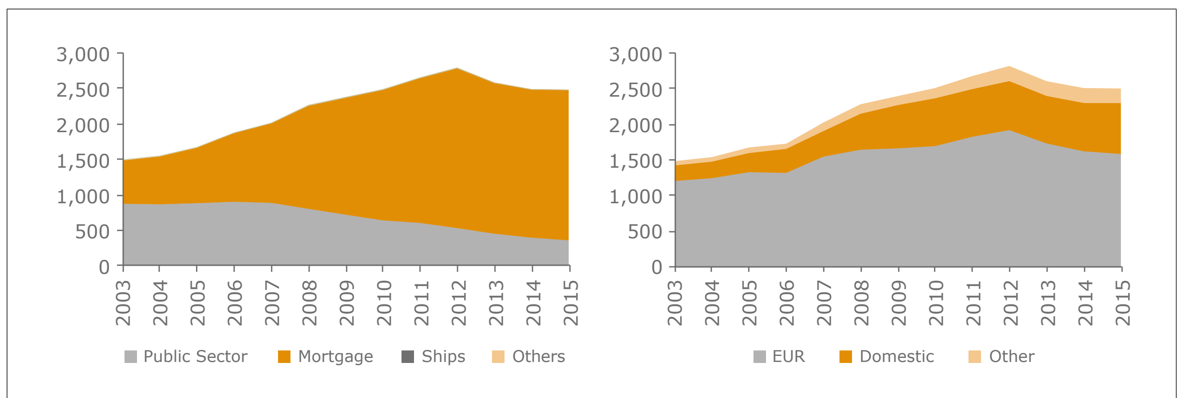
Out of these 30 countries, 18 saw their market grow in 2015. Growth did however take place predominantly in either smaller countries within Europe (i.e. Belgium continued to grow dynamically with outstanding volumes growing by EUR 5 bn / 37%) or in countries outside of Europe. Markets such as for example Norway (up by 5% / EUR 5 bn), Switzerland (up by EUR 11 bn / +11%) or Sweden (up by EUR 12 bn / +6%) are among the

notable exceptions to this rule. The biggest overall increase in outstanding volumes came from Canada (up by EUR 21 bn / 32.3%).

Out of the top seven countries by outstanding volumes five still recorded falling numbers, with Spain (down by EUR 27 bn / 9%), Germany (down by EUR 18 bn / 4%) and the UK (down by EUR 16 bn / 12%) experiencing the most pronounced drops in outstanding volumes.

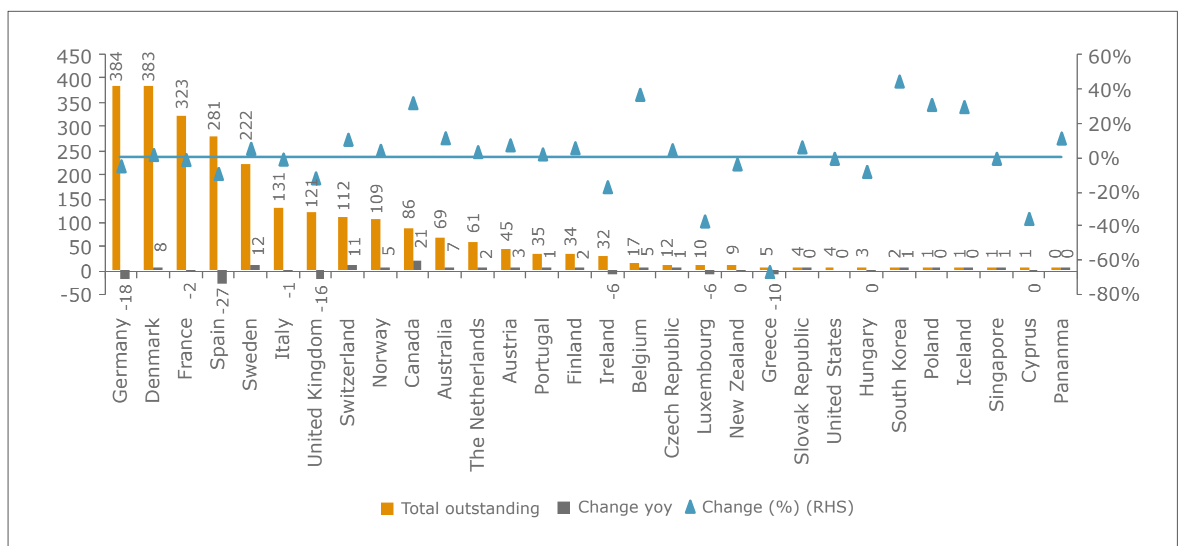
Looking at the ranking of countries by size, there were no major changes in the top ten compared to 2014. Germany still features the largest market by outstanding volumes (EUR 384 bn) ahead of Denmark (EUR 383 bn) (Denmark does have the largest mortgage backed covered bond market though) and France (EUR 323 bn). The only change we had in 2015 is Italy and the United Kingdom swapping places with Italy moving up one place to 6th while the UK dropped by one to 7th.

> FIGURE 1: OUTSTANDING COVERED BONDS BY COLLATERAL TYPE (LHS) AS WELL AS CURRENCY (RHS) IN EUR BN



Source: Crédit Agricole CIB

> FIGURE 2: OUTSTANDING COVERED BONDS BY COUNTRY AS WELL AS CHANGE VS. 2014 (EUR BN)

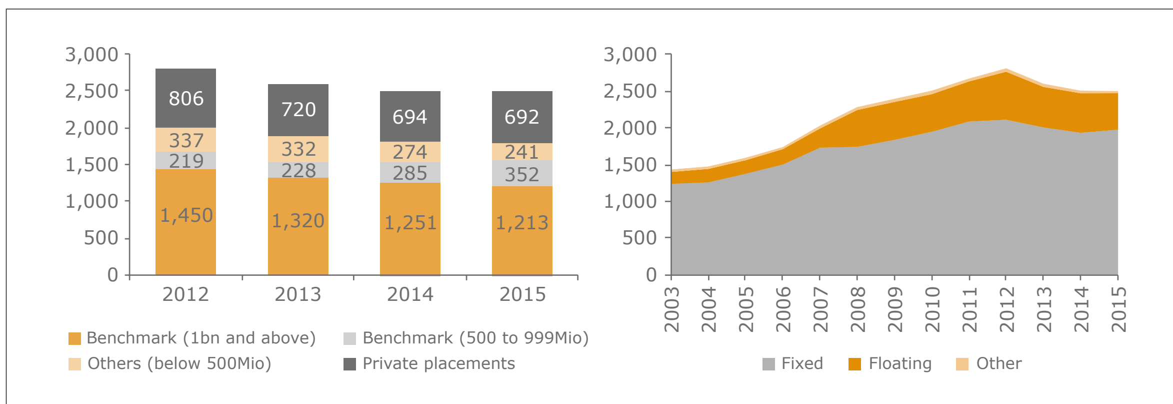


Source: Crédit Agricole CIB

As can also be seen from the figures above, despite the many discussions about covered bonds being used for additional collateral types, the market is heavily focused on the two most traditional collateral classes – mortgages (85% after 83% in 2014) and public sector assets (15% after 16% in 2014). Ship and aircraft mortgages only represent 0.4% of the market roughly keeping the same share as in 2014.

Having seen a big surge in volumes as banks in a number of countries used retained covered bonds as repo collateral during the crisis, the private placement category saw a big drop in 2013 (-85 bn or 11%) as European lenders paid back part of their long-term refinancing operations (LTRO) money and consequently cancelled out retained covered bonds. In 2014 this category did continue to fall (EUR -26 bn or 4%) but similar to the overall market it has stabilised in 2015. The biggest increase compared to 2014 took place in the EUR 500-999 m benchmark category, having already been a growth driver in 2014. Outstanding covered bonds in this category increased by EUR 66 bn or 24%.

> Figure 3: Outstanding covered bonds by issue type (LHS) as well as by coupon type (RHS) in EUR bn



Source: Crédit Agricole CIB

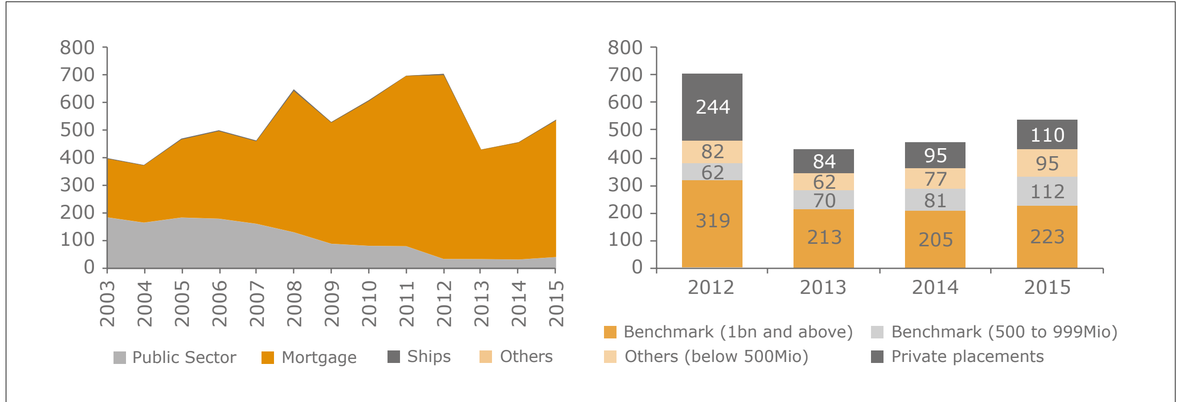
Covered bond markets continued to be dominated by fixed rate bonds. Despite the low interest rate environment this coupon type continues to make up 79% of the market, a slight increase by 2 percentage points vs 2014. Floating rate covered bonds are predominantly either from domestic covered bond markets in the Nordics or retained bonds by issuers. Much of the retained covered bonds were issued in FRN format to minimise ECB repo haircuts. But other than for senior unsecured, covered bonds' role as long term investments that investors use to build up duration has prevented a surge in FRN with ultra-low yields in EUR and subsequent questions around negative FRN coupons tilting the market even more into fixed coupon territory.

Looking at the breakdown by currencies, contractions in EUR (down by EUR 38 bn) were offset by growth in domestic currencies (up by EUR 37 bn). When thinking about the countries with the biggest absolute drop in volumes (Spain and Germany), this should not come as a surprise. Other currencies (so i.e. Canadians issuing in USD or Germans issuing in GBP) fell slightly by 3%.

EVOLUTION OF COVERED BOND ISSUANCE 2015

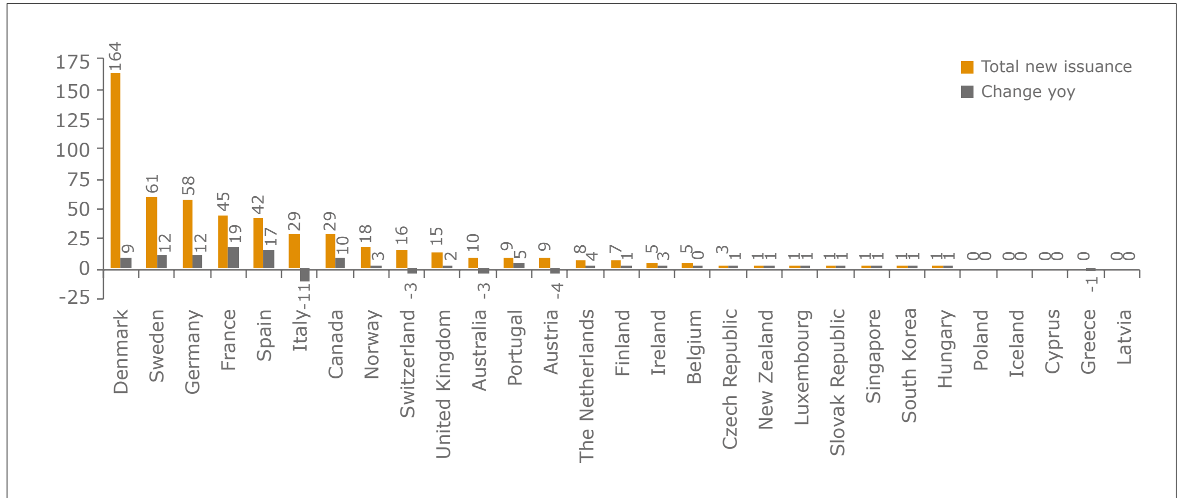
We have written about outstanding volumes stabilising in 2015. Looking at issuance 2015 is in fact the second year running with substantial increase in issuance volumes. In 2013 covered bond issuance still took a fairly severe beating compared to 2012 as volumes dropped by EUR 277 bn or 39% to EUR 429 bn. In 2014 new issue volumes registered some cautious gains again growing by EUR 28 bn. 2015 new issuance has continued this positive momentum growing by EUR 82 bn to EUR 540 bn.

