

ECBC

EUROPEAN COVERED BOND
COUNCIL



37TH ECBC PLENARY MEETING

Seville, Spain | 17 September 2025



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Network: Villa Luisa (no password needed)

WELCOME	5
FOREWORD	6
PROGRAMME OF EVENTS	10
37TH ECBC PLENARY MEETING - AGENDA	14
SPEAKERS	16
6TH EEMI SUSTAINABILITY AND DIGITALISATION PAVILION	33
MARKET INSIGHTS	
Towards an Operational Standard for Truly Effective Energy Efficiency: The EACCP* Proposal Claudio Pacella, partner of Harley&Dikkinson	35
The primary market for covered bonds – review H1 and outlook H2 Florian Hillenbrand, Helaba	39
ESG covered bonds at a glance Rodger Rinke, LBBW	42
Spanish Covered Bonds Have Come a Long Way Tomas Rodriguez-Vigil Junco & Ketan Thaker, Morningstar DBRS	47
Property Value under Art. 229 CRR III: Methodological Implementation and Practical Application Andreas Kunert, vdpResearch GmbH	51

Audiovisual notice: The Conference will be open to media. A photographer will be present at the event taking photographs for our internet / intranet webpage. If you prefer not to have your photograph taken, please approach the photographer directly. The event may be filmed and the video recording, or parts of it, may be published on the internet / intranet.



37th ECBC Plenary Meeting

Seville, 17 September 2025

Dear Delegate,

We are delighted to welcome you to Seville ! This gathering of the covered bond community for the 37th ECBC Plenary Meeting is a testament to our ongoing commitment to shaping the future of our society – one rooted in multilateralism, global cooperation and solidarity. Ours is a global community that, over the years and throughout past crises, has transformed challenges into opportunities by showing market leadership which has allowed us to forge workable and sustainable compromises, share and develop market best practices, and drive forward deep technical market knowledge.

Our mission is to foster the development of an affordable and sustainable housing ecosystem that supports the personal ambitions and dreams of citizens, shaping the Single Market into a land of opportunity by driving economic growth, strengthening labour markets, and promoting financial stability.

ECBC Plenaries are where we learn, collaborate, challenge ideas, shift perspectives and co-create solutions. In short, the Plenary is where we shape the market of tomorrow.

The ECBC plays the role of a market lighthouse in times of crisis and, outside of these, seeks to constantly build and reinforce the bridges that allow us to go beyond existing borders both geographically and intellectually. It is with this mindset that the ECBC brings the Plenary Meeting to the magnificent city of Seville for the first time and we look forward to today's discussions and encourage your active participation. We recognise our differences, yet it is these very differences that enrich us by sparking debate and creating opportunities to learn from one another.

We would like to express our deep gratitude to all the sponsors for supporting the organisation of this Plenary Meeting: Bloomberg, BMO Capital

Markets, DZ BANK, FitchRatings, Harley&Dickinson, Helaba, LBBW, Moody's, MorningStars|DBRS, NORD/LB and vdpResearch. In addition to our sponsors, we would also like to thank our partners: Asociación Hipotecaria Española (AHE), CB Label, European Bank for Reconstruction and Development (EBRD), FT Live, United Nations Environment Programme Finance Initiative (UNEP FI) and the University of Seville for helping to make these events possible. We would also like to thank ABN AMRO, Bloomberg, EcoAsset.AI, GlobalCapital, Harley&Dickinson, MorningStars|DBRS, Storied Data & vdpResearch for their support which allows us to stage the latest in our series of Energy Efficient Mortgage Initiative Sustainability & Digitalisation Pavilions. We are all eager to deepen our understanding of the key issues and trends shaping the global debate on housing markets and their refinancing needs. These discussions will carry forward into tomorrow's Covered Bond Congress, organised in cooperation with our friends at Financial Times Live, who are also generously hosting today's post-Plenary Welcome Congress Reception. We look forward to seeing you at both events.

As recent geopolitical events have shown, we are entering a new era for global trade and markets, one in which the norms of the post-Cold War period no longer hold as they did just months ago. The months ahead may bring further surprises, obliging us to reconsider the very foundations of our political and economic models. Yet while the future remains uncertain, experience tells us that by coming together in fora such as the Plenary, we are stronger as a community, better equipped to meet whatever challenges lie ahead and to turn them into opportunities.

Thank you for joining us today and enjoy the events.

Luca Bertalot
EMF-ECBC Secretary General



Foreword of the ECBC Covered Bond Fact Book

Housing lays the foundation for freedom, dignity and opportunity, paving a solid path towards lasting peace and shared prosperity. Housing policies for their part represent a major social lift, with the potential to support each and every citizen in realising their future expectations. Alongside these, the development of solid long-term funding strategies, which facilitate lenders' access to capital markets and therefore optimise and enhance public resources in this critical sector, is of paramount importance in Europe and around the world. Any sound capital markets solution linked to the housing sector will not only relieve public resources but also reinforce market harmonisation and efficiency in the mechanism of transmission of monetary policies, securing financial stability, affordability and sustainability, whilst facilitating labour mobility and investment opportunities for citizens in the single market.

The lack of affordable housing in Europe has been worsening since the Global Financial Crisis and even more since the Covid Pandemic, particularly affecting larger cities. Such a lack of affordable housing highlights an increasing concern for Europe's social equality, economic growth and productivity as, inter alia, it hampers workers' mobility, the possibility for students to complete their education and the need of the most vulnerable to own or rent a house or a flat at affordable conditions. The Affordable Housing Initiative, newly announced in the European Commission's Renovation Wave Strategy for Europe, aims to ensure access to adequate and affordable housing for all Europeans, while also promoting energy efficiency and environmental sustainability. At the heart of this initiative is the recently announced **European Affordable Housing Plan**, which will provide a roadmap to tackle the root causes of the crisis.

The publication of the 20th edition of the European Covered Bond Council (ECBC) Covered Bond Fact Book this year comes at a critical geopolitical moment and at the dawn of a new political agenda for the European Institutions. In addition to the emphasis placed on ensuring access to affordable housing for all, the new agenda envisages a new role for the Capital Markets Union (CMU) Initiative against the backdrop of the European Banking Authority's (EBA) assessment of the EU covered bond framework. Changing priorities in Brussels, with the Omnibus Simplification Package, augur radical changes to the regulatory landscape. All of these developments are taking place in conjunction with the recently launched initiative on Saving and Investments Union (SIU), which takes forward the debate initiated by the CMU initiative.

Market dynamics and developments are called to design a new capital markets paradigm and resources, the way forward for the covered bond market in the wake of the imminent delivery of the EBA's report. During the recent months of market turmoil, lenders have been able to secure access to capital market

funding by relying on the 250 year old DNA of covered bonds and their macro-prudential characteristics, including low volatility, exceptionally low transaction execution risk, outstanding credit ratings and decreased refinancing costs, which limits banks' reliance on less stable funding and interbank markets.

It is against this background that the EMF-ECBC (European Mortgage Federation – European Covered Bond Council) remains committed to strengthening the European housing market and the Single Market by serving as a catalyst supporting the banking sector and uniting leading market and academic experts to shape an affordable, sustainable housing ecosystem.

Established in 1967, the European Mortgage Federation (EMF) is the voice of the European mortgage industry, worth over €9 trillion at the end of 2024 (EU27 and UK, Norway, and Iceland). In 2004, the EMF founded the European Covered Bond Council (ECBC), bringing together covered bond market participants worldwide, including issuers, analysts, investment banks, rating agencies, and a wide range of other stakeholders. ECBC members represent over 95% of covered bonds outstanding, which were worth over €3.3 trillion globally (of which €2.9 trillion in the EU27, UK, Switzerland, Norway, and Iceland) at the end of 2024.

Through its membership, our organisation represents more than 2,000 financial institutions in more than 60 jurisdictions encompassing the entire mortgage credit value chain from retail to funding activities. We stand ready to assist the EU institutions by sharing knowledge, advice, best practices, cooperating, and supporting the housing agenda with an ecosystem approach, bringing affordability, energy efficiency, and renovation solutions over the coming years. In particular, we believe that we can provide a tangible contribution with our expertise in developing and leading global market initiatives such as the Covered Bond Label with its specific disclosure section of the Harmonised Transparency Template for Green & Sustainable Covered Bonds, the Energy Efficient Mortgage Initiative (EEMI), Energy Efficient Mortgage Label, the International Secondary Mortgage Market Association (ISMMA) and a global housing finance database (HOFINET). These initiatives, where innovation and harmonisation of best practices have already facilitated a leveraging of the market to scale-up efficiencies, demonstrate both the capacity and willingness of our sector to assume and play its full role.

The EMF-ECBC has played a prominent role as a market catalyst through its efforts to monitor and align best practices in promoting dual recourse instruments to support funding in housing, the public sector, and the real economy.

Furthermore, through its technical committees, working groups, and task forces, the EMF-ECBC has developed technical knowledge and centres of competence in both the mortgage and covered bond businesses, with a focus on retail considerations, property valuation, prudential regulation, and funding strategies, to name but a few key areas. By adopting a “think-tank” approach and adhering to a clear global market governance structure, the EMF-ECBC has applied this expertise to help minimise market disruption and ensure the wider adoption of best practices in financial markets.

At the same time, through the initiatives highlighted above, it has sought to deliver active coordination and implementation of an operational market toolkit aimed at harmonising procedures, standards, definitions, and solutions.

Mortgage lenders and capital markets have played and will continue to play a crucial and catalytic role in supporting economic transition, providing the means to respond to local, regional and national needs – especially with regards to access to housing, with an overarching European financial infrastructure which also supports the EU’s leadership in ESG policies as a geopolitical financial model. In this context, designing an affordable and sustainable housing ecosystem that supports citizens, investors, and lenders is an opportunity to generate both macro- and micro-economic growth models.

In this context, the EMF-ECBC is proposing constructive ideas which can help in creating a sustainable and affordable Housing Ecosystem:

1. Market governance and coordination between public and private sector stakeholders
2. Capital Markets support and guarantee schemes
3. Additional funding options to scale up capital markets resources for a Housing Ecosystem

Honing in on capital markets, in the context of capital market development in a potential long-term alignment with the SIU debate, it is essential to underline the critical complementarity in securing optimisation of access to capital markets played by both covered bonds and securitisation. These are two key tools for bank funding and capital markets development, albeit each with distinct structures, risk profiles and regulatory frameworks.

In the context of the current political debate, these instruments play unique but mutually reinforcing roles in the financial ecosystem offering:

1. Diverse Funding Sources: Covered bonds and securitisation offer banks diverse funding options. Covered bonds offer stable, long-term funding with lower risk, while securitisation allows banks to achieve efficient capital management with the benefit of redeploying capital in segments of interest and free up regulatory capital. There is very little overlap between the two investor groups, and the complementarity in the funding mix allows the use of both tools, mobilising two very different parts of the market to the needs of housing finance.

2. Market Stability and Resilience: The dual recourse nature of covered bonds contributes to financial stability, particularly in times of crisis. By distributing risk across a broad base of investors, securitisation enhances market resilience through accrued risk sharing and supports credit availability.

3. Enhanced Liquidity: Both instruments contribute to market liquidity. Covered bonds are typically highly liquid, making them attractive for institutional investors. Securitisation can create liquidity for less liquid asset classes, broadening access to funding.

4. Investor Diversification: Each asset class’s different risk profiles and structures attract a wide range of investors, from conservative to risk-seeking. Diversifying the investor base enhances the robustness and depth of capital markets.

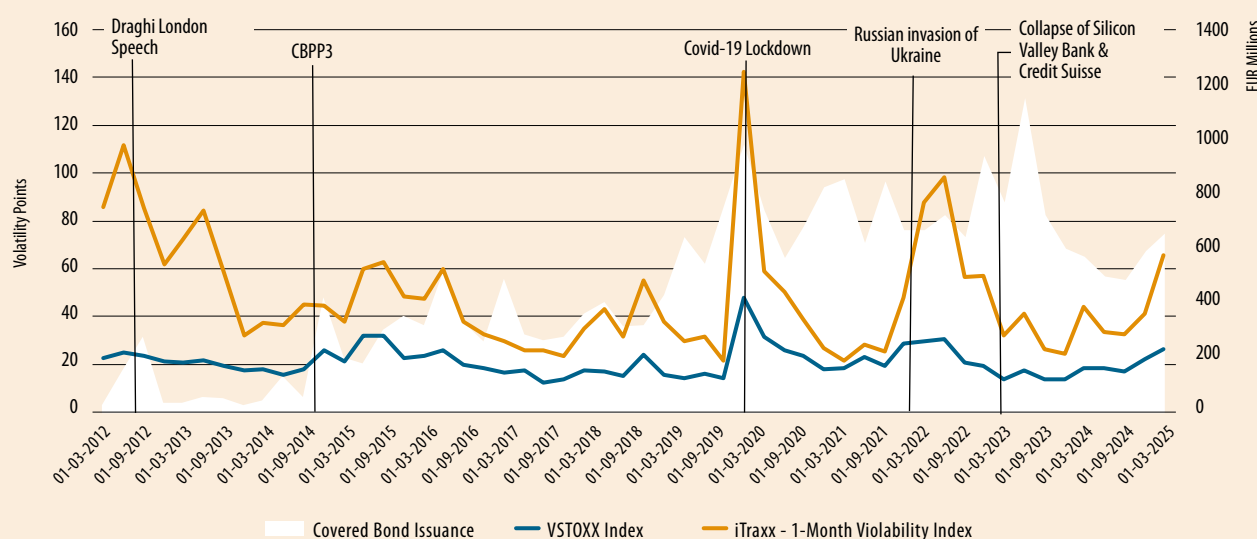
5. Regulatory Balance: Harmonised regulatory frameworks for covered bonds and securitisation under the CMU ensure high standards of transparency, quality and investor protection, fostering trust and participation in European capital markets.

6. SME Financing: European Secured Notes (ESN) and SME securitisation are mutually complementary as ESNs would be issued based on an issuance programme, therefore acting as a resilient funding instrument for SMEs, especially in times of market volatility where issuers can react quickly according to the economic context, whereas securitisations would finance SMEs through investors’ differing risk appetites and would be issued via stand-alone transactions in periods of market stability. Furthermore, ESNs are also complementary to the importance of balance sheet SME securitisations, which are currently allowing banks to off-load portions of their regulatory capital, allowing new credit issuance to the real economy.

7. Economic Growth: Both instruments support economic growth by improving banks’ and businesses’ access to finance. Covered bonds provide stable funding for mortgages and public sector projects, while securitisation facilitates credit for a wide range of economic sectors, including SMEs and consumer lending.