> FIGURE 4: COVERED BOND NEW ISSUANCE BY COLLATERAL TYPE (LHS) AS WELL AS PLACEMENT TYPE (RHS) IN EUR BN



Source: Crédit Agricole CIB

> FIGURE 5: COVERED BONDS NEW ISSUANCE BY COUNTRY AS WELL AS CHANGE VS. 2014 (EUR BN)



Source: Crédit Agricole CIB

Denmark is still by far the country with the largest new issuance volumes (EUR 164 bn). This represents 43% of the existing Danish covered bond stock and is due to the way the market operates with its auction system as well as ongoing tap issuance of existing bonds. The gap to the second largest country in terms of issuance is quite substantial despite the Danes shifting more issuance from short dated bond auctions to longer maturities. With EUR 61 bn Sweden occupies that second spot.

The biggest growth in new issuance compared to 2014 did however take place in France (up by EUR 19 bn), Spain (up by EUR 18 bn) as well as Canada (up by EUR 10 bn). In all three countries the growth came from benchmark issuance rather than private placements. The latter category has clearly been hurt by the low interest rate environment and we have seen smaller issuers that used to only rely on private placements enter public markets. This is also one driver for why out of the four placement categories we use the smaller benchmark issuance did grow the strongest in 2015 (up by EUR 31 bn).

Last but not least, looking at currencies, issues in EUR went up the most (EUR +47 bn). Since EUR also saw the largest amount of redemptions, growth in outstanding volumes was larger in domestic currency covered bonds despite new issuance growth in this space only coming in at EUR 25 bn. Other currency issuance still is a rather modest portion of overall issuance. It did grow by EUR 10 bn but at EUR 33 bn it only makes up 6% of the overall covered bonds issued in 2015.

HOW HAS 2016 STARTED AND WHAT COULD THE REST OF THIS YEAR HOLD IN STORE…?

Covered bond benchmark issuance across currencies has seen a very active start in 2016. In fact at EUR 78 bn benchmark issuance in EUR as well as EUR 91 bn equivalent in overall EUR, USD and GBP benchmark issuance, the first four months of 2016 have been well above 2015 (EUR 51 bn EUR benchmark issuance and EUR 66 bn equivalent in overall benchmarks). Issuance did slow down with the announcement of the TLTRO II but even so, H1 2016 still is well above 2015.

The TLTRO II together with ultra-low yields have also led to predominantly longer issuance. We have seen the first EUR benchmark new issue price in negative yield territory (BHH 3Y priced at a reoffer yield of -17bp) but it has remained the sole exception. The average initial term at issuance in EUR benchmark markets has moved up to 8 years in Q2 from around 7 years in Q1 and slightly less than that in 2014.

Another phenomenon we have seen is more pronounced issuance from non-Eurozone countries. The TLTRO II has especially driven down issuance from peripheral countries and issuers from countries such as Canada have seized the chance to place EUR benchmarks successfully and Turkey managing to get their debut EUR benchmark covered bond off the ground.

Looking forward towards the end of this year, issuance will continue to come in at a much slower pace than the one we saw early this year. The TLTRO II will however not have as dramatic an effect as some might feared. Covered bonds still are a viable alternative for issuers, especially at the long end of the curve. And in countries that are struggling with the net lending benchmark due to large loan prepayments on the back of ultra-low yields, covered bonds can even compete on cost grounds with the Eurosystem.

5.2 STATISTICS

5.2.1 TOTAL

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total CB Outstanding										
Public Sector	915,003	899,500	815,550	733,076	653,022	616,551	543,977	464,761	408,617	371,530
Mortgage	958,415	1,112,594	1,447,235	1,644,362	1,836,449	2,041,311	2,253,327	2,125,402	2,085,080	2,115,280
Ships	11,341	12,167	16,327	15,151	14,527	12,640	13,571	11,306	9,824	10,379
Others	-	-	-	-	-	-	506	506	1,006	1,006
Total Outstanding	1,884,759	2,024,262	2,279,112	2,392,589	2,503,998	2,670,502	2,811,382	2,601,974	2,504,527	2,498,195
Public Placements										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,449,751	1,322,047	1,253,859	1,212,539
Benchmark (500 to 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	218,860	227,896	286,214	352,637
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	337,504	332,712	273,482	241,084
Private Placements	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	805,266	719,319	690,974	691,934
Total	1,884,759	2,024,262	2,279,112	2,392,589	2,503,998	2,670,503	2,811,381	2,601,974	2,504,528	2,498,194
Denominated in EURO	1,326,648	1,555,576	1,653,013	1,672,557	1,703,410	1,834,407	1,928,952	1,743,185	1,630,760	1,592,989
Denominated in domestic currency	346,388	364,936	509,403	610,742	674,389	673,074	691,400	670,680	682,382	719,184
Denominated in other currencies	57,121	103,749	116,695	109,291	126,198	163,020	191,028	188,110	191,386	186,022
Total	1,884,759*	2,024,261	2,279,112	2,392,589	2,503,997	2,670,501	2,811,381	2,601,974	2,504,527	2,498,195
Outstanding fixed coupon	1,505,880	1,737,822	1,748,656	1,844,952	1,955,481	2,095,679	2,120,414	2,017,241	1,941,486	1,984,164
Outstanding floating coupon	203,972	255,458	498,205	511,725	507,882	542,469	650,855	547,742	534,741	493,277
Outstanding other	20,305	30,982	32,252	35,913	40,635	32,354	40,111	36,989	28,301	20,755
Total	1,884,759*	2,024,261	2,279,113	2,392,590	2,503,997	2,670,502	2,811,381	2,601,973	2,504,528	2,498,196
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	412	424	434
Number of Issuers	215	236	268	301	303	322	308	309	313	314

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total CB Issuance										
Public Sector	181,992	163,611	132,988	91,526	84,018	82,711	36,495	36,096	34,537	43,486
Mortgage	315,502	296,779	511,292	436,816	522,919	611,953	665,638	392,998	421,168	492,918
Ships	3,334	3,143	6,289	2,221	3,325	1,016	4,643	761	1,319	3,163
Others	-	-	-	-	-	-	506	-	500	-
Total Issuance	500,829	463,533	650,569	530,562	610,262	695,680	707,281	429,855	457,524	539,567
Public Placements										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	319,059	212,807	208,861	223,160
Benchmark (500 to 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	62,410	70,557	79,980	111,601
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	82,450	62,376	76,207	95,112
Private Placements	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	243,362	84,116	92,476	109,694
Total	500,829	463,533	650,569	530,562	610,262	695,680	707,281	429,856	457,524	539,567
Denominated in EURO	344,027	332,243	385,377	302,589	373,730	437,190	405,271	213,868	227,734	275,003
Denominated in domestic currency	127,961	100,317	248,869	215,370	200,886	207,701	249,631	188,186	207,112	231,921
Denominated in other currencies	28,840	30,973	16,323	12,603	35,646	50,788	52,380	27,801	22,678	32,643
Total	500,828	463,533	650,569	530,562	610,262	695,680	707,281	429,855*	457,523	539,567
Issuance fixed coupon	396,931	373,842	350,866	405,130	492,585	497,001	271,036	337,651	338,213	420,813
Issuance floating coupon	55,828	85,017	292,848	120,902	115,329	195,736	411,372	91,416	118,232	117,583
Issuance other	6,035	4,673	6,855	4,530	2,348	2,943	24,872	790	1,079	1,171
Total	500,828*	463,532	650,569	530,562	610,262	695,680	707,281	429,857*	457,524	539,568
Number of New Issuers	20	22	41	36	27	23	20	8	9	13

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 onwards 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 2015 STATISTICS BY TYPE OF ASSETS

COVERED BONDS OUTSTANDING 2015 in EUR million						
	Public Sector	Mortgage	Ships	Others	Mixed Assets	TOTAL
Australia	-	68,604	-	-	-	68,604
Austria	17,620	27,345	-	-	-	44,965
Belgium	1,800	15,105	-	-	-	16,905
Canada	-	85,759	-	-	-	85,759
Cyprus	-	650	-	-	-	650
Czech Republic	-	11,656	-	-	-	11,656
Denmark	-	377,903	5,221	-	-	383,124
Finland	-	33,974	-	-	-	33,974
France	66,717	188,669	-	-	67,685	323,072
Germany	180,524	197,726	5,158	1,006	-	384,414
Greece	-	4,961	-	-	-	4,961
Hungary	-	3,022	-	-	-	3,022
Iceland	-	1,205	-	-	-	1,205
Ireland	15,389	16,916	-	-	-	32,305
Italy	8,400	122,135	-	-	-	130,535
Latvia	-	-	-	-	-	-
Luxembourg	10,166	-	-	-	-	10,166
The Netherlands	-	61,101	-	-	-	61,101
New Zealand	-	9,149	-	-	-	9,149
Norway	1,672	107,694	-	-	-	109,366
Panama	-	276	-	-	-	276
Poland	35	1,230	-	-	-	1,266
Portugal	500	34,461	-	-	-	34,961
Singapore	-	919	-	-	-	919
Slovakia	-	4,198	-	-	-	4,198
South Korea	-	1,954	-	-	-	1,954
Spain	28,505	252,383	-	-	-	280,888
Sweden	-	221,990	-	-	-	221,990
Switzerland	-	111,542	-	-	-	111,542
United Kingdom	6,358	114,910	-	-	-	121,268
United States	-	4,000	-	-	-	4,000
Total	**337,687**	**2,081,437**	**10,379**	**1,006**	**67,685**	**2,498,195**

COVERED BONDS ISSUANCE 2015 in EUR million						
	Public Sector	Mortgage	Ships	Others	Mixed Assets	TOTAL
Australia	-	9,836	-	-	-	9,836
Austria	3,177	5,457	-	-	-	8,635
Belgium	50	4,530	-	-	-	4,580
Canada	-	29,287	-	-	-	29,287
Cyprus	-	-	-	-	-	-
Czech Republic	-	2,729	-	-	-	2,729
Denmark	-	163,050	955	-	-	164,005
Finland	-	7,425	-	-	-	7,425
France	6,785	29,705	-	-	8,395	44,885
Germany	15,544	40,369	2,208	-	-	58,121
Greece	-	-	-	-	-	-
Hungary	-	888	-	-	-	888
Iceland	-	414	-	-	-	414
Ireland	-	5,225	-	-	-	5,225
Italy	1,700	27,650	-	-	-	29,350
Latvia	-	-	-	-	-	-
Luxembourg	1,220	-	-	-	-	1,220
The Netherlands	-	7,908	-	-	-	7,908
New Zealand	-	1,450	-	-	-	1,450
Norway	312	17,750	-	-	-	18,063
Panama	-	-	-	-	-	-
Poland	-	416	-	-	-	416
Portugal	100	8,675	-	-	-	8,775
Singapore	-	919	-	-	-	919
Slovakia	-	1,159	-	-	-	1,159
South Korea	-	919	-	-	-	919
Spain	10,400	31,375	-	-	-	41,775
Sweden	-	60,729	-	-	-	60,729
Switzerland	-	15,840	-	-	-	15,840
United Kingdom	-	15,015	-	-	-	15,015
United States	-	-	-	-	-	-
Total	**39,289**	**488,721**	**3,163**	**-**	**8,395**	**539,567**

Source: EMF-ECBC

5.2.3 AUSTRALIA

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	-	-	2,142	34,902	46,021	61,326	68,604
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	-	-	-	-	-	2,142	34,902	46,021	61,326	68,604
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	25,443	36,938	38,224	27,820
Benchmark (500Mio - 999Mio)	-	-	-	-	-	966	3,666	2,670	5,822	9,747
Others (below 500Mio)	-	-	-	-	-	1,176	2,150	1,118	5,434	4,277
Private Placement	-	-	-	-	-	-	3,643	5,295	11,846	26,760
Total	-	-	-	-	-	2,142	34,902	46,021	61,326	68,604
Denominated in EURO	-	-	-	-	-	-	10,242	14,355	21,415	26,119
Denominated in domestic currency	-	-	-	-	-	-	9,676	9,012	10,526	10,512
Denominated in other currencies	-	-	-	-	-	2,142	14,984	22,654	29,385	31,974
Total	-	-	-	-	-	2,142	34,902	46,021	61,326	68,604
Outstanding fixed coupon	-	-	-	-	-	2,142	27,640	38,198	52,259	61,050
Outstanding floating coupon	-	-	-	-	-	-	7,262	7,823	9,066	7,554
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	2,142	34,902	46,021	61,326	68,604
Number of Programmes	-	-	-	-	-	n.a.	5	5	5	5
Number of Issuers	-	-	-	-	-	3	5	5	5	5

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	-	-	2,142	32,731	13,519	12,716	9,836
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	-	-	-	-	-	2,142	32,731	13,519	12,716	9,836
Public Placement									-	
Benchmark (1bn and above)	-	-	-	-	-	-	25,443	10,907	10,001	3,250
Benchmark (500Mio - 999Mio)	-	-	-	-	-	966	2,698	750	-	2,236
Others (below 500Mio)	-	-	-	-	-	1,176	947	-	579	1,545
Private Placement	-	-	-	-	-	-	3,643	1,863	2,137	2,805
Total	-	-	-	-	-	2,142	32,731	13,520	12,716	9,836
Denominated in EURO	-	-	-	-	-	-	10,242	4,112	7,060	4,705
Denominated in domestic currency	-	-	-	-	-	-	9,676	1,037	1,338	34
Denominated in other currencies	-	-	-	-	-	2,142	12,813	8,370	4,318	5,098
Total	-	-	-	-	-	2,142	32,731	13,519	12,716	9,836
Issuance fixed coupon	-	-	-	-	-	2,142	25,469	12,066	11,625	9,101
Issuance floating coupon	-	-	-	-	-	-	7,262	1,455	1,091	735
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	2,142	32,731	13,521	12,716	9,836
Number of New Issuers	-	-	-	-	-	3	2	-	-	-