This strategic complementarity also offers unique value in terms of the ability of these asset classes to support housing solutions and the transition to a climate-neutral economy due to their pivotal role in forging a path to sustainable growth, stability, and shared prosperity. Capital market solutions continue to evolve and expand, transcending borders and bridging gaps between capital markets and the real economy.

During the recent years of market turmoil, also impacting the levels of customer deposits, lenders have been able to secure access to capital market funding by relying on covered bonds and their macroprudential characteristics. This anti-cyclical, long-term financing instrument has become a pillar of EU financial stability and is the nexus between harmonised European financial innovation and the traditions that sit within national legal frameworks. Together, via the harmonisation and convergence of efforts through the entry into force of the Covered Bond Directive and the ongoing pursuit

FIGURE 1 | COVERED BOND LABELLED ISSUANCE OVER TIME SHOWING ANTI-CRISIS ACCESS TO CAPITAL MARKETS

The **VSTOXX** Indices are based on EURO STOXX 50 realtime options prices and are designed to **reflect the market expectations of near-term up to long-term volatility** by measuring the square root of the implied variance across all options of a given time to expiration.

The European **iTraxx** indices trade 3, 5, 7 and 10-year maturities, and a new series is determined on the basis of **liquidity** every six months.

Sources: Bloomberg & Covered Bond Label

of third-country equivalence for non-EEA countries, our industry continues to seek to address geographical barriers.

The covered bond market continues to evolve and expand, transcending borders and bridging gaps between capital markets and the real economy. Beyond the purely financial aspects, for most jurisdictions the introduction of covered bonds has also resulted in the provision of more affordable mortgages, more funding choices for lenders and more long-term borrowing options for consumers when they make the biggest investment of their life.

In this context, the ECBC Covered Bond Fact Book represents an industry transparency and information toolkit offering a deep-dive into the covered bond world, summarising the latest market trends, providing a statistical overview and compiling detailed legal information, jurisdiction by jurisdiction. Moreover, the Fact Book sheds light on the potential of this asset class to support the transition to a climate-neutral economy through covered bonds' pivotal role in forging a path to sustainable growth, stability, shared prosperity and, in the end, a brighter future for all.

The ECBC Covered Bond Fact Book together with the Covered Bond Label comparative database serve as a map and compass, guiding market participants, regulators and policymakers through the intricacies of the covered bond market.

The Fact Book represents the collective effort of our community to produce a prime academic and statistical benchmark publication, whilst coordinating

a discussion forum encompassing the collaborative spirit and the different cultures of ECBC members.

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

On a daily basis, capital market participants need complete and accurate information to support regulatory compliance with the Covered Bond Directive, LCR eligibility and ESG-related diligence matters, to name but a few priorities, and this need is growing all the time. This is where the ECBC comes into its own. The ECBC-led Covered Bond Label¹, has become a qualitative benchmark as an informative gateway into the covered bond space.

Most recently, the ECBC has completely refreshed its Comparative Database² on global covered bond legislative frameworks, which is embedded in the Covered Bond Label website.

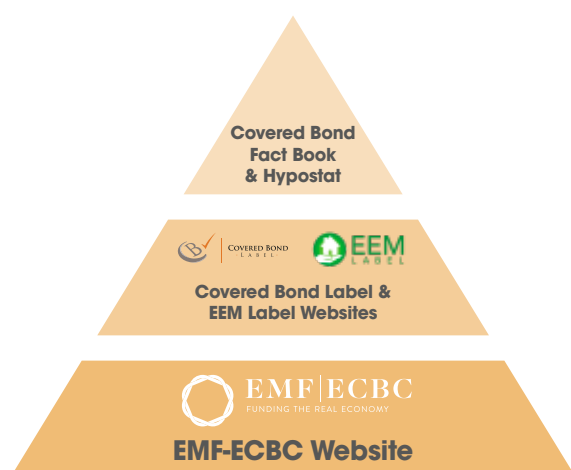
At the same time, it has sought to deliver active coordination and implementation of initiatives aimed at harmonising procedures, standards, definitions and solutions, for example via the Covered Bond Label and its Harmonised Transparency Template (HTT), the Energy Efficient Mortgages Initiative (EEMI)³ or the Energy Efficient Mortgage Label (EEM Label)⁴ and its Harmonised Disclosure Template (HDT).

1 www.coveredbondlabel.com

2 <https://compare.coveredbondlabel.com>

3 www.energyefficientmortgages.eu

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



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

The operational entry level of the pyramid is the [EMF-ECBC website](https://hypo.org)⁵ through which the EMF-ECBC provides access to all position papers, studies and analysis produced by its technical committees and working groups, offering a valuable window into the potential of current and future legislative and market evolutions. The EMF-ECBC website furthermore provides links to its member organisations, giving an insight into the experts behind the knowledge.

Stepping up a level, the next layer of the pyramid consists of the Covered Bond Label website, where around EUR 2 trillion of covered bonds outstanding are officially registered. The Covered Bond Label website offers a unique level of transparency as the data it holds is managed directly by issuers, ISIN by ISIN, on: (1) liabilities’ characteristics; (2) cover asset data via the Harmonised Transparency Template (HTT); and (3) the features of national legislation, which are summarised and comparable at global level. In a similar way, on the ESG lending side, the EEM Label website offers transparency in the energy efficient mortgages space for consumers, lenders and investors. The pyramid’s cornerstone lies in the compliance with disclosure requirements, with the Covered Bond Label’s HTT being fully aligned to Article 14 of the Directive.

At the top of the pyramid are the EMF-ECBC’s flagship publications offering a deeper dive into market dynamics and legislative developments: the ECBC Fact Book and the EMF Hypostat. The ECBC Fact Book crowns the Covered Bond Label website and Comparative Database with its insights into key themes and trends having impacted the covered bond space in the previous year, national legislation, summaries of the overarching macroprudential value and regulatory treatment of the asset class, as well as synopses of rating agencies’ methodologies. Through the Hypostat, the EMF-ECBC delivers a unique analysis of trends in Europe’s mortgage and housing markets, offering a comprehensive asset

side perspective of mortgage market dynamics and national characteristics for investors and other market participants.

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

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

The EMF-ECBC has always sought to be part of the solution and has activated the Industry’s best resources to monitor, analyse, discuss and guard against potentially negative impacts for mortgage, housing and funding markets worldwide, amalgamating different cultures and market perspectives in a common way forward. Over the years, this approach has become the true *fil rouge* of our industry’s *modus operandi*, and we are always ready to adapt to challenges whilst preserving asset quality and ensuring consumer and investor protection.

Our myriad of market-led initiatives reinforce the role of the European mortgage market as a driver for growth and risk reduction. As identified in the Report “Assessing real estate risks and vulnerabilities: Hidden cracks in the financial system?” prepared by the Economic Governance and EMU Scrutiny Unit (EGOV) of the European Parliament in April 2025 at the request of the European Parliament’s Economic and Monetary Affairs Committee (ECON), there is a growing need for strengthening oversight, improving data collection, and adjusting regulations. This Report concludes that too many national segmentations remain across Member States, there is ample room for bringing national markets closer to the best practice, and that asymmetries should be investigated, aiming to promote a faster alignment towards best practices. The EMF-ECBC stands ready to continue its support and commitment to EU institutions toward effective policies for affordable housing and resilient financing conditions.

After so many years of activities and successful market initiatives, there is no doubt that we are stronger together and we would like to thank all ECBC members for their inputs, engagement and continued support. We would particularly like to express our gratitude to the contributors to this year’s publication for their work in ensuring that this 20th edition of the ECBC European Covered Bond Fact Book remains:

- > The leading source of covered bond market intelligence; and
- > The primary source for aggregate covered bond market data and statistics, and a comparative framework analysis.

Stefano Patruno
ECBC Chairman

Luca Bertalot
EMF-ECBC Secretary General

⁵ <https://hypo.org>



Programme of Events

All times CEST (UTC+2)

Monday, 15 September 2025

15:00 – 17:30	ECBC GLOBAL ISSUES WORKING GROUP MEETING IN THE MAGNOLIA ROOM OF THE MELIA SEVILLA HOTEL Dr. Pedro De Castro, 1, 41004, Seville
19:30 – 22:30	WELCOME DINNER AT THE ABADES TRIANA RESTAURANT C/ Betis 69, 41010 Seville

Tuesday, 16 September 2025

8:30 – 9:00	WELCOME COFFEE AT THE UNIVERSITY OF SEVILLE San Fernando street, 4, 41004, Seville
9:00 – 13:00	EMF-ECBC ACADEMY TRAINING & MARKET UPDATE IN THE AUDITORIUM ROOM (PARANINFO) OF THE UNIVERSITY OF SEVILLE San Fernando street, 4, 41004, Seville
13:00 – 14:00	BUFFET LUNCH AT THE UNIVERSITY OF SEVILLE San Fernando street, 4, 41004, Seville
14:30 – 15:30	COVERED BOND LABEL FOUNDATION (CBLF) LABEL COMMITTEE MEETING IN THE MAGNOLIA ROOM OF THE MELIA SEVILLA HOTEL Dr. Pedro De Castro, 1, 41004, Seville
15:30 – 17:30	EUROPEAN COVERED BOND COUNCIL (ECBC) STEERING COMMITTEE MEETING IN THE MAGNOLIA ROOM OF THE MELIA SEVILLA HOTEL Dr. Pedro De Castro, 1, 41004, Seville
15:30 – 17:30	ECBC ROUNDTABLE FOR AUTHORITIES & INVESTORS IN THE AZALEA ROOM OF THE MELIA SEVILLA HOTEL Dr. Pedro De Castro, 1, 41004, Seville
18:00 – 20:00	ECBC COVERED BOND INVESTORS' APERITIF IN THE CRYSTAL HALL OF VILLA LUISA Av. Manuel Siurot, 1, 41013, Seville
20:00 – 20:40	FLAMENCO SHOW IN THE CRYSTAL HALL OF VILLA LUISA Av. Manuel Siurot, 1, 41013, Seville

20:40 – 23:10 **37TH ECBC PLENARY DINNER**
 IN VILLA LUISA
 📍 Av. Manuel Siurot, 1, 41013, Seville

Wednesday, 17 September 2025

9:00 – 15:30 **37TH ECBC PLENARY MEETING**
 IN THE CRYSTAL HALL OF VILLA LUISA
 📍 Av. Manuel Siurot, 1, 41013, Seville

9:00 – 15:30 **6TH EEMI SUSTAINABILITY AND DIGITALISATION PAVILION**
 IN THE GARDENS OF VILLA LUISA
 📍 Av. Manuel Siurot, 1, 41013, Seville

17:00 – 00:00 **FINANCIAL TIMES LIVE PRE-CONGRESS PARTY**
 IN HACIENDA EL VIZIR
 📍 Hacienda El Vizir, Gines – Espratinas Road, Espartinas, Seville

Thursday, 18 September 2025

9:00 – 17:00 **FINANCIAL TIMES LIVE – ECBC COVERED BOND CONGRESS 2025**
 AT THE FIBES
 📍 Avda. Alcalde Luis Uruñuela, 1 (41020) Seville



EMF-ECBC Academy Training Session

Auditorium Room (Paraninfo), University of Seville

📍 San Fernando street, 4, 41004, Seville

8:30-14:00 CEST (UTC+2)

Tuesday, 16 September 2025

8:30	REGISTRATION AND WELCOME COFFEE
9:00	WELCOME & INTRODUCTIONS Luca Bertalot , EMF-ECBC Secretary General
9:05	DYNAMICS & TRENDS IN THE AUSTRALIAN CB MARKET: DEVELOPING OPPORTUNITIES Guy Volpicella , Westpac Australia
9:25	PRIMARY MARKET INNOVATION & OPPORTUNITIES Armin Peter , Consultant – International Capital Market Association (ICMA)
9:45	CLIMATE AND BIODIVERSITY RISKS FOR REAL ESTATE GLOBALLY – A SIMPLE SOLUTION TO A COMPLEX PROBLEM Sascha Koch , VIDA
10:05	NEXT-GENERATION COVER POOLS: AI AUTOMATION FOR ESG COMPLIANCE Vladimir Rubin , EcoAsset.AI
10:25	BEST PRACTICE: SMART MONITORING OF TIME- AND EVENT- BASED REAL ESTATE Reinier Mijsberg , ABN AMRO Erik Schlooz , KATE Innovations
10:45	COFFEE BREAK
11:15	DECODING HOUSING AFFORDABILITY IN GREECE Dr. Panayotis Kapopoulos , Alpha Bank
11:35	MORNINGSTAR DBRS' COVERED BOND RATING METHODOLOGY Tomas Rodriguez-Vigil Junco , MorningStar DBRS
11:55	ESG PERSPECTIVES FOR THE COVERED BOND SPACE Maureen Schuller , ING
12:15	PROPERTY VALUE – A NEW CONCEPT OF VALUE FOR THE BANKING INDUSTRY Andreas Kunert , vdp
12:35	REGULATORY UPDATE FROM THE UNITED STATES Anna Pinedo , Mayer Brown LLP
12:55	CLOSING REMARKS Luca Bertalot , EMF-ECBC
13:00	BUFFET LUNCH

ECBC Covered Bond Investors' Aperitif

Crystal Hall Villa Luisa

📍 Av. Manuel Siurot, 1, 41013, Seville

18:00-19:30 CEST (UTC+2)

Tuesday, 16 September 2025

18:00	WELCOME DRINK
18:30	OPENING REMARKS Stefano Patruno , ECBC Chairman Luca Bertalot , EMF-ECBC
18:50	EBA REPORT ON CALL FOR ADVICE ON THE REVIEW OF THE EU COVERED BOND FRAMEWORK – UPDATE Lars Overby , European Banking Authority (EBA)
19:10	ECBC INVESTOR SURVEY 2025 - OVERVIEW MODERATOR Niek Allon , Moderator of the ECBC Investor Task Force & NN Bank PANELLISTS Florian Eichert , Crédit Agricole Corporate and Investment Bank Frederik Kunze , NORD/LB Olaf Pimper , Commerzbank
20:00	FLAMENCO SHOW
20:40	37TH ECBC PLENARY DINNER



37th ECBC Plenary Meeting - Agenda

Crystal Hall Villa Luisa

Av. Manuel Siurot, 1, 41013, Seville

8:30-15:30 CEST (UTC+2)