5.2.4 AUSTRIA

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	15,615	15,200	17,326	19,617	19,555	25,116	25,831	23,682	19,279	17,620
Mortgage	3,880	4,125	4,973	5,317	7,645	17,174	17,010	18,854	22,450	27,345
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	19,495	19,325	22,299	24,934	27,200	42,290	42,841	42,536	41,729	44,965
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	6,000	7,087	5,000	3,000	4,087
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	9,915	11,328	12,870	13,050	14,550
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	5,821	5,897	87	-	600
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	20,554	18,529	24,579	25,679	25,728
Total	19,495	19,325	22,299	24,934	27,200	42,290	42,841	42,536	41,729	44,965
Denominated in EURO	17,703	17,304	19,664	24,002	21,510	37,576	39,068	39,184	39,287	43,065
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	1,792	2,021	2,634	932	5,690	4,714	3,773	3,352	2,442	1,900
Total	19,495	19,325	22,298	24,934	27,200	42,290	42,841	42,536	41,729	44,965
Outstanding fixed coupon	17,207	18,111	19,189	16,593	17,900	32,275	32,696	34,793	29,680	31,611
Outstanding floating coupon	2,062	1,029	3,110	6,309	6,600	7,650	7,750	7,342	12,049	12,720
Outstanding other	226	185	-	2,032	2,700	2,364	2,395	402	-	634
Total	19,495	19,325	22,299	24,934	27,200	42,290	42,841	42,536	41,729	44,965
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	39	45	47
Number of Issuers	23	24	25	26	23	24	26	27	28	27

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	3,110	3,131	9,361	2,501	8,125	7,114	6,882	3,373	5,146	3,177
Mortgage	2,176	1,959	1,321	1,442	3,600	3,664	3,805	6,093	7,111	5,457
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	5,286	5,090	10,682	3,943	11,725	10,778	10,687	9,466	12,257	8,635
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	3,000	1,000	-	-	-
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	2,750	2,500	3,800	3,000	4,000
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	321	318	-	-	327
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	4,707	6,869	5,666	9,256	4,308
Total	5,286	5,090	10,682	3,943	11,725	10,778	10,687	9,466	12,256	8,635
Denominated in EURO	4,899	4,861	10,362	3,943	10,725	10,008	10,447	9,466	12,256	8,635
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	387	229	320	-	1,000	770	240	-	-	-
Total	5,286	5,090	10,682	3,943	11,725	10,778	10,687	9,466	12,256	8,635
Issuance fixed coupon	3,807	4,577	8,255	3,252	10,200	5,922	8,155	6,609	4,671	5,317
Issuance floating coupon	1,478	490	2,262	435	525	4,561	2,201	2,812	7,346	3,304
Issuance other	-	23	165	256	1,000	295	331	45	239	13
Total	5,286	5,090	10,682	3,943	11,725	10,778	10,687	9,466	12,256	8,635
Number of New Issuers	1	1	1	1	2	1	2	1	1	1

5.2.5 BELGIUM

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	1,750	1,800
Mortgage	-	-	-	-	-	-	2,590	8,188	10,575	15,105
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	-	-	-	-	-	-	2,590	8,188	12,325	16,905
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	2,500	4,500	5,750	9,750
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	2,500	5,175	5,175
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	-	90	1,188	1,400	1,980
Total	-	-	-	-	-	-	2,590	8,188	12,325	16,905
Denominated in EURO	-	-	-	-	-	-	2,590	8,188	12,325	16,905
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	2,590	8,188	12,325	16,905
Outstanding fixed coupon	-	-	-	-	-	-	2,590	8,188	12,185	16,765
Outstanding floating coupon	-	-	-	-	-	-	-	-	140	140
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	2,590	8,188	12,325	16,905
Number of Programmes	-	-	-	-	-	-	2	3	4	4
Number of Issuers	-	-	-	-	-	-	2	3	3	3

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	1,750	50
Mortgage	-	-	-	-	-	-	2,590	5,598	2,387	4,530
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	-	-	-	-	-	-	2,590	5,598	4,137	4,580
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	2,500	2,000	1,250	4,000
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	2,500	2,675	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	-	90	1,098	212	580
Total	-	-	-	-	-	-	2,590	5,598	4,137	4,580
Denominated in EURO	-	-	-	-	-	-	2,590	5,598	4,137	4,580
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	2,590	5,598	4,137	4,580
Issuance fixed coupon	-	-	-	-	-	-	2,590	5,598	3,997	4,580
Issuance floating coupon	-	-	-	-	-	-	-	-	140	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	2,590	5,598	4,137	4,580
Number of New Issuers	-	-	-	-	-	-	2	1	-	-

5.2.6 CANADA

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	2,000	6,574	7,525	18,003	38,610	49,121	50,459	64,836	85,759
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	-	2,000	6,574	7,525	18,003	38,610	49,121	50,459	64,836	85,759
Public Placement										
Benchmark (1bn and above)	-	2,000	6,250	6,238	14,600	34,009	43,495	45,372	59,481	76,749
Benchmark (500Mio - 999Mio)	-	-	-	496	2,230	3,653	4,130	1,205	4,877	7,538
Others (below 500Mio)	-	-	-	467	1,173	948	1,496	3,882	478	571
Private Placement	-	-	324	324	-	-	-	-	-	901
Total	-	2,000	6,574	7,525	18,003	38,610	49,121	50,459	64,836	85,759
Denominated in EURO	-	2,000	6,574	6,574	4,250	4,250	2,576	6,750	19,250	34,401
Denominated in domestic currency	-	-	-	496	1,201	2,043	2,055	1,840	1,387	2,183
Denominated in other currencies	-	-	-	455	12,552	32,317	44,490	41,869	44,200	49,175
Total	-	2,000	6,574	7,525	18,003	38,610	49,121	50,459	64,836	85,759
Outstanding fixed coupon	-	2,000	6,250	6,999	17,763	38,610	48,743	48,962	60,588	76,427
Outstanding floating coupon	-	-	324	526	240	-	378	1,497	4,249	9,332
Outstanding other	-	-	-	-	-	-	-	-	0	0
Total	-	2,000	6,574	7,525	18,003	38,610	49,121	50,459	64,836	85,759
Number of Programmes	-	1	3	3	5	7	7	9	13	13
Number of Issuers	-	1	3	3	5	7	7	7	7	7

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	2,000	4,574	951	12,648	19,977	12,937	9,354	19,275	29,287
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	-	2,000	4,574	951	12,648	19,977	12,937	9,354	19,275	29,287
Public Placement										
Benchmark (1bn and above)	-	2,000	4,250	-	10,290	18,544	11,937	9,030	18,448	24,045
Benchmark (500Mio - 999Mio)	-	-	-	496	2,058	1,433	834	324	827	3,955
Others (below 500Mio)	-	-	-	455	299	-	166	-	-	386
Private Placement	-	-	324	-	-	-	-	-	-	901
Total	-	2,000	4,574	951	12,648	19,977	12,937	9,354	19,275	29,287
Denominated in EURO	-	2,000	4,574	-	-	-	-	5,500	12,500	15,151
Denominated in domestic currency	-	-	-	496	638	832	-	-	-	1,455
Denominated in other currencies	-	-	-	455	12,010	19,145	12,937	3,854	6,775	12,681
Total	-	2,000	4,574	951	12,648	19,977	12,937	9,354	19,275	29,287
Issuance fixed coupon	-	2,000	4,250	749	12,648	19,977	12,558	8,219	16,618	24,330
Issuance floating coupon	-	-	324	202	-	-	379	1,135	2,657	4,957
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	-	2,000	4,574	951	12,648	19,977	12,937	9,354	19,275	29,287
Number of New Issuers	-	1	2	-	2	2	-	-	-	-

Note: Outstanding and issuance amounts include registered (legislative) and non-registered covered bonds. For a breakdown, please refer to Figure 2 from the Canada chapter in 3.5 section of the Fact Book.

5.2.7 CYPRUS

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	-	-	5,200	4,550	1,000	1,000	650
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	-	-	-	-	-	5,200	4,550	1,000	1,000	650
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	5,200	4,550	1,000	1,000	650
Total	-	-	-	-	-	5,200	4,550	1,000	1,000	650
Denominated in EURO	-	-	-	-	-	5,200	4,550	1,000	1,000	650
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	5,200	4,550	1,000	1,000	650
Outstanding fixed coupon	-	-	-	-	-	-	-	-	-	-
Outstanding floating coupon	-	-	-	-	-	5,200	4,550	1,000	1,000	650
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	5,200	4,550	1,000	1,000	650
Number of Programmes	-	-	-	-	-	n.a.	n.a.	1	1	1
Number of Issuers	-	-	-	-	-	2	2	1	1	1

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	-	-	5,200	-	-	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	-	-	-	-	-	5,200	-	-	-	-
Public Placement								-	-	-
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	5,200	-	-	-	-
Total	-	-	-	-	-	5,200	-	-	-	-
Denominated in EURO	-	-	-	-	-	5,200	-	-	-	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	5,200	-	-	-	-
Issuance fixed coupon	-	-	-	-	-	-	-	-	-	-
Issuance floating coupon	-	-	-	-	-	5,200	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	5,200	-	-	-	-
Number of New Issuers	-	-	-	-	-	2	-	-	-	-

5.2.8 CZECH REPUBLIC

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	5,543	8,213	8,091	8,179	8,234	8,546	9,056	10,355	11,106	11,656
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	5,543	8,213	8,091	8,179	8,234	8,546	9,056	10,355	11,106	11,656
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	4,682	6,613	6,502	5,439	5,454	5,194	5,522	6,731	4,316	6,156
Private Placement	861	1,600	1,589	2,740	2,780	3,352	3,534	3,624	6,790	5,500
Total	5,543	8,213	8,091	8,179	8,234	8,546	9,056	10,355	11,106	11,656
Denominated in EURO	42	39	35	119	128	111	571	914	735	1,187
Denominated in domestic currency	5,501	8,174	8,056	8,060	8,106	8,435	8,485	9,441	10,371	10,469
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	5,543	8,213	8,091	8,179	8,234	8,546	9,056	10,355	11,106	11,656
Outstanding fixed coupon	4,615	5,871	5,752	3,756	3,608	3,740	3,280	6,110	5,279	6,101
Outstanding floating coupon	928	1,675	1,270	3,900	4,063	4,119	5,096	4,105	5,654	5,462
Outstanding other	-	667	1,069	523	563	687	680	140	173	93
Total	5,543	8,213	8,091	8,179	8,234	8,546	9,056	10,355	11,106	11,656
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	8	8	8
Number of Issuers	8	9	8	8	8	8	8	8	8	8

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	956	3,501	938	738	723	770	1,309	1,791	2,188	2,729
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	956	3,501	938	738	723	770	1,309	1,791	2,188	2,729
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	875	3,347	938	187	705	711	742	622	369	1,138
Private Placement	81	154	-	551	18	59	567	1,169	1,819	1,591
Total	956	3,501	938	738	723	770	1,309	1,791	2,188	2,729
Denominated in EURO	42	-	-	89	18	-	500	886	286	623
Denominated in domestic currency	914	3,501	938	649	705	770	809	905	1,902	2,106
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	956	3,501	938	738	723	770	1,309	1,791	2,188	2,729
Issuance fixed coupon	903	1,322	55	76	420	378	484	1,717	2,013	2,090
Issuance floating coupon	53	1,699	789	662	178	169	745	74	136	639
Issuance other	-	480	95	-	125	223	80	-	39	-
Total	956	3,501	938	738	723	770	1,309	1,791	2,188	2,729
Number of New Issuers	-	1	-	-	-	-	-	-	-	-

5.2.9 DENMARK

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	260,367	244,696	255,140	319,434	332,505	345,529	359,560	359,646	369,978	377,903
Ships	6,672	7,754	7,045	7,197	6,722	5,999	6,325	5,514	5,013	5,221
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	267,039	252,450	262,185	326,631	339,227	351,528	365,885	365,160	374,991	383,124
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	231,421	234,504	228,111	216,822
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	52,156	54,170	64,229	76,880
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	80,692	74,355	78,721	77,125
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,616	2,131	3,931	12,297
Total	267,039	252,450	262,185	326,631	339,227	351,528	365,885	365,160	374,992	383,124
Denominated in EURO	18,743	19,547	22,520	37,675	42,848	43,753	46,451	40,856	38,682	36,934
Denominated in domestic currency	248,296	232,903	238,324	287,317	294,019	302,938	312,065	316,603	327,442	337,631
Denominated in other currencies	-	-	1,341	1,639	2,360	4,837	7,368	7,701	8,867	8,559
Total	267,039	252,450	262,185	326,631	339,227	351,528	365,885	365,160	374,991	383,124
Outstanding fixed coupon	208,623	178,953	184,636	254,894	267,075	275,092	285,754	284,483	285,721	285,004
Outstanding floating coupon	48,232	73,497	77,549	71,737	72,152	76,436	80,131	80,677	89,271	98,120
Outstanding other	10,184	-	-	-	-	-	-	-	-	-
Total	267,039	252,450	262,185	326,631	339,227	351,528	365,885	365,160	374,992	383,124
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	24	23	23
Number of Issuers	9	10	10	10	10	10	10	10	9	9