Wednesday, 17 September 2025

8:30	REGISTRATION AND WELCOME COFFEE
9:00	ECBC CHAIRMAN'S NOTE Stefano Patruno , ECBC Chairman
9:10	AGENDA OVERVIEW Luca Bertalot , European Mortgage Federation – European Covered Bond Council (EMF-ECBC)
9:15	KEYNOTE SPEECH Pablo Pérez , Banco de España
9:30	COVERED BOND MARKETS IN EUROPE – SESSION ONE MODERATOR Antonio Torio , Spanish Mortgage Association (AHE) PANELLISTS Sanna Eriksson , ECBC Deputy Chairwoman & OP Financial Group Maria José Fernández González , Banco de España Juan Garcia , Fitch Ratings Csaba Nagy , OTP Mortgage Bank & OTP Building Society Alexander Zeidler , Moody's → <i>Market Evolution in a Post-Directive Era</i> → <i>Extendable Maturities: the new normal?</i> → <i>New Covered Bond Markets: just around the corner?</i>
10:15	COFFEE BREAK
10:45	KEYNOTE SPEECH Andreea Moraru , European Bank for Reconstruction and Development (EBRD)
11:00	DEVELOPMENT OF AFFORDABLE & SUSTAINABLE HOUSING MARKETS IN THE EU AND BEYOND – SESSION TWO MODERATOR Luca Bertalot , EMF-ECBC PANELLISTS Sergiu Oprescu , UniCredit Bank Romania & EMF Chairman Luiz de Mello , Organisation for Economic Cooperation and Development Johannes Trautwein , DZ Bank Patrick Seifert , LBBW Frank Will , HSBC & Chairman of ECBC EU Legislation Working Group → <i>Mortgage Markets and Housing Finance: two sides of the same coin</i> → <i>Housing as a Driver of Convergence for the Single Market: reinforcing opportunities for citizens</i> → <i>Capital Market Support for the European Union in a new Geopolitical Context</i>
11:45	KEYNOTE SPEECH Yeonmi Park , Human Rights Foundation

12:00	LUNCH BREAK
13:00	KEYNOTE SPEECH Kyung-Hwan Kim , Korea Housing Finance Corporation (KHFC)
13:15	KEYNOTE SPEECH David Marks , Defence, Security & Resilience Bank (DSRB)
13:30	OUTLOOK FOR CAPITAL MARKETS IN EUROPE AND BEYOND – SESSION THREE MODERATOR Thomas Cohrs , ECBC Liquidity Task Force Moderator & Helaba PANELLISTS Elena Bortolotti , ECBC Rating Agency Approaches Working Group Chairwoman & Barclays CIB Bart Verwaest , Belfius Sven Gerhardt , Bloomberg Michael McCormick , BMO Capital Markets Carsten Tegtmeier , NORD/LB → <i>Latest Market Trends and Evolutions</i> → <i>Third-Country Equivalence Regime: between opportunities and risks</i> → <i>Data Transparency for a Global Investor Base: the way forward to support development of capital markets</i>
14:15	KEYNOTE SPEECH Ana Bachurova , United Nations Environment Programme Finance Initiative (UNEP FI)
14:30	DELIVERING THE ENERGY EFFICIENT MORTGAGE ECOSYSTEM – SESSION FOUR MODERATOR Jennifer Johnson , EMF-ECBC PANELLISTS Ana Bachurova , UNEP FI Daniela Antonini , Banco BPM Miguel García de Eulate Martín , Caja Rural de Navarra Claudio Pacella , CEO Centro Finanziamenti S.p.A., partner of Harley & Dickinson → <i>ESG Perspective: a new landscape for issuers and investors</i> → <i>Building a Sustainable Ecosystem around Consumers</i> → <i>How to Incentivise Consumers, Lenders and Investors? Lining up new strategies for the banking sector</i>
15:15	CLOSING REMARKS Stefano Patruno , ECBC Chairman
15:30	END OF PLENARY MEETING
16:30	BUS TRANSFER TO THE FINANCIAL TIMES LIVE PRE-CONGRESS PARTY

Speakers



Niek ALLON

Head of Treasury, Nationale-Nederlanden Bank (NN Bank)

Niek Allon is since June 2020 Head of Treasury at NN Bank. NN Bank is the fifth largest retail bank in the Netherlands and part of NN Group. The bank is a frequent issuer of covered bonds and unsecured funding. Previously Niek worked for over 23 years at NIBC Bank, where he performed several roles within treasury, structuring, syndicate and distribution. In his career, he has gained extensive experience in issuing and

structuring covered bonds, senior unsecured, RMBS and structured finance transactions. From 2017 until 2020, Niek acted as Chairman of the European Covered Bond Council (ECBC). Currently, he moderates the Investor Task Force of the ECBC. Niek received his master's degree in business administration from Groningen University and is a registered treasurer (VU University Amsterdam).



Daniela ANTONINI

Head of Sustainable Finance & Advisory, Banco BPM

Daniela Antonini is a senior expert in sustainable finance, currently leading the Sustainable Finance & Advisory division at Banco BPM. Under her leadership, the bank has issued over €7 billion in Green and Social Bonds and developed one of the first EU Taxonomy-aligned Green, Social & Sustainability Frameworks in Europe. She has played a key role in integrating ESG targets into products, bank's investment guidelines and sustainability reporting (CSRD, GAR, Pillar 3). In her role, she also acts as advisor for the development of frameworks for customer corporates.

Daniela actively contributes to international market standards as a member of ICMA working groups and serves as Coordinator

of the Italian HUB of the Energy Efficient Mortgages Initiative (EEMI-EMF), fostering cooperation among European banks on green mortgage practices.

She has recently completed MIT Sustainability Certificate Program, with graduation in August 2025. Daniela holds a degree in Economic and Banking from the University of Siena (with 110/110 cum Laude).

In addition to her professional role, Daniela is a lecturer in Sustainable Finance at both Politecnico di Milano and Ca' Foscari University of Venice, promoting ESG knowledge across academia and the next generation of finance professionals.



Ana BACHUROVA

Energy Efficiency Lead, UNEP FI

Ana Bachurova is the Energy Efficiency Lead at the United Nations Environment Programme Finance Initiative (UNEP FI). In this capacity, she contributes to the European Energy Efficiency Finance Coalition - a collaborative platform with EU countries, financial institutions, and the European Commission aimed at enhancing private financing for energy efficiency projects. She is also involved in capacity-building initiatives on energy efficiency finance - part of UNEP FI's mission to scale sustainable finance and implement the Principles for Responsible Banking.

Ana is an environmental policy & finance professional, with 15+ years of experience in investment and policy initiatives

supporting the transition to a green and low-carbon economy. She has worked in a number of international organisations, such as the German Agency for International Cooperation (GIZ), the Stockholm Environment Institute (SEI), and the European Bank for Reconstruction and Development (EBRD).

Ana holds B.Sc. in Environmental and Resources Management from the Brandenburg University of Technology, M.Sc. in Environmental Governance from the University of Freiburg, and an MBA from the Yale School of Management. Ana is also a member of the International Society of Sustainability Professionals (ISSP).



Luca BERTALOT

Secretary General, EMF-ECBC

Luca Bertalot is Secretary General of the European Mortgage Federation - European Covered Bond Council (EMF-ECBC), representing the interests of EU mortgage lenders and the covered bond community in discussions with the European Institutions and stakeholders in general on all issues relating to the retail and funding sides of the mortgage business. Established in 1967, the EMF is the voice of the European mortgage industry, providing data and information on European mortgage markets, which were worth over €9.1 trillion at the end of 2024 (EU27 + UK, Norway and Iceland). In 2004 the EMF founded the ECBC, a platform that brings together covered bond market participants including issuers, analysts, investment bankers, rating agencies and a wide range of interested stakeholders. ECBC members represent over 95% of covered bonds outstanding, which were worth over €3.31 trillion at the end of 2024.

In his capacity as EMF-ECBC Secretary General, Luca is also Consortium Coordinator for the Energy Efficient Mortgages Initiative (EEMI). In addition, Luca is a member of the European Commission's Sustainable Energy Investment (SEI) Forum's Advisory Group, the Advisory Board of the Ca' Foscari University of Venice's Economics Department and a member of the Board of the Housing Finance Network (HOFINET).

Luca joined the EMF-ECBC in 2006, becoming Head of the ECBC in 2007 and was appointed Secretary General in 2014. Prior to this, he worked as a financial analyst in Italy and Australia. Luca holds a degree in Economics and Financial Markets from the University of Rome, Tor Vergata. He also studied at the University of Mannheim, Germany, and at the Wharton School - University of Pennsylvania, in the United States.



Elena BORTOLOTTI

Current Managing Director & Global Head of Covered Bonds and Head of Structured Solutions for EME, Barclays

Elena Bortolotti is a Managing Director and Global Head of Covered Bonds & Head of Structured Solutions for EME at Barclays. She joined Barclays' securitisation and covered bond structuring team in January 2006. She has worked on structuring legislative and structured covered bonds across jurisdictions and securitisations backed by various assets classes including: residential mortgages, consumer loans, SME loans and trade receivables. Her focus has been in establishing

covered bond programmes in new jurisdictions (including Iceland, Czech Republic, Turkey, Singapore, Poland, Japan and Romania).

Before joining Barclays, Elena spent four years with the Italian securitisation team at Deloitte Consulting in Milan working on both Italian and Greek securitisations. Elena is Chairwoman of the ECBC Rating Agency Working Group 2024-2027.



Thomas COHRS

Head of DCM, Syndicate & Relationship Management, HELABA

Thomas Cohrs, CFA, L.L.M. has joined HELABA in 2019 with a brief to invigorate its FI/SSA franchise and a view to establish the bank as a European Covered Bond champion. In this capacity, he heads the DCM, Syndicate and Relationship Management functions for all of HELABA's FI/SSA clients and reports to the Global Head of Capital Markets.

Before joining HELABA, Thomas was in a similar function at NORD/LB where he spent 10 years focusing exclusively on DCM and Syndicate and firmly established that institution

on the Global Covered Bond Markets map. Thomas set out on his career as an FX trader with Irving Trust and Chemical Bank (which eventually ended up within BNY Mellon and JP Morgan, respectively) before studying economics at the London School of Economics. He then joined UniCredit (then Bayerische Vereinsbank) in Munich where he held several executive positions including Head of Treasury for the bank's Polish subsidiary in Warsaw. Thomas holds degrees in economics, management and law from universities in London, Manchester, Frankfurt and Berlin.



Florian EICHERT

Head of Covered Bond & SSA Research, Credit Agricole CIB

Florian Eichert heads CACIB's covered bond and SSA research team. He joined CACIB in August 2010 from LBBW in Stuttgart, where he had been for six years. After more than seven years in London, Florian relocated to Frankfurt at the end of 2017. He won the "Best Covered Bond Research" category at the Global Capital Covered Bond Awards for the first time in September 2011 at the Euromoney / ECBC Covered Bond

Congress in Barcelona and has since followed up with ten more wins, the latest one coming in 2024 in Porto.

Florian has been a member of the Steering Committee of the European Covered Bond Council since 2015 and has served as chairman of the data and statistics working group for eight years representing CA CIB in this important industry body.



Sanna ERIKSSON

Managing Director, OP Mortgage Bank Head of Investor Relations, OP Financial Group Deputy Chairwoman, ECBC

Since 2019 Sanna Eriksson has been the Managing Director of OP Mortgage Bank and the Head of Investor Relations for OP Financial Group in Finland. She has worked in the Group since 2000 in various managerial positions and for the last 12 years in OP Mortgage Bank.

Sanna actively contributes to the field by representing Finnish Covered Bond issuing entities in the European Covered Bond Council's (ECBC) Steering Committee as its Deputy Chairwoman. In 2019, Sanna became a member of Finance Finland's Mortgage Bank Committee and, as of 2023 she has been its chairwoman.

Green finance is close to Sanna's heart and under her leadership, OP Mortgage Bank has been the pioneer issuing the inaugural Green Covered Bond in Finland in 2021 and the next one in 2022.

Sanna holds a degree in Marketing from Helsinki School of Economics and finds sustainability to be an integral part of her life both on and off work.



Maria José FERNÁNDEZ GONZÁLEZ

Senior adviser to the Director of the Regulation Department, Banco de España

Senior adviser to the Director of the Regulation Department -Banco de España- and Banco de España representative in different international committees and working groups (EBA, BIS, EU Council, EU Commission).

Degree in Economics and Business Studies, with specialisation in Auditing and Finance -Colegio Universitario de Estudios Financieros (CUNEF)-. Degree in Law -Universidad Nacional de Educación a Distancia (UNED)-. PhD in Economics with Special distinction -Universidad Nacional de Educación a Distancia (UNED)-.

Adviser on financial regulation and policy to the Deputy General Director of the Treasury and Financial Policy at the Spanish Ministry of Economic Affairs and Finance (2015-2017). Senior policy expert on banking regulation at the European Banking Authority (2014-2015). Senior Economist in the Regulation Department of the Banco de España (1989-2014). Associate lecturer -UNED- (1988-2001). Auditor in KPMG (1988-1989). Deputy Director Compliance, Analysis and Financial Innovation in Descontiber (1989).



Juan David GARCÍA

Senior Director, Fitch Ratings

Juan David García is a senior director within Fitch Ratings' European structured finance group, based in Madrid. He manages the team that conducts the rating analysis of Structured Finance transactions in Spain, Portugal and Greece and Spanish Covered Bonds.

Juan re-joined the agency in 2011 after working at Deutsche Bank as head of the independent valuations team covering European securitisation bonds and illiquid portfolios, based in

London. Prior to that, he worked at Fitch Ratings in London and Madrid between 2004 and 2008, and at ING Bank and Banco Santander in Spain and Colombia respectively, as a corporate credit analyst. Juan also worked as a business consultant at Accenture in the UK.

He earned a BA in economics from the Universidad Rosario in Bogotá, Colombia, and an MA in international business from the University of North London, in the UK.



Miguel GARCÍA DE EULATE

Head of Treasury and Capital Markets, Caja Rural de Navarra

Miguel García de Eulate is head of treasury and capital markets at Caja Rural de Navarra (CRN, Pamplona) where he is responsible for the bank's liquidity management and funding strategy, including bond issuance under CRN's sustainability framework. CRN is a member of the Spanish Caja Rural Group Association (AECR, Madrid), where Mr García de Eulate currently participates in working groups and task forces to implement and develop capital markets related issues at a national level.

He is also a member of the financial markets and sustainable finance working groups of the European Association of Cooperative Banks (EACB, Brussels). Previously he has worked in various positions in the credit risk and corporate departments for this Spanish regional cooperative bank.