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	114,014	70,955	103,230	125,484	148,475	145,147	185,845	149,989	154,310	163,050
Ships	960	2,515	235	935	136	121	1,474	458	399	955
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	114,974	73,470	103,465	126,419	148,611	145,268	187,319	150,447	154,709	164,005
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	140,705	112,880	78,323	74,213
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	18,339	17,573	31,779	33,205
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	27,843	19,657	44,592	54,531
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	432	337	15	2,056
Total	114,974	73,470	103,465	126,419	148,611	145,268	187,319	150,447	154,709	164,005
Denominated in EURO	8,844	14,415	13,186	22,255	24,833	25,415	25,074	23,553	15,412	11,390
Denominated in domestic currency	106,130	59,055	90,279	101,183	122,374	116,911	158,335	124,331	134,368	147,944
Denominated in other currencies	-	-	-	2,981	1,404	2,942	3,910	2,563	4,929	4,671
Total	114,974	73,470	103,465	126,419	148,611	145,268	187,319	150,447	154,709	164,005
Issuance fixed coupon	93,771	50,757	89,888	122,851	133,846	128,195	-	130,290	131,949	129,815
Issuance floating coupon	21,203	22,713	13,577	3,568	14,765	17,073	163,680	20,157	22,760	34,190
Issuance other	-	-	-	-	-	-	23,638	-	-	-
Total	114,974	73,470	103,465	126,419	148,611	145,268	187,319	150,447	154,709	164,005
Number of New Issuers	-	1	-	-	-	-	-	-	-	-

Note: With the size buckets in the ECBC statistics we want to capture the reality of what the liquid benchmark part of the covered bond market is as closely as possible rather than mechanistically stick to a hard definition. Danish mortgage covered bonds are tap issued to a group of market making banks that distribute the bonds to investors. The formalised market making set-up is in practice similar to syndication and all bonds are listed and sold into the public market. Private placements are not used in Denmark which is why we have decided to give Danish covered bonds an exception from our own rules that normally require a bond to be listed and syndicated to be considered public.

5.2.10 FINLAND

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	3,000	4,500	5,750	7,625	10,125	18,839	26,684	29,783	32,031	33,974
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	3,000	4,500	5,750	7,625	10,125	18,839	26,684	29,783	32,031	33,974
Public Placement										
Benchmark (1bn and above)	2,000	3,000	4,000	5,250	7,250	14,750	20,750	22,500	25,750	27,250
Benchmark (500Mio - 999Mio)	-	-	-	600	1,600	2,200	2,200	2,200	2,100	2,070
Others (below 500Mio)	1,000	1,500	1,750	1,775	1,275	1,606	2,874	4,115	3,116	500
Private Placement	-	-	-	-	-	283	861	969	1,065	4,154
Total	3,000	4,500	5,750	7,625	10,125	18,839	26,684	29,783	32,031	33,974
Denominated in EURO	3,000	4,500	5,750	7,625	10,125	18,453	26,114	29,230	31,738	33,663
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	386	571	553	293	311
Total	3,000	4,500	5,750	7,625	10,125	18,839	26,684	29,783	32,031	33,974
Outstanding fixed coupon	2,250	3,750	4,750	6,500	9,250	17,863	23,247	26,425	28,665	30,476
Outstanding floating coupon	750	750	1,000	1,125	875	976	3,437	3,358	3,366	3,498
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	3,000	4,500	5,750	7,625	10,125	18,839	26,684	29,783	32,031	33,974
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	8	9	9
Number of Issuers	2	3	3	3	4	4	5	6	6	6

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	1,500	1,500	1,250	2,125	5,250	9,964	9,368	3,771	6,469	7,425
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	1,500	1,500	1,250	2,125	5,250	9,964	9,368	3,771	6,469	7,425
Public Placement										
Benchmark (1bn and above)	1,000	1,000	1,000	1,250	4,000	8,500	7,000	2,750	5,500	6,500
Benchmark (500Mio - 999Mio)	-	-	-	600	1,000	600	-	500	500	500
Others (below 500Mio)	500	500	250	275	250	581	1,790	370	469	250
Private Placement	-	-	-	-	-	283	578	151	-	175
Total	1,500	1,500	1,250	2,125	5,250	9,964	9,368	3,771	6,469	7,425
Denominated in EURO	1,500	1,500	1,250	2,125	5,250	9,578	9,186	3,771	6,283	7,425
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	386	182	-	186	-
Total	1,500	1,500	1,250	2,125	5,250	9,964	9,368	3,771	6,469	7,425
Issuance fixed coupon	1,250	1,500	1,000	2,000	5,000	9,613	6,783	3,621	6,170	7,410
Issuance floating coupon	250	-	250	125	250	351	2,585	150	299	15
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	1,500	1,500	1,250	2,125	5,250	9,964	9,368	3,771	6,469	7,425
Number of New Issuers	-	1	-	-	1	-	1	1	-	-

5.2.11 FRANCE

Outstanding (in EUR million)	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Total Covered Bonds Outstanding										
Public Sector	49,660	56,403	64,756	71,905	75,548	77,835	72,033	68,349	67,696	66,717
Mortgage	43,012	63,555	119,092	134,757	156,239	198,395	208,297	202,822	188,925	188,669
Mixed Assets	61,930	80,097	80,631	82,572	88,693	89,768	81,560	73,015	68,896	67,685
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	154,602	200,055	264,479	289,234	320,480	365,998	361,890	344,185	325,517	323,072
Public Placement									-	-
Benchmark (Above 1bn)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	241,775	209,885	208,784	201,947
Benchmark (500Mio - 1bn)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4,949	23,992	14,788	17,128
Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	36,595	32,253	7,865	10,121
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	78,570	78,055	94,081	93,876
Total	154,602	200,055	264,479	289,234	320,480	365,998	361,890	344,186	325,518	323,072
Denominated in EURO	n.a.	165,779	226,922	256,798	285,501	327,874	331,212	316,562	303,435	303,710
Denominated in domestic currency	n.a.	-	-	-	-	-	-	-	-	-
Denominated in other currencies	n.a.	34,276	37,558	32,436	34,979	38,123	30,678	27,624	22,083	19,362
Total	154,602	200,055	264,480	289,234	320,480	365,998	361,890	344,186	325,517	323,072
Outstanding fixed coupon	n.a.	174,388	204,729	236,106	266,080	284,266	297,009	287,504	279,149	295,639
Outstanding floating coupon	n.a.	10,502	48,633	42,600	43,710	75,068	47,805	43,002	32,725	16,640
Outstanding other	n.a.	15,165	11,117	10,528	10,690	6,665	17,076	13,680	13,643	10,792
Total	154,602	200,055	264,479	289,234	320,480	365,998	361,890	344,186	325,517	323,072
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	23	21	19
Number of Issuers	6	7	10	14	16	19	20	21	21	19

Issuance (in EUR million)	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Total Covered Bonds Issuance										
Public Sector	12,134	15,271	11,354	13,915	12,508	8,851	1,150	4,179	5,318	6,785
Mortgage	12,637	21,670	59,734	29,373	42,895	84,416	49,260	19,637	14,483	29,705
Mixed Assets	17,263	23,682	8,549	15,824	17,261	8,719	8,101	3,498	6,149	8,395
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	42,034	60,623	79,637	59,112	72,664	101,986	58,511	27,314	25,950	44,885
Public Placement										
Benchmark (Above 1bn)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	25,672	12,250	15,250	14,500
Benchmark (500Mio - 1bn)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,185	5,550	4,250	5,650
Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4,830	1,755	496	2,431
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	26,824	7,759	5,955	22,304
Total	42,034	60,623	79,637	59,112	72,664	101,986	58,511	27,314	25,951	44,885
Denominated in EURO	34,172	50,700	73,930	56,155	64,375	96,020	55,851	26,596	25,455	44,562
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	7,862	9,923	5,708	2,957	8,289	5,967	2,660	718	495	323
Total	42,034	60,623	79,637	59,112	72,664	101,986	58,511	27,314	25,950	44,885
Issuance fixed coupon	n.a.	57,009	37,158	50,443	64,503	67,612	36,003	23,556	24,027	43,642
Issuance floating coupon	n.a.	2,614	42,224	8,519	7,953	34,286	22,368	3,558	1,549	1,243
Issuance other	n.a.	1,000	255	150	208	89	140	200	374	-
Total	42,034	60,623	79,637	59,112	72,664	101,986	58,511	27,314	25,950	44,885
Number of New Issuers	1	1	3	4	4	3	1	1	-	-

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).

5.2.12 GERMANY

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	720,835	677,656	578,974	486,406	412,090	355,673	301,125	245,961	206,535	180,524
Mortgage	223,306	206,489	217,367	225,100	219,947	223,676	215,999	199,900	189,936	197,726
Ships	4,669	4,413	9,282	7,954	7,805	6,641	7,246	5,792	4,811	5,158
Others	-	-	-	-	-	-	506	506	1,006	1,006
Total Outstanding	948,810	888,558	805,623	719,460	639,842	585,990	524,876	452,159	402,288	384,414
Public Placement										
Benchmark (1bn and above)	326,140	298,220	266,747	224,042	170,068	141,393	112,869	81,030	55,608	48,462
Benchmark (500Mio - 999Mio)	31,102	36,178	32,909	27,683	28,644	28,704	36,862	46,798	56,987	69,883
Others (below 500Mio)	155,379	92,675	62,805	66,030	46,344	43,634	75,244	63,864	60,229	43,828
Private Placement	436,189	461,485	443,162	401,705	394,786	372,259	299,901	260,467	229,464	222,241
Total	948,810	888,558	805,623	719,460	639,842	585,990	524,876	452,159	402,288	384,414
Denominated in EURO	922,878	863,594	778,623	690,510	620,420	565,529	506,639	437,737	387,772	370,419
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	25,932	24,964	27,000	28,950	19,422	20,461	18,237	14,422	14,516	13,995
Total	948,810	888,558	805,623	719,460	639,842	585,990	524,876	452,159	402,288	384,414
Outstanding fixed coupon	823,130	789,338	689,124	619,364	546,791	493,983	433,787	375,537	339,705	334,264
Outstanding floating coupon	121,754	90,552	107,522	90,136	78,105	74,340	76,840	59,170	51,956	44,359
Outstanding other	3,926	8,668	8,976	9,959	14,946	17,667	14,249	17,452	10,627	5,791
Total	948,810	888,558	805,623	719,460	639,842	585,990	524,876	452,159	402,288	384,414
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	116	121	121
Number of Issuers	57	58	59	61	63	66	71	72	78	79

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	129,452	107,913	89,522	52,251	41,574	30,990	14,341	15,611	15,334	15,544
Mortgage	35,336	26,834	57,345	56,852	42,216	40,911	38,540	33,583	29,145	40,369
Ships	2,374	628	6,054	1,286	3,189	895	3,169	303	920	2,208
Others	-	-	-	-	-	-	506	-	500	-
Total Issuance	167,162	135,375	152,921	110,389	86,979	72,796	56,556	49,497	45,899	58,121
Public Placement										
Benchmark (1bn and above)	45,210	32,980	26,285	17,125	16,853	21,406	4,008	2,125	5,500	5,500
Benchmark (500Mio - 999Mio)	7,200	12,556	10,880	7,650	10,297	5,319	11,879	15,725	14,100	22,201
Others (below 500Mio)	24,525	12,437	30,172	18,732	11,835	15,632	11,816	11,816	9,045	11,263
Private Placement	90,227	77,402	85,584	66,882	47,994	30,439	28,853	19,831	17,254	19,157
Total	167,162	135,375	152,921	110,389	86,979	72,796	56,556	49,497	45,899	58,121
Denominated in EURO	159,340	131,807	149,137	107,488	84,459	68,585	52,608	45,757	42,811	55,470
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	7,822	3,568	3,784	2,901	2,520	4,211	3,948	3,740	3,088	2,651
Total	167,162	135,375	152,921	110,389	86,979	72,796	56,556	49,497	45,899	58,121
Issuance fixed coupon	143,869	113,085	111,309	89,605	62,518	54,023	32,274	37,878	36,917	50,618
Issuance floating coupon	18,859	20,099	40,156	20,091	23,468	16,692	23,702	11,302	8,755	6,743
Issuance other	4,434	2,191	1,456	693	993	2,081	580	317	227	760
Total	167,162	135,375	152,921	110,389	86,979	72,796	56,556	49,497	45,899	58,121
Number of New Issuers	4	2	4	5	5	3	5	1	6	2

5.2.13 GREECE

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	5,000	6,500	19,750	19,750	18,046	16,546	14,546	4,961
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	-	-	5,000	6,500	19,750	19,750	18,046	16,546	14,546	4,961
Public Placement										
Benchmark (1bn and above)	-	-	-	1,500	1,500	1,500	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	846	846	846	846
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	5,000	5,000	18,250	18,250	17,200	15,700	13,700	4,115
Total	-	-	5,000	6,500	19,750	19,750	18,046	16,546	14,546	4,961
Denominated in EURO	-	-	5,000	6,500	19,750	19,750	18,046	16,546	14,546	4,961
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	-	-	5,000	6,500	19,750	19,750	18,046	16,546	14,546	4,961
Outstanding fixed coupon	-	-	-	1,500	1,500	1,500	846	846	846	846
Outstanding floating coupon	-	-	5,000	5,000	18,250	18,250	17,200	15,700	13,700	4,115
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	-	-	5,000	6,500	19,750	19,750	18,046	16,546	14,546	4,961
Number of Programmes	-	-	n.a.	n.a.	n.a.	n.a.	n.a.	6	6	6
Number of Issuers	-	-	3	3	4	4	4	4	4	4

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	5,000	1,500	17,250	5,000	-	-	750	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	-	-	5,000	1,500	17,250	5,000	-	-	750	-
Public Placement										
Benchmark (1bn and above)	-	-	-	1,500	-	-	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	5,000	-	17,250	5,000	-	-	750	-
Total	-	-	5,000	1,500	17,250	5,000	-	-	750	-
Denominated in EURO	-	-	5,000	1,500	17,250	5,000	-	-	750	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	-	-	5,000	1,500	17,250	5,000	-	-	750	-
Issuance fixed coupon	-	-	-	1,500	-	-	-	-	-	-
Issuance floating coupon	-	-	5,000	-	17,250	5,000	-	-	750	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	-	-	5,000	1,500	17,250	5,000	-	-	750	-
Number of New Issuers	-	-	3	-	2	1	-	-	-	-

5.2.14 HUNGARY

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	5,924	5,987	7,105	7,375	6,323	5,175	4,958	4,016	3,272	3,022
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	5,924	5,987	7,105	7,375	6,323	5,175	4,958	4,016	3,272	3,022
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,290	-	-	-
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	865	20	-	19
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,803	3,996	3,272	3,003
Total	5,924	5,987	7,105	7,375	6,323	5,175	4,958	4,016	3,272	3,022
Denominated in EURO	1,547	1,784	2,879	3,799	2,904	2,167	1,863	1,616	1,116	1,036
Denominated in domestic currency	4,377	4,203	4,209	3,559	3,419	2,934	3,059	2,354	2,154	1,986
Denominated in other currencies	-	-	17	17	-	74	36	46	2	-
Total	5,924	5,987	7,105	7,375	6,323	5,175	4,958	4,016	3,272	3,022
Outstanding fixed coupon	5,214	5,080	4,086	6,737	5,713	3,195	3,318	2,650	2,205	1,699
Outstanding floating coupon	635	907	3,019	638	610	1,980	1,640	1,366	1,067	1,323
Outstanding other	75	-	-	-	-	-	-	-	-	-
Total	5,924	5,987	7,105	7,375	6,323	5,175	4,958	4,016	3,272	3,022
Number of Programmes	n.a	n.a	n.a	n.a	n.a	n.a	n.a	3	3	4
Number of Issuers	3	3	3	3	3	3	3	3	3	3

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	1,418	331	3,331	3,209	542	2,264	1,140	559	91	888
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	1,418	331	3,331	3,209	542	2,264	1,140	559	91	888
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	510	500	-	-
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	630	57	-	-
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	2	91	888
Total	1,418	331	3,331	3,209	542	2,264	1,140	559	91	888
Denominated in EURO	1,007	291	1,407	1,102	300	1,600	510	515	-	500
Denominated in domestic currency	411	40	1,907	2,107	242	565	630	42	91	388
Denominated in other currencies	-	-	17	-	-	99	-	2	-	-
Total	1,418	331	3,331	3,209	542	2,264	1,140	559	91	888
Issuance fixed coupon	1,168	116	2,275	3,200	477	538	630	57	44	121
Issuance floating coupon	250	215	1,056	9	65	1,726	510	502	48	767
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	1,418	331	3,331	3,209	542	2,264	1,140	559	92	888
Number of New Issuers	-	-	-	-	-	-	-	-	-	-

5.2.15 ICELAND

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	467	478	492	685	807	808	893	803	927	1,205
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	467	478	492	685	807	808	893	803	927	1,205
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	467	478	492	685	807	808	893	803	927	1,205
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	467	478	492	685	807	808	893	803	927	1,205
Denominated in EURO	-	-	-	-	-	-	-	-	-	-
Denominated in domestic currency	467	478	492	685	807	808	893	803	927	1,205
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	467	478	492	685	807	808	893	803	927	1,205
Outstanding fixed coupon	-	-	-	-	-	-	15	66	199	254
Outstanding floating coupon	-	-	-	-	-	-	-	-	-	-
Outstanding other	467	478	492	685	807	808	878	737	728	951
Total	467	478	492	685	807	808	893	803	927	1,205
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	1	3	4	4	4
Number of Issuers	2	2	1	1	1	1	2	3	3	3

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	467	-	321	-	-	25	113	51	91	414
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	467	-	321	-	-	25	113	51	91	414
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	467	-	321	-	-	25	113	51	91	414
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	467	-	321	-	-	25	113	51	91	414
Denominated in EURO	-	-	-	-	-	-	-	-	-	-
Denominated in domestic currency	467	-	321	-	-	25	113	51	91	414
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	467	-	321	-	-	25	113	51	91	414
Issuance fixed coupon	-	-	-	-	-	-	15	23	35	158
Issuance floating coupon	-	-	-	-	-	-	-	-	-	-
Issuance other	467	-	321	-	-	25	98	28	56	256
Total	467	-	321	-	-	25	113	51	91	414
Number of New Issuers	2	-	-	-	-	-	1	1	-	-

5.2.16 IRELAND

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	49,914	51,204	52,613	50,951	36,492	31,760	27,546	22,154	20,258	15,389
Mortgage	11,900	13,575	23,075	29,725	29,037	30,007	25,099	20,827	18,473	16,916
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	61,814	64,779	75,688	80,676	65,529	61,767	52,645	42,981	38,731	32,305
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	26,402	23,079	17,169	13,254	8,010
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	500	500	2,500	4,611	7,134
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	1,092	868	239	-	232
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	33,773	28,198	23,073	20,866	16,930
Total	61,814	64,779	75,688	80,676	65,529	61,767	52,645	42,981	38,731	32,305
Denominated in EURO	52,800	52,328	60,056	67,626	54,940	53,054	44,725	36,360	31,987	27,108
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	9,014	12,451	15,632	13,050	10,589	8,713	7,920	6,621	6,743	5,198
Total	61,814	64,779	75,688	80,676	65,529	61,767	52,645	42,981	38,731	32,305
Outstanding fixed coupon	55,832	56,094	48,817	43,717	40,069	35,853	32,658	27,652	26,187	23,003
Outstanding floating coupon	3,028	5,299	23,294	33,607	22,507	22,919	17,008	12,730	10,240	7,045
Outstanding other	2,954	3,386	3,577	3,353	2,953	2,995	2,979	2,598	2,303	2,258
Total	61,814	64,779	75,688	80,676	65,529	61,767	52,645	42,981	38,731	32,305
Number of Programmes	4	4	5	6	6	6	5	5	5	5
Number of Issuers	4	4	5	6	6	6	5	5	5	5

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	9,722	9,533	12,665	3,174	60	-	-	25	-	-
Mortgage	7,753	1,675	9,506	14,801	6,000	9,290	5,500	3,235	2,535	5,225
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	17,475	11,208	22,171	17,975	6,060	9,290	5,500	3,260	2,535	5,225
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,000	1,000	-	1,000
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	500	2,000	1,250	3,000
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.	4,000	260	1,285	1,225
Total	17,475	11,208	22,171	17,975	6,060	9,290	5,500	3,260	2,535	5,225
Denominated in EURO	15,035	6,612	18,741	17,975	6,060	9,290	5,500	3,260	2,535	5,225
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	2,440	4,596	3,430	-	-	-	-	-	-	-
Total	17,475	11,208	22,171	17,975	6,060	9,290	5,500	3,260	2,535	5,225
Issuance fixed coupon	15,537	8,183	4,600	4,175	210	-	1,500	3,035	1,385	4,225
Issuance floating coupon	1,101	2,351	17,240	13,750	5,850	9,290	4,000	225	1,150	1,000
Issuance other	837	674	331	50	-	-	-	-	-	-
Total	17,475	11,208	22,171	17,975	6,060	9,290	5,500	3,260	2,535	5,225
Number of New Issuers	1	-	1	1	-	-	-	-	-	-

5.2.17 ITALY

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	8,063	8,063	8,063	9,063	10,092	12,999	10,300	6,945	8,700	8,400
Mortgage	-	-	6,500	14,000	26,925	50,768	116,405	122,099	122,464	122,135
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	8,063	8,063	14,563	23,063	37,017	63,767	126,705	129,044	131,164	130,535
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	37,927	39,602	44,453	46,503
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4,450	8,450	8,400	12,628
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,783	1,170	140	500
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	82,544	79,822	78,171	70,904
Total	8,063	8,063	14,563	23,063	37,017	63,767	126,705	129,044	131,164	130,535
Denominated in EURO	8,000	8,000	14,500	23,000	36,925	63,668	126,705	129,044	131,164	130,535
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	63	63	63	63	92	99	-	-	-	-
Total	8,063	8,063	14,563	23,063	37,017	63,767	126,705	129,044	131,164	130,535
Outstanding fixed coupon	8,063	8,063	10,063	15,563	27,100	44,954	50,059	57,724	63,924	68,111
Outstanding floating coupon	-	-	500	500	2,825	18,814	76,646	71,320	67,240	62,424
Outstanding other	-	-	4,000	7,000	7,092	-	-	-	-	-
Total	8,063	8,063	14,563	23,063	37,017	63,767	126,705	129,044	131,164	130,535
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	19	21	24
Number of Issuers	1	1	4	7	11	12	13	13	14	14

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	4,063	-	-	3,000	2,000	5,900	-	4,200	1,000	1,700
Mortgage	-	-	6,500	7,500	12,925	29,261	70,768	24,520	39,475	27,650
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	4,063	-	6,500	10,500	14,925	35,161	70,768	28,720	40,475	29,350
Public Placement										
Benchmark (1bn and above)	n.a.	-	n.a.	n.a.	n.a.	n.a.	6,304	5,250	7,750	7,250
Benchmark (500Mio - 999Mio)	n.a.	-	n.a.	n.a.	n.a.	n.a.	1,700	3,500	2,750	5,500
Others (below 500Mio)	n.a.	-	n.a.	n.a.	n.a.	n.a.	-	250	-	-
Private Placement	n.a.	-	n.a.	n.a.	n.a.	n.a.	62,764	19,720	29,975	16,600
Total	4,063	-	6,500	10,500	14,925	35,161	70,768	28,720	40,475	29,350
Denominated in EURO	4,000	-	6,500	10,500	14,925	35,161	70,768	28,720	40,475	29,350
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	63	-	-	-	-	-	-	-	-	-
Total	4,063	-	6,500	10,500	14,925	35,161	70,768	28,720	40,475	29,350
Issuance fixed coupon	4,000	-	2,000	7,500	12,600	18,750	11,013	12,170	10,585	12,250
Issuance floating coupon	-	-	500	-	2,325	16,411	59,755	16,550	29,890	17,100
Issuance other	63	-	4,000	3,000	-	-	-	-	-	-
Total	4,063	-	6,500	10,500	14,925	35,161	70,768	28,720	40,475	29,350
Number of New Issuers	-	-	3	3	4	1	1	-	1	1

5.2.18 LATVIA

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	63	90	90	85	63	37	-	-	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	63	90	90	85	63	37	-	-	-	-
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	63	90	90	85	63	37	-	-	-	-
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	63	90	90	85	63	37	-	-	-	-
Denominated in EURO	20	56	69	64	45	25	-	-	-	-
Denominated in domestic currency	34	28	17	17	14	12	-	-	-	-
Denominated in other currencies	8	6	4	4	4	-	-	-	-	-
Total	63	90	90	85	63	37	-	-	-	-
Outstanding fixed coupon	21	15	26	26	27	12	-	-	-	-
Outstanding floating coupon	41	75	64	59	36	25	-	-	-	-
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	63	90	90	85	63	37	-	-	-	-
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Number of Issuers	4	5	5	5	4	2	-	-	-	-

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	20	19	25	-	-	-	-	-	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	20	19	25	-	-	-	-	-	-	-
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	20	19	25	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	20	19	25	-	-	-	-	-	-	-
Denominated in EURO	20	19	25	-	-	-	-	-	-	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	20	19	25	-	-	-	-	-	-	-
Issuance fixed coupon	-	-	25	-	-	-	-	-	-	-
Issuance floating coupon	20	19	-	-	-	-	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	20	19	25	-	-	-	-	-	-	-
Number of New Issuers	3	1	-	-	-	-	-	-	-	-