He graduated in economics and business administration from Deusto University (Spain) and holds a postgraduate certificate in sustainable business from the University of Cambridge (UK).



Sven GERHARDT

EMEA Fixed Income Data Manager, Bloomberg

Sven Gerhardt is an EMEA Fixed Income Data Manager at Bloomberg L.P. in Frankfurt. With his extensive experience in fixed income markets, he possesses deep subject matter expertise across various areas within this field. Prior to his role at Bloomberg, Sven led the European Trading Government Bond Desk at a prominent international investment bank, where he focused on electronic trading. Leveraging this expertise, he later contributed to the design of a leading electronic bond trading platform in an emerging market.

In his current role at Bloomberg, Sven oversees a team responsible for managing the reference data related to new

bond issuance and corporate actions in the DACH region (Germany, Austria, and Switzerland). Additionally, he is in charge of the data associated with Cover Pools in the covered bond market on a global scale. His work ensures the accuracy and integrity of critical financial data, which is essential for market participants.

Sven also plays an active role in shaping industry standards as a member of the DIN/ISO working group for reference data in financial services. His contributions to this group highlight his commitment to enhancing data quality and consistency across the financial industry.



Jennifer JOHNSON

Deputy Secretary General, EMF-ECBC

Jennifer Johnson joined the EMF-ECBC in 2002, where she is Deputy Secretary General, overseeing, in particular, the EMF policy work. She specialises in a range of mortgage-specific issues on both the retail and prudential sides of the business and therefore handles a variety of files from those with a consumer protection focus right through to liquidity, leverage and capital requirements, as well as a broad range of horizontal

EU business regulatory files. She also closely follows the EMF-ECBC's covered bond-related activities and files. Jennifer is furthermore heavily involved in the management of the EMF-ECBC's Energy Efficient Mortgages Initiative.

Before joining the EMF-ECBC, she studied French, German and European politics at the University of Wales, Cardiff.



Panayotis KAPOPOULOS

Chief Economist, Head of Economic Research and Analysis, Alpha Bank

He was born in Athens in 1964. He holds a PhD from the Athens University of Economics and Business and an MA in Economics and Econometrics. He was Head of Risk Management at Emporiki Bank, Crédit Agricole Group (2005-2013) and served as member of the BoD of Tiresias S.A. and of the Scientific Council of the Hellenic Bank Association (HBA). During his career, he served as Advisor to the Management on Strategic Planning at Emporiki Bank and Alpha Bank. He has taught macroeconomics, banking and risk management at the University of Piraeus and the Athens University of Economics and Business. He is the

author of four books, for one of which (co-authored with G. Provopoulos) he received the Award of the Class of Ethical and Political Sciences from the Academy of Athens in 2003, as well as numerous articles in academic scientific journals such as, inter alia, the European Journal of Political Economy, the Journal of Policy Modeling, Corporate Governance, the Journal of Real Estate Finance and Economics, the Scottish Journal of Political Economy, Managerial and Decision Economics and Economics Letters. He was appointed Head of Economic Research in 2014 and Chief Economist in 2022.



Kyung-Hwan KIM

President & Chief Executive Officer, Korea Housing Finance Corporation

Kyung-Hwan Kim is currently president and CEO of the Korea Housing Finance Corporation (HF) to which post he was appointed in September 2024. He is also an emeritus professor of economics at Sogang University in Seoul. He previously served as president of Korea Research Institute for Human Settlements (2013-2015), vice minister of the Ministry of Land, Infrastructure and Transport of the Republic of Korea (2015-2017), and Chairman of the Korea Real Estate Finance and Investment Forum (2023-2024). He served on various government committees on housing, urban planning and local public finance prior to his service in the public sector in Korea. Mr. Kim also has international work experiences. He was urban finance advisor at the UN Centre for Human Settlements (UN

Habitat) (1994-96) and a consultant for the World Bank and several other international organisations. He was president of the Asian Real Estate Society (2001-2002).

Dr. Kim is an urban economist by training. He received his PhD in economics from Princeton University in 1987. He then taught at Syracuse University (1986-88), Sogang University (1988-2022), University of Wisconsin-Madison (2002-2003), and Singapore Management University (2010-2011). Dr. Kim has published in academic journals in urban economics and real estate, and co-authored a book. Recently he co-edited a book titled *Greening the Housing Stock in Asia: Toward Net-zero Cities in East Asia* (2025).



Sascha KOCH

Senior Strategy and Growth Manager, VIDA

Sascha Koch is Senior Strategy and Growth Manager at VIDA, a leading provider of location-based risk intelligence for climate and biodiversity. In his role, Sascha spearheads market expansion and global growth initiatives, with a focus on empowering real estate banks, valuers, and investors to address physical climate and biodiversity risks with ease while ensuring compliance with evolving regulations and client expectations.

At VIDA, Sascha works closely with financial institutions and valuation networks to integrate advanced risk data into decision-making processes, enabling them to anticipate environmental impacts, protect asset value, and meet stringent

sustainability standards. The platform's reach already extends across global markets, trusted by prominent institutions such as Berenberg Bank and distributed through key industry partners like vdpResearch, the data provider of the Association of German Pfandbrief Banks (vdp), which offers VIDA's insights to over 2,500 property valuers in Germany alone.

With deep expertise at the intersection of sustainability, finance, and technology, Sascha is passionate about transforming how the real estate and banking sectors approach environmental risk - turning complex datasets into actionable intelligence that drives both resilience and competitive advantage.



Andreas KUNERT

Head of Real Estate Market Research, vdpResearch

Andreas Kunert has been leading the Real Estate Market Research department at vdpResearch, the research institute of the Association of German Pfandbrief Banks (vdp), since January 2024. In addition to his main responsibilities, he serves as a lecturer for mathematics and statistics in preparatory courses for real estate appraisers and holds a teaching position for digitalisation and research at Anhalt University of Applied Sciences.

Andreas has been with vdpResearch since 2009, bringing comprehensive expertise in real estate market research.

Prior to joining vdpResearch, he worked at HypoVereinsbank from 2005 to 2009 in the Collateral Risk Management department, where he specialised in risk assessment of real estate collateral. Earlier in his career, he gained seven years of experience as a research associate, first at the Rhine-Westphalia Institute for Economic Research (RWI) and subsequently at the University of Essen at the Chair of Statistics and Econometrics.

Andreas Kunert graduated with a degree in Economics and brings expertise in real estate market research, statistics, and risk analysis.



Frederik KUNZE

Head of International Sales, NORD/LB

Frederik Kunze joined NORD/LB in 2009 and is currently responsible for NORD/LB's international sales. Before that, he was fixed income floor analyst, focusing on covered bonds and unsecured bank bonds. He provides market comments as well as trading strategies for the fixed income market.

Prior to joining NORD/LB's Floor Research team in 2018, Frederik Kunze worked as economist as well as senior credit portfolio manager at NORD/LB.



David MARKS

Member of the Leadership Team, DSRB

David is a member of the leadership team at DSR Bank Development Group. The Defence, Security and Resilience Bank is a Multilateral Defence Mechanism (MDM) designed to mobilise investment from capital markets.