5.2.19 LUXEMBOURG

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	28,360	33,741	35,467	31,645	28,889	26,700	24,859	21,708	16,002	10,166
Mortgage	150	150	150	-	-	-	-	-	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	28,510	33,891	35,617	31,645	28,889	26,700	24,859	21,708	16,002	10,166
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,768	1,000	-	-
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	973	2,781
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9,696	10,052	8,041	440
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13,395	10,656	6,987	6,945
Total	28,510	33,891	35,617	31,645	28,889	26,700	24,859	21,708	16,002	10,166
Denominated in EURO	12,319	16,172	18,147	16,592	15,826	15,496	14,994	12,925	8,226	5,578
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	16,191	17,719	17,470	15,053	13,063	11,204	9,864	8,783	7,775	4,589
Total	28,510	33,891	35,617	31,645	28,889	26,700	24,859	21,708	16,002	10,166
Outstanding fixed coupon	19,077	22,573	22,267	21,126	20,390	16,547	14,766	13,182	11,417	8,250
Outstanding floating coupon	7,217	9,210	11,270	9,355	7,710	9,377	8,507	7,080	3,802	1,710
Outstanding other	2,216	2,108	2,080	1,164	789	776	1,585	1,445	783	206
Total	28,510	33,891	35,617	31,645	28,889	26,700	24,859	21,708	16,002	10,166
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6	5	3
Number of Issuers	3	5	5	5	5	5	6	6	5	3

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	9,730	10,052	3,967	3,083	3,524	2,788	2,660	825	398	1,220
Mortgage	150	-	-	-	-	-	-	-	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	9,880	10,052	3,967	3,083	3,524	2,788	2,660	825	398	1,220
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	1,000
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.	2,660	825	398	220
Total	9,880	10,052	3,967	3,083	3,524	2,788	2,660	825	398	1,220
Denominated in EURO	3,628	5,773	2,639	2,661	3,260	2,422	2,587	825	233	1,220
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	6,252	4,279	1,328	422	264	366	73	-	165	-
Total	9,880	10,052	3,967	3,083	3,524	2,788	2,660	825	398	1,220
Issuance fixed coupon	8,092	5,425	1,423	1,526	1,213	336	187	-	398	1,205
Issuance floating coupon	1,601	4,448	2,471	1,530	2,289	2,452	2,473	825	-	15
Issuance other	187	178	73	27	22	-	-	-	-	-
Total	9,880	10,051	3,967	3,083	3,524	2,788	2,660	825	398	1,220
Number of New Issuers	-	2	-	-	-	-	1	-	-	-

5.2.20 THE NETHERLANDS

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	7,477	15,093	20,534	27,664	40,180	51,970	59,822	61,015	58,850	61,101
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	7,477	15,093	20,534	27,664	40,180	51,970	59,822	61,015	58,850	61,101

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Public Placement										-
Benchmark (1bn and above)	5,500	11,000	14,275	20,650	29,898	39,623	45,245	44,913	41,159	37,228
Benchmark (500Mio - 999Mio)	-	-	-	-	-	500	500	1,000	1,000	2,750
Others (below 500Mio)	685	937	1,279	1,281	1,819	2,345	2,319	2,281	2,329	1,523
Private Placement	1,292	3,156	4,979	5,733	8,463	9,503	11,758	12,822	14,362	19,600
Total	7,477	15,093	20,534	27,664	40,180	51,970	59,822	61,015	58,850	61,101

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Denominated in EURO	6,437	13,777	18,715	25,822	36,854	47,795	53,884	55,362	53,030	55,897
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	1,040	1,316	1,819	1,842	3,326	4,175	5,938	5,653	5,820	5,204
Total	7,477	15,093	20,534	27,664	40,180	51,970	59,822	61,015	58,850	61,101

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Outstanding fixed coupon	7,182	13,697	17,804	25,658	37,954	51,230	58,902	60,016	57,892	59,142
Outstanding floating coupon	255	1,336	2,670	1,956	2,176	700	880	959	928	1,928
Outstanding other	40	60	60	50	50	40	40	40	30	30
Total	7,477	15,093	20,534	27,664	40,180	51,970	59,822	61,015	58,850	61,101

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of Programmes	1	2	5	5	5	5	5	5	6	8
Number of Issuers	1	2	5	5	5	5	5	5	5	7

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	5,477	7,648	5,355	7,725	13,660	14,143	10,738	4,478	3,910	7,908
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	5,477	7,648	5,355	7,725	13,660	14,143	10,738	4,478	3,910	7,908

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Public Placement										-
Benchmark (1bn and above)	3,500	5,500	3,275	6,375	10,498	9,700	8,387	2,750	1,500	1,750
Benchmark (500Mio - 999Mio)	-	-	-	-	-	500	-	500	500	1,750
Others (below 500Mio)	685	272	236	-	300	473	290	-	-	-
Private Placement	1,292	1,876	1,845	1,350	2,862	3,470	2,062	1,228	1,910	4,408
Total	5,477	7,648	5,355	7,725	13,660	14,143	10,738	4,478	3,910	7,908

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Denominated in EURO	4,437	7,340	4,938	7,725	12,337	13,207	8,859	4,478	3,910	7,908
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	1,040	308	418	-	1,324	937	1,879	-	-	-
Total	5,477	7,648	5,355	7,725	13,660	14,143	10,738	4,478	3,910	7,908

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Issuance fixed coupon	5,182	6,529	4,030	7,725	13,603	14,013	10,558	4,398	3,895	6,908
Issuance floating coupon	255	1,099	1,325	-	57	130	180	80	15	1,000
Issuance other	40	20	-	-	-	-	-	-	-	-
Total	5,477	7,648	5,355	7,725	13,660	14,143	10,738	4,478	3,910	7,908

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of New Issuers	-	1	3	-	-	-	-	-	-	2

5.2.21 NEW ZEALAND

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	-	1,247	3,656	6,881	7,851	9,464	9,149
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	-	-	-	-	1,247	3,656	6,881	7,851	9,464	9,149
Public Placement										
Benchmark (1bn and above)	-	-	-	-	1,000	2,000	2,000	2,000	2,000	2,000
Benchmark (500Mio - 999Mio)	-	-	-	-	-	1,050	3,051	3,954	5,472	5,470
Others (below 500Mio)	-	-	-	-	247	427	1,353	1,436	1,347	788
Private Placement	-	-	-	-	-	179	477	461	645	891
Total	-	-	-	-	1,247	3,656	6,881	7,851	9,464	9,149
Denominated in EURO	-	-	-	-	1,000	2,500	4,500	5,500	7,000	7,200
Denominated in domestic currency	-	-	-	-	247	606	982	940	1,014	879
Denominated in other currencies	-	-	-	-	-	550	1,399	1,411	1,449	1,070
Total	-	-	-	-	1,247	3,656	6,881	7,851	9,464	9,149
Outstanding fixed coupon	-	-	-	-	1,247	3,477	6,259	7,244	8,834	8,961
Outstanding floating coupon	-	-	-	-	-	179	622	607	630	188
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	1,247	3,656	6,881	7,851	9,464	9,149
Number of Programmes	-	-	-	-	1	4	4	5	5	5
Number of Issuers	-	-	-	-	1	4	4	5	5	5

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	-	1,247	2,409	3,192	1,122	750	1,450
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	-	-	-	-	1,247	2,409	3,192	1,122	750	1,450
Public Placement										
Benchmark (1bn and above)	-	-	-	-	1,000	1,000	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	1,050	2,000	1,000	750	1,250
Others (below 500Mio)	-	-	-	-	247	179	902	122	-	-
Private Placement	-	-	-	-	-	179	290	-	-	200
Total	-	-	-	-	1,247	2,409	3,192	1,122	750	1,450
Denominated in EURO	-	-	-	-	1,000	1,500	2,000	1,000	750	1,450
Denominated in domestic currency	-	-	-	-	247	358	343	-	-	-
Denominated in other currencies	-	-	-	-	-	550	849	122	-	-
Total	-	-	-	-	1,247	2,409	3,192	1,122	750	1,450
Issuance fixed coupon	-	-	-	-	1,247	2,229	2,757	1,122	750	1,450
Issuance floating coupon	-	-	-	-	-	179	435	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	1,247	2,409	3,192	1,122	750	1,450
Number of New Issuers	-	-	-	-	1	3	-	1	-	-

5.2.22 NORWAY

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	751	1,837	3,759	2,742	2,035	1,820	1,672
Mortgage	-	6,371	21,924	53,582	70,401	91,852	107,242	105,202	102,704	107,694
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	-	6,371	21,924	54,333	72,238	95,611	109,984	107,237	104,524	109,366
Public Placement										
Benchmark (1bn and above)	-	n.a.	n.a.	n.a.	n.a.	n.a.	51,179	47,342	51,185	46,834
Benchmark (500Mio - 999Mio)	-	n.a.	n.a.	n.a.	n.a.	n.a.	20,125	18,471	14,523	18,953
Others (below 500Mio)	-	n.a.	n.a.	n.a.	n.a.	n.a.	32,354	31,763	26,434	32,463
Private Placement	-	n.a.	n.a.	n.a.	n.a.	n.a.	6,327	9,661	12,382	11,116
Total	-	6,371	21,924	54,333	72,238	95,611	109,985	107,237	104,524	109,366
Denominated in EURO	-	4,500	12,847	14,522	22,022	29,953	38,597	44,510	49,928	51,537
Denominated in domestic currency	-	1,433	8,351	39,022	45,803	55,325	59,533	49,965	41,502	44,081
Denominated in other currencies	-	438	725	789	4,413	10,333	11,854	12,762	13,094	13,748
Total	-	6,371	21,924	54,333	72,238	95,611	109,984	107,237	104,524	109,366
Outstanding fixed coupon	-	5,718	14,750	17,064	28,809	44,813	56,918	63,088	66,831	70,368
Outstanding floating coupon	-	653	7,174	37,269	43,429	50,798	53,066	44,148	37,694	38,998
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	-	6,371	21,924	54,333	72,238	95,611	109,984	107,236	104,524	109,366
Number of Programmes	-	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	23	23	27
Number of Issuers	-	3	7	22	22	23	22	22	22	24

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	751	1,421	2,374	943	239	664	312
Mortgage	-	6,458	15,660	30,105	21,062	28,135	22,946	18,339	14,474	17,750
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	-	6,458	15,660	30,856	22,483	30,509	23,888	18,578	15,138	18,063
Public Placement										
Benchmark (1bn and above)	-	n.a.	n.a.	n.a.	n.a.	n.a.	10,916	7,441	6,823	4,937
Benchmark (500Mio - 999Mio)	-	n.a.	n.a.	n.a.	n.a.	n.a.	4,748	1,458	2,157	4,346
Others (below 500Mio)	-	n.a.	n.a.	n.a.	n.a.	n.a.	7,664	8,267	5,082	8,574
Private Placement	-	n.a.	n.a.	n.a.	n.a.	n.a.	560	1,412	1,076	206
Total	-	6,458	15,660	30,856	22,483	30,509	23,888	18,578	15,138	18,063
Denominated in EURO	-	4,500	8,346	2,044	11,232	8,800	12,431	8,382	4,590	6,773
Denominated in domestic currency	-	1,521	7,042	28,745	7,777	15,808	9,463	7,546	9,854	9,206
Denominated in other currencies	-	438	272	67	3,474	5,901	1,994	2,651	694	2,084
Total	-	6,458	15,660	30,856	22,483	30,509	23,888	18,578	15,138	18,063
Issuance fixed coupon	-	5,754	9,020	2,207	16,074	15,961	15,462	11,423	3,475	9,173
Issuance floating coupon	-	704	6,640	28,649	6,409	14,548	8,427	7,155	11,519	8,748
Issuance other	-	-	-	-	-	-	-	-	144	142
Total	-	6,458	15,660	30,856	22,483	30,509	23,888	18,578	15,138	18,063
Number of New Issuers	-	3	4	15	-	1	-	-	1	2

5.2.23 PANAMA

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	-	-	-	152	218	247	276
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	-	-	-	-	-	-	152	218	247	276
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	152	218	247	276
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	152	218	247	276
Denominated in EURO	-	-	-	-	-	-	-	-	-	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	152	218	247	276
Total	-	-	-	-	-	-	152	218	247	276
Outstanding fixed coupon	-	-	-	-	-	-	152	218	247	276
Outstanding floating coupon	-	-	-	-	-	-	-	-	-	-
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	152	218	247	276
Number of Programmes	-	-	-	-	-	-	1	1	1	1
Number of Issuers	-	-	-	-	-	-	1	1	1	1

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	-	-	-	152	73	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	-	-	-	-	-	-	152	73	-	-
Public Placement										
Benchmark (1bn and above)	-	-	-	-	-	-	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	152	73	-	-
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	152	73	-	-
Denominated in EURO	-	-	-	-	-	-	-	-	-	-
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	152	73	-	-
Total	-	-	-	-	-	-	152	73	-	-
Issuance fixed coupon	-	-	-	-	-	-	152	73	-	-
Issuance floating coupon	-	-	-	-	-	-	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	152	73	-	-
Number of New Issuers	-	-	-	-	-	-	1	-	-	-

5.2.24 POLAND

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	131	137	139	126	112	110	84	82	35
Mortgage	453	676	561	583	511	527	657	707	882	1,230
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	453	807	698	722	636	639	768	791	964	1,266
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Benchmark (500Mio - 999Mio)	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.	768	791	964	1,266
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total	453	807	698	722	636	639	768	791	964	1,266
Denominated in EURO	62	56	56	4	-	-	20	117	250	378
Denominated in domestic currency	357	726	617	711	636	639	748	674	714	888
Denominated in other currencies	34	25	25	7	-	-	-	-	-	-
Total	453	807	698	722	636	639	768	791	964	1,266
Outstanding fixed coupon	4	1	1	4	-	-	-	30	107	139
Outstanding floating coupon	450	806	697	718	636	639	768	761	857	1,127
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	453	807	698	722	636	639	768	791	964	1,266
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3	3	3	4
Number of Issuers	2	2	3	3	3	2	2	2	2	3

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	131	24	-	25	-	61	-	-	-
Mortgage	52	206	197	88	138	269	228	116	269	416
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	52	337	222	88	164	269	289	116	269	416
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Benchmark (500Mio - 999Mio)	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.	289	116	269	416
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Total	52	337	222	88	164	269	289	116	269	416
Denominated in EURO	-	-	-	-	-	-	20	96	135	127
Denominated in domestic currency	52	337	222	88	164	269	269	20	135	290
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	52	337	222	88	164	269	289	116	269	416
Issuance fixed coupon	-	-	-	-	-	-	-	30	78	31
Issuance floating coupon	52	337	222	88	164	269	289	86	192	385
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	52	337	222	88	164	269	289	116	269	416
Number of New Issuers	-	-	1	-	-	-	-	-	-	1

5.2.25 PORTUGAL

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	150	1,150	1,400	1,400	1,300	1,200	400	500
Mortgage	2,000	7,850	15,270	20,270	27,690	33,248	34,321	36,016	33,711	34,461
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	2,000	7,850	15,420	21,420	29,090	34,648	35,621	37,216	34,111	34,961
Public Placement										
Benchmark (1bn and above)	2,000	6,500	12,150	18,150	17,900	15,358	11,550	9,706	8,656	6,906
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	750	1,500	3,000
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	1,350	3,270	3,270	11,190	19,290	24,071	26,760	23,955	25,055
Total	2,000	7,850	15,420	21,420	29,090	34,648	35,621	37,216	34,111	34,961
Denominated in EURO	2,000	7,850	15,420	21,420	29,090	34,648	35,621	37,216	34,111	34,961
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	2,000	7,850	15,420	21,420	29,090	34,648	35,621	37,216	34,111	34,961
Outstanding fixed coupon	2,000	6,500	12,170	18,170	17,960	15,418	11,610	10,516	10,966	11,466
Outstanding floating coupon	-	1,350	3,250	3,250	11,130	19,230	24,011	26,700	23,145	23,495
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	2,000	7,850	15,420	21,420	29,090	34,648	35,621	37,216	34,111	34,961
Number of Programmes	1	2	6	8	9	11	11	11	10	11
Number of Issuers	1	2	5	6	7	9	9	9	9	9

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	150	1,000	250	-	-	-	-	100
Mortgage	2,000	5,850	7,420	6,000	11,570	8,450	4,850	4,500	3,825	8,675
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	2,000	5,850	7,570	7,000	11,820	8,450	4,850	4,500	3,825	8,775
Public Placement										
Benchmark (1bn and above)	2,000	4,500	5,650	6,000	3,000	-	-	-	1,000	1,000
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	750	1,500	750
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	1,350	1,920	1,000	8,820	8,450	4,850	3,750	1,325	7,025
Total	2,000	5,850	7,570	7,000	11,820	8,450	4,850	4,500	3,825	8,775
Denominated in EURO	2,000	5,850	7,570	7,000	11,820	8,450	4,850	4,500	3,825	8,775
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	2,000	5,850	7,570	7,000	11,820	8,450	4,850	4,500	3,825	8,775
Issuance fixed coupon	2,000	4,500	5,650	6,000	3,040	-	-	750	3,250	2,500
Issuance floating coupon	-	1,350	1,920	1,000	8,780	8,450	4,850	3,750	575	6,275
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	2,000	5,850	7,570	7,000	11,820	8,450	4,850	4,500	3,825	8,775
Number of New Issuers	1	1	3	1	1	2	-	-	-	-

5.2.26 SINGAPORE

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	n.a.	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.	n.a.	919
Ships	n.a.	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.	n.a.	-
Total Outstanding	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	919
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	919
Benchmark (500Mio - 999Mio)	n.a.	n.a.	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.	n.a.	n.a.	-
Private Placement	n.a.	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.	n.a.	919
Denominated in EURO	n.a.	n.a.	n.a.	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.	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.	n.a.	919
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	919
Outstanding fixed coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	919
Outstanding floating coupon	n.a.	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.	n.a.	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	919
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1
Number of Issuers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	n.a.	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.	n.a.	919
Ships	n.a.	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.	n.a.	-
Total Issuance	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	919
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	919
Benchmark (500Mio - 999Mio)	n.a.	n.a.	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.	n.a.	n.a.	-
Private Placement	n.a.	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.	n.a.	919
Denominated in EURO	n.a.	n.a.	n.a.	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.	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.	n.a.	919
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	919
Issuance fixed coupon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	919
Issuance floating coupon	n.a.	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.	n.a.	-
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	919
Number of New Issuers	-	-	-	-	-	-	-	-	-	1

5.2.27 SLOVAKIA

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	2,214	2,738	3,576	3,608	3,442	3,768	3,835	4,067	3,939	4,198
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	2,214	2,738	3,576	3,608	3,442	3,768	3,835	4,067	3,939	4,198
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Benchmark (500Mio - 999Mio)	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.	1,606	1,477	1,197	927
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,229	2,590	2,742	3,271
Total	2,214	2,738	3,576	3,608	3,442	3,768	3,835	4,067	3,939	4,198
Denominated in EURO	280	510	1,189	3,516	3,350	3,625	3,680	3,925	3,814	4,094
Denominated in domestic currency	1,934	2,161	2,296	-	-	-	-	-	-	-
Denominated in other currencies	-	68	92	92	92	143	155	142	124	104
Total	2,214	2,738	3,576	3,608	3,442	3,768	3,835	4,067	3,939	4,198
Outstanding fixed coupon	1,405	1,666	1,992	1,845	1,571	1,886	2,224	2,611	2,754	3,262
Outstanding floating coupon	809	1,073	1,584	1,762	1,871	1,882	1,606	1,451	1,185	936
Outstanding other	-	-	-	-	-	-	5	5	-	-
Total	2,214	2,738	3,576	3,608	3,442	3,768	3,835	4,067	3,939	4,198
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	8	8	8
Number of Issuers	9	8	8	8	8	8	8	8	8	8

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	676	803	1,414	707	1,179	867	785	841	654	1,159
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	676	803	1,414	707	1,179	867	785	841	654	1,159
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-
Benchmark (500Mio - 999Mio)	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.	248	167	154	-
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	537	674	500	1,159
Total	676	803	1,414	707	1,179	867	785	841	654	1,159
Denominated in EURO	280	230	679	707	1,179	820	735	815	654	1,159
Denominated in domestic currency	396	505	711	-	-	-	-	-	-	-
Denominated in other currencies	-	68	24	-	-	47	50	26	-	-
Total	676	803	1,414	707	1,179	867	785	841	654	1,159
Issuance fixed coupon	227	539	902	529	349	414	703	757	585	940
Issuance floating coupon	449	264	512	178	830	452	77	84	69	219
Issuance other	-	-	-	-	-	-	5	-	-	-
Total	676	803	1,414	707	1,179	867	785	841	654	1,159
Number of New Issuers	-	-	-	-	-	-	-	-	-	-

5.2.28 SOUTH KOREA

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	773	1,120	2,171	2,407	2,536	1,349	1,954
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	-	-	-	773	1,120	2,171	2,407	2,536	1,349	1,954
Public Placement										
Benchmark (1bn and above)	-	-	-	773	773	773	758	725	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	347	721	758	1,088	1,235	1,837
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	117
Private Placement	-	-	-	-	-	677	891	723	113	-
Total	-	-	-	773	1,120	2,171	2,407	2,536	1,349	1,954
Denominated in EURO	-	-	-	-	-	-	-	-	-	-
Denominated in domestic currency	-	-	-	-	-	527	740	723	113	117
Denominated in other currencies	-	-	-	773	1,120	1,644	1,667	1,813	1,235	1,837
Total	-	-	-	773	1,120	2,171	2,407	2,536	1,349	1,954
Outstanding fixed coupon	-	-	-	773	1,120	2,021	2,255	2,536	1,349	1,954
Outstanding floating coupon	-	-	-	-	-	150	152	-	-	-
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	773	1,120	2,171	2,407	2,536	1,349	1,954
Number of Programmes	-	-	-	1	2	2	2	2	1	2
Number of Issuers	-	-	-	1	2	2	2	2	1	2

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	-	-	-	773	347	1,051	178	466	-	919
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	-	-	-	773	347	1,051	178	466	-	919
Public Placement										
Benchmark (1bn and above)	-	-	-	773	-	-	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	347	374	-	363	-	919
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	677	178	103	-	-
Total	-	-	-	773	347	1,051	178	466	-	919
Denominated in EURO	-	-	-	-	-	-	-	-	-	-
Denominated in domestic currency	-	-	-	-	-	527	178	466	-	-
Denominated in other currencies	-	-	-	773	347	524	-	-	-	919
Total	-	-	-	773	347	1,051	178	466	-	919
Issuance fixed coupon	-	-	-	773	347	901	178	466	-	919
Issuance floating coupon	-	-	-	-	-	150	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	773	347	1,051	178	466	-	919
Number of New Issuers	-	-	-	1	1	-	-	-	-	1

5.2.29 SPAIN

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	11,590	17,054	17,749	16,724	19,098	32,657	33,609	30,352	25,495	28,505
Mortgage	214,768	266,959	315,055	336,750	343,401	369,208	406,736	334,572	282,568	252,383
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	226,358	284,013	332,804	353,474	362,499	401,865	440,345	364,924	308,063	280,888
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	243,207	211,343	172,344	146,305
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	11,850	14,098	10,714	13,701
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	200	-	-	-
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	185,088	139,483	125,006	120,882
Total	226,358	284,013	332,804	353,474	362,499	401,865	440,345	364,924	308,063	280,888
Denominated in EURO	226,358	283,334	332,085	352,780	361,751	401,092	438,641	363,731	306,522	279,969
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	679	719	694	748	773	1,703	1,193	1,541	919
Total	226,358	284,013	332,804	353,474	362,499	401,865	440,345	364,924	308,063	280,888
Outstanding fixed coupon	212,878	238,952	262,198	291,929	310,499	343,067	311,719	260,831	200,975	181,033
Outstanding floating coupon	13,480	45,061	70,606	61,545	52,000	58,797	128,625	103,631	107,088	99,855
Outstanding other	-	-	-	-	-	-	-	462	-	-
Total	226,358	284,013	332,804	353,474	362,499	401,865	440,345	364,924	308,063	280,888
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	40	39	40
Number of Issuers	67	69	66	68	59	64	38	32	31	31

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	5,150	5,739	1,670	500	5,900	20,334	6,407	5,895	1,853	10,400
Mortgage	69,890	51,801	54,187	43,580	51,916	72,077	98,846	22,919	23,038	31,375
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	75,040	57,540	55,857	44,080	57,816	92,411	105,253	28,814	24,891	41,775
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	7,200	7,000	8,250	15,000
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3,600	4,840	500	4,750
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.	94,453	16,974	16,141	22,025
Total	75,040	57,540	55,857	44,080	57,816	92,411	105,253	28,814	24,891	41,775
Denominated in EURO	75,040	56,861	55,857	44,080	57,816	92,411	105,253	28,814	24,891	41,775
Denominated in domestic currency	-	-	-	-	-	-	-	-	-	-
Denominated in other currencies	-	679	-	-	-	-	-	-	-	-
Total	75,040	57,540	55,857	44,080	57,816	92,411	105,253	28,814	24,891	41,775
Issuance fixed coupon	66,125	36,549	21,957	37,480	50,891	52,507	27,559	16,169	8,800	23,837
Issuance floating coupon	8,915	20,991	33,900	6,600	6,925	39,904	77,694	12,445	16,091	17,938
Issuance other	-	-	-	-	-	-	-	200	-	-
Total	75,040	57,540	55,857	44,080	57,816	92,411	105,253	28,814	24,891	41,775
Number of New Issuers	1	1	1	1	2	1	3	-	-	2

Source: AIAF, Bloomberg, Reuters, Moody's, Fitch, S&P, ECBC

Note: Please note that the breakdowns in public vs private placements and fixed vs floating coupon are estimations 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.

5.2.30 SWEDEN

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	55,267	92,254	117,628	133,903	188,750	208,894	220,374	217,854	209,842	221,990
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	55,267	92,254	117,628	133,903	188,750	208,894	220,374	217,854	209,842	221,990
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	175,163	173,333	163,281	172,823
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	8,234	10,775	12,149	14,836
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	29,055	26,071	26,047	24,859
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	7,921	7,676	8,364	9,472
Total	55,267	92,254	117,628	133,903	188,750	208,894	220,374	217,854	209,842	221,990
Denominated in EURO	5,283	13,171	21,126	25,787	35,697	37,554	39,995	39,423	36,108	37,931
Denominated in domestic currency	49,474	77,436	93,374	103,809	144,969	159,628	164,501	161,651	156,791	165,682
Denominated in other currencies	510	1,648	3,128	4,308	8,085	11,712	15,878	16,780	16,942	18,377
Total	55,267	92,254	117,628	133,903	188,750	208,894	220,374	217,854	209,842	221,990
Outstanding fixed coupon	55,029	88,944	112,648	126,116	172,693	191,013	198,372	195,770	187,395	200,034
Outstanding floating coupon	21	3,046	4,259	7,169	16,013	17,659	21,778	22,055	22,432	21,956
Outstanding other	217	265	721	619	45	222	224	29	14	0
Total	55,267	92,254	117,628	133,903	188,750	208,894	220,374	217,854	209,842	221,990
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	10	10	9
Number of Issuers	3	6	7	7	7	7	7	8	8	8

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	17,569	36,638	43,488	53,106	79,910	69,800	48,936	51,633	48,424	60,729
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	17,569	36,638	43,488	53,106	79,910	69,800	48,936	51,633	48,424	60,729
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	37,148	35,519	34,881	47,756
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	92	6,753	5,989	5,608
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	10,078	8,276	5,883	6,410
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,620	1,086	1,672	955
Total	17,569	36,638	43,488	53,106	79,910	69,800	48,936	51,633	48,424	60,729
Denominated in EURO	5,283	7,085	10,975	6,705	20,797	13,263	2,485	5,745	6,531	10,066
Denominated in domestic currency	11,794	28,417	31,490	44,354	55,117	52,118	41,971	41,220	39,866	47,364
Denominated in other currencies	492	1,135	1,023	2,047	3,997	4,419	4,481	4,668	2,027	3,299
Total	17,569	36,638	43,488	53,106	79,910	69,800	48,936	51,633	48,424	60,729
Issuance fixed coupon	17,560	35,779	39,135	47,375	68,023	53,137	38,294	42,949	41,346	54,618
Issuance floating coupon	2	752	4,353	5,376	11,888	16,562	10,642	8,684	7,077	6,111
Issuance other	7	107	-	354	-	102	-	-	-	-
Total	17,569	36,638	43,488	53,106	79,910	69,800	48,936	51,633	48,424	60,729
Number of New Issuers	3	3	1	-	-	-	-	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.

5.2.31 SWITZERLAND

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Outstanding CBs - Pfandbriefe	29,395	29,013	36,180	43,283	58,046	60,729	67,652	71,716	78,468	95,940
Outstanding CBs - Structured	-	-	-	3,000	7,000	11,152	18,055	17,348	21,967	15,602
Total Outstanding	29,395	29,013	36,180	46,283	65,046	71,881	85,707	89,064	100,436	111,542
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	17,926	17,120	21,133	14,898
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	23,839	6,218	40,767	60,457
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	35,986	61,351	37,701	35,483
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	7,956	4,376	834	704
Total	29,395	29,013	36,180	46,283	65,046	71,881	85,707	89,064	100,436	111,542
Denominated in EURO	-	-	-	3,000	7,000	10,250	13,000	11,500	15,350	13,100
Denominated in domestic currency	29,395	29,013	36,180	43,283	58,046	60,729	67,652	71,716	78,468	95,940
Denominated in other currencies	-	-	-	-	-	902	5,055	5,848	6,617	2,502
Total	29,395	29,013	36,180	46,283	65,046	71,881	85,707	89,064	100,436	111,542
Outstanding fixed coupon	29,395	29,013	36,180	46,283	65,046	71,752	85,707	89,064	100,312	111,542
Outstanding floating coupon	-	-	-	-	-	-	-	-	124	-
Outstanding other	-	-	-	-	-	129	-	-	-	-
Total	29,395	29,013	36,180	46,283	65,046	71,881	85,707	89,064	100,436	111,542
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4	4	4
Number of Issuers	2	2	2	3	4	4	4	4	4	4

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
New Issues of CBs - Pfandbriefe	4,967	4,559	5,316	9,414	10,834	11,227	12,804	12,568	13,343	15,840
New Issues of CBs - Structured	-	-	-	3,000	4,000	4,152	6,919	1,015	5,850	-
Total Issuance	4,967	4,559	5,316	12,414	14,834	15,379	19,723	13,583	19,193	15,840
Public Placement										
Benchmark (1bn and above)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6,919	906	5,250	-
Benchmark (500Mio - 999Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,394	2,171	4,562	8,822
Others (below 500Mio)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	10,410	10,397	8,782	7,018
Private Placement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	109	600	-
Total	4,967	4,559	5,316	12,414	14,834	15,379	19,723	13,583	19,193	15,840
Denominated in EURO	-	-	-	3,000	4,000	3,250	2,750	-	5,850	-
Denominated in domestic currency	4,967	4,559	5,316	9,414	10,834	11,227	12,804	12,568	13,343	15,840
Denominated in other currencies	-	-	-	-	-	902	4,169	1,015	-	-
Total	4,967	4,559	5,316	12,414	14,834	15,379	19,723	13,583	19,193	15,840
Issuance fixed coupon	4,967	4,559	5,316	12,414	14,834	15,250	19,723	13,474	19,193	15,840
Issuance floating coupon	-	-	-	-	-	-	-	109	-	-
Issuance other	-	-	-	-	-	129	-	-	-	-
Total	4,967	4,559	5,316	12,414	14,834	15,379	19,723	13,583	19,193	15,840
Number of New Issuers	-	-	-	-	1	1	-	-	-	-

Note: from 2008 only Limmat bonds are considered as "Private Placements"

5.2.32 UNITED KINGDOM

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Regulated - Mortgages	-	-	125,764	109,473	125,250	121,623	147,425	114,395	114,654	106,674
Regulated - Public Sector	-	-	-	-	-	-	-	-	-	-
Non-regulated - Mortgages	54,265	84,874	78,092	90,993	77,965	63,429	37,818	18,077	16,143	8,236
Non-regulated - Public Sector	-	-	-	3,439	3,548	3,656	3,742	5,784	6,152	6,358
Total Outstanding	54,265	84,874	203,856	203,905	206,763	188,707	188,985	138,255	136,949	121,268
Public Placement										
Benchmark (1bn and above)	45,269	72,274	179,076	174,036	171,202	147,473	148,608	112,064	107,687	93,997
Benchmark (500Mio - 999Mio)	6,602	8,909	19,789	24,555	27,738	29,424	27,127	13,341	16,995	10,233
Others (below 500Mio)	2,395	3,691	4,981	5,304	6,643	9,231	9,137	8,637	7,948	971
Private Placement	-	-	10	10	1,180	2,580	4,113	4,213	4,319	16,068
Total	54,265	84,874	203,856	203,905	206,763	188,707	188,985	138,255	136,949	121,268
Denominated in EURO	45,176	69,776	79,338	73,324	81,475	102,084	118,667	84,633	77,968	67,651
Denominated in domestic currency	6,552	7,023	116,049	122,395	115,625	76,905	61,012	44,957	50,972	47,613
Denominated in other currencies	2,536	8,075	8,469	8,186	9,663	9,718	9,306	8,665	8,009	6,004
Total	54,265	84,874	203,856	203,905	206,763	188,707	188,985	138,255	136,949	121,268
Outstanding fixed coupon	49,956	76,236	78,287	71,342	83,820	111,426	123,888	106,995	101,816	91,567
Outstanding floating coupon	4,309	8,638	125,410	132,563	122,943	77,282	65,097	31,260	35,133	29,701
Outstanding other	-	-	160	-	-	-	-	-	-	-
Total	54,265	84,874	203,856	203,905	206,763	188,707	188,985	138,255	136,949	121,268
Number of Programmes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	18	17	16
Number of Issuers	7	8	19	21	20	16	15	17	16	15

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Regulated - Mortgages	-	-	10,145	8,254	25,000	36,983	37,109	1,480	12,529	15,015
Regulated - Public Sector	-	-	-	-	-	-	-	-	-	-
Non-regulated - Mortgages	25,813	31,673	110,761	22,177	900	-	-	-	-	-
Non-regulated - Public Sector	-	-	-	3,439	-	-	-	-	-	-
Total Issuance	25,813	31,673	120,906	33,870	25,900	36,983	37,109	1,480	12,529	15,015
Public Placement										
Benchmark (1bn and above)	22,019	27,165	106,620	27,407	15,412	20,190	22,921	1,000	9,135	11,540
Benchmark (500Mio - 999Mio)	2,829	2,809	13,211	6,001	6,603	9,659	9,432	-	2,892	2,159
Others (below 500Mio)	965	1,698	1,064	462	2,706	5,734	3,222	380	396	409
Private Placement	-	-	10	-	1,180	1,400	1,534	100	106	907
Total	25,813	31,673	120,906	33,870	25,900	36,983	37,109	1,480	12,529	15,015
Denominated in EURO	20,500	24,900	10,263	5,535	22,095	27,211	20,024	1,480	6,406	8,135
Denominated in domestic currency	2,829	1,023	110,643	28,335	2,788	8,290	15,041	-	6,123	6,880
Denominated in other currencies	2,483	5,750	-	-	1,018	1,482	2,044	-	-	-
Total	25,813	31,673	120,906	33,870	25,900	36,983	37,109	1,480	12,529	15,015
Issuance fixed coupon	24,472	26,800	2,618	3,750	20,542	35,102	17,991	1,200	6,406	8,816
Issuance floating coupon	1,340	4,873	118,128	30,120	5,359	1,881	19,118	280	6,123	6,199
Issuance other	-	-	160	-	-	-	-	-	-	-
Total	25,813	31,673	120,906	33,870	25,900	36,983	37,109	1,480	12,529	15,015
Number of New Issuers	2	1	11	3	1	-	-	-	-	-

Note: There are 12 regulated issuers each with one regulated mortgage programme, 3 more unregulated programmes from regulated issuers as well as 1 un-regulated issuer with 1 unregulated mortgage programme.

5.2.33 UNITED STATES

Outstanding (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Outstanding										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	4,000	12,859	12,937	12,888	11,497	9,546	6,000	6,000	4,000	4,000
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Outstanding	4,000	12,859	12,937	12,888	11,497	9,546	6,000	6,000	4,000	4,000
Public Placement										
Benchmark (1bn and above)	4,000	12,859	12,937	12,888	11,497	9,546	6,000	6,000	4,000	4,000
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	4,000	12,859	12,937	12,888	11,497	9,546	6,000	6,000	4,000	4,000
Denominated in EURO	4,000	11,500	11,500	11,500	10,000	8,000	6,000	6,000	4,000	4,000
Denominated in domestic currency	-	1,359	1,437	1,388	1,497	1,546	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	4,000	12,859	12,937	12,888	11,497	9,546	6,000	6,000	4,000	4,000
Outstanding fixed coupon	4,000	12,859	12,937	12,888	11,497	9,546	6,000	6,000	4,000	4,000
Outstanding floating coupon	-	-	-	-	-	-	-	-	-	-
Outstanding other	-	-	-	-	-	-	-	-	-	-
Total	4,000	12,859	12,937	12,888	11,497	9,546	6,000	6,000	4,000	4,000
Number of Programmes	1	2	2	2	2	2	2	2	2	2
Number of Issuers	1	2	2	2	2	2	2	2	2	2

Issuance (in EUR million)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Covered Bonds Issuance										
Public Sector	-	-	-	-	-	-	-	-	-	-
Mortgage	4,000	8,859	-	-	-	-	-	-	-	-
Ships	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total Issuance	4,000	8,859	-	-	-	-	-	-	-	-
Public Placement										
Benchmark (1bn and above)	4,000	8,859	-	-	-	-	-	-	-	-
Benchmark (500Mio - 999Mio)	-	-	-	-	-	-	-	-	-	-
Others (below 500Mio)	-	-	-	-	-	-	-	-	-	-
Private Placement	-	-	-	-	-	-	-	-	-	-
Total	4,000	8,859	-	-	-	-	-	-	-	-
Denominated in EURO	4,000	7,500	-	-	-	-	-	-	-	-
Denominated in domestic currency	-	1,359	-	-	-	-	-	-	-	-
Denominated in other currencies	-	-	-	-	-	-	-	-	-	-
Total	4,000	8,859	-	-	-	-	-	-	-	-
Issuance fixed coupon	4,000	8,859	-	-	-	-	-	-	-	-
Issuance floating coupon	-	-	-	-	-	-	-	-	-	-
Issuance other	-	-	-	-	-	-	-	-	-	-
Total	4,000	8,859	-	-	-	-	-	-	-	-
Number of New Issuers	1	1	-	-	-	-	-	-	-	-

5.2.34 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
2004	1.7459	3.6201	1.6416	1.5429	30.464	7.4388	0.70505
2005	1.6109	2.7462	1.3725	1.5551	29	7.4605	0.6853
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**	**0.7340**

	Hong Kong dollar	Hungarian forint	Iceland krona	Japanese yen	Korean won (Republic)	Lithuanian litas	Latvian lats
2004	10.5881	245.97	83.6	139.65	1410.05	3.4528	0.6979
2005	9.1474	252.87	74.57	138.9	1184.42	3.4528	0.6962
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	0.7025
2014	9.417	315.54	154.29**	145.23	1324.8	3.4528	1.000
2015	**8.4376**	**315.98**	**141.30****	**131.07**	**1280.8**	**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).

	Norwegian krone	New Zealand dollar	Polish zloty	Swedish krona	Singapore dollar	Turkish lira	US dollar
2004	8.2365	1.8871	4.0845	9.0206	2.2262	1836200	1.3621
2005	7.985	1.727	3.86	9.3885	1.9628	1.5924	1.1797
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**

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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