Prior to that David worked in capital markets at JPMorgan for nearly 38 years in a variety of roles across origination, syndicate, and trading. He held various leadership roles running

EMTNs, ECP and FIG syndicate before moving to Origination. There he was co head of DCM and head of FIG DCM. He retired from JPMorgan in 2023 as Chairman of DCM. In 2024 he joined the investment banking boutique Alantra as a Senior Advisor. He also served as Deputy Chairman of ICMA for six years.

David has a long interest in defence and is passionate about capital markets resilience.



Michael McCORMICK

Head of FIG EMEA Origination, BMO Capital Markets

Michael joined BMO in May 2023 as Head of FIG EMEA Origination for BMO Capital Markets and is based in London. His responsibilities include originating transactions for European financial institutions accessing funding in debt capital markets across currencies, while also advising BMO's global client base on accessing European markets. Michael and his team also provide advisory services, including assistance with rating agencies, regulatory updates and the development of bespoke derivatives for use in secured funding programmes.

Prior to joining BMO, Michael worked at Credit Suisse for over eight years and was head of DCM Advisory, managing a team responsible for covered bond origination, capital structuring and sustainability. Prior to Credit Suisse, Michael worked on

HSBC's structured finance team (in New York and London) for 10 years and ended his tenure there as Co-Head of Covered Bond Origination. Michael served two terms on the European Covered Bond Council's Steering Committee between 2019 and 2022.

In total, Michael has over 20 years of debt capital markets and structure finance experience, during which time he has engaged with issuers and investors across 25 countries and six currencies. During his career, he has structured over 20 new secured funding programmes for his clients across globally and led several first-of-a-kind liability management exercises.

Michael holds a BA in Government and Economics from Georgetown University.



Luiz DE MELLO

Director of the Country Studies Branch, OECD

Luiz de Mello is Director of the Country Studies Branch at the Economics Department of the OECD which produces the OECD Economic Surveys for about 50 countries and provides leadership and strategic direction within the Economics Department.

Earlier in his career, Mr. de Mello held senior positions at the OECD, including Deputy Director of the Public Governance

Directorate, Deputy Chief of Staff to the OECD Secretary-General and Counsellor to the Chief Economist. Prior to joining the OECD, he worked as a Senior Economist at the Fiscal Affairs Department of the International Monetary Fund, and as a Lecturer at the Economics Department of the University of Kent, United Kingdom. He holds a PhD in Economics from the University of Kent, United Kingdom.



Reinier MIJSBERG

Head Valuation Team, ABN AMRO

Reinier Mijsberg is an experienced professional with a diverse background in real estate, banking, and fintech startup. His current role is Head Valuation Team at ABN AMRO, he brings a wealth of expertise and leadership to the role. Before joining ABN AMRO, Reinier successfully navigated the entrepreneurial landscape as a self-employed consultant and interim manager in the real estate sector. Reinier is member of the EMF Valcom and had various side roles in The Netherlands concerning valuations.

His career trajectory includes a pivotal role of 12 years as CEO of a large Dutch single-family office, where he led investment strategies by building and managing a real estate portfolio of

€ 100 mln in The Netherlands and Europe. Reinier's banking experience is equally impressive, having held various positions at Fortis, CLBN, Westland Utrecht and Direktbank. These roles have equipped him with a deep understanding of financial markets and operational excellence in banking.

Beyond his professional achievements, Reinier is a passionate runner, finding joy and balance in the pursuit of running marathons. His passion for running complements his dynamic career, providing a source of personal fulfilment and resilience. Reinier's journey reflects a commitment to innovation and excellence, making him a respected figure in his fields of expertise.



Andreea MORARU

Regional Director for Poland and the Baltic States, European Bank for Reconstruction and Development (EBRD)

Andreea Moraru is the EBRD's Regional Director for Poland and the Baltic States. She is responsible for overseeing the EBRD's activities in these four countries, leading the business delivery, driving the implementation of EBRD's strategic direction in investment operations and policy reform with a focus to accelerate the Green Economy Transition, enhance Competitiveness through Innovation, Digitalisation, and Good Governance, and strengthen Resilience and Economic Integration.

Prior to assuming her role in Warsaw in September 2024, Andreea served as Director and Regional Head, managing the EBRD's operations in Greece and Cyprus. With over 20

years of experience, she has led, structured, negotiated, and closed a wide array of debt and equity projects across Central and Eastern Europe, Turkey, and North Africa. During her career, she has also held non-executive directorships on banks, insurance and pension fund boards in Ukraine, Slovenia, Hungary, Croatia and Russia, and currently serves on the board of Enterprise Expansion Fund (ENEF) focused on Western Balkans.

Andreea holds an Executive MBA from Cass Business School, London, and a Certificate in Corporate Governance from INSEAD Business School.



Csaba NAGY

Deputy Chief Executive Officer & Board Member, OTP Mortgage Bank & OTP Building Society

Csaba Nagy is currently the Deputy CEO and the board member of both OTP Mortgage Bank and OTP Building Society. His responsibilities include funding, ALM and IR. In addition to that, he keeps relationship with credit rating agencies, as well as with the cover pool monitor and the auditor. He also actively participated in the most recent international covered bonds transaction of the bank.

Before joining OTP Mortgage Bank, he worked as the CEO of the Hungarian Development Bank (MFB) for three years where he made large scale M&A transactions on behalf of the Hungarian Government. He also worked for OTP Securities Ltd. during the 90's where he was responsible for fixed income and derivative trading.



Sergiu OPRESCU

Chairman, EMF

Chairman of the Supervisory Board, UniCredit Bank Romania

Sergiu Opreescu has over 32 years of experience in banking and capital markets across Romania and Europe. He holds a Master of Engineering (MEng) in Avionics from the Polytechnic Institute of Bucharest and a postgraduate degree in Banking from the University of Colorado. He is an alumnus of Harvard Business School (2019) and London Business School (2021), having completed executive programmes at both institutions.

He joined Alpha Bank Romania in 1994, rising to Executive President in 2007 and later General Manager of the International Network of Alpha Bank Group (2019-2024). Following UniCredit's acquisition of Alpha Bank Romania, he was appointed Chairman of the Supervisory Board of UniCredit Romania in March 2025.

A key figure in Romania's financial sector, he served as Chairman of the Bucharest Stock Exchange from 2001 to

2006, leading the demutualisation and consolidation of capital markets in Romania. He was also Chairman of the Romanian Association of Banks (2015-2021), advocating for Eastern European banking within the European Banking Federation. Since 2009, he has served on the Executive Committee of the European Mortgage Federation (EMF) and as of January 2025, he is the Chairman of the EMF.

Sergiu played a pivotal role in developing Romania's mortgage market, launching the first mortgage loan and spearheading the Covered Bond Law framework.

He is an active YPO member since 2004, past Chair of the Romanian Chapter (2012-2014), and part of the Greater Europe Gold Chapter. Additionally, he is a founding member of the European League for Economic Cooperation Romania and a member of the Club of Rome Romania branch.



Lars OVERBY

Head of Risk-based Metrics Unit, European Banking Authority (EBA)

Lars Jul Overby is Head of the Risk-based Metrics (RBM) Unit in the Prudential Regulation and Supervisory Policy Department of the European Banking Authority (EBA). He is currently responsible for the EBA's regulatory work in the area of credit, market and operational risk in addition to covered bonds and

securitisation. As part of his responsibilities, he is also leading the EBA work on implementing Basel III in EU. Prior to joining the EBA, he worked in Nykredit, Denmark's Nationalbank, ECB and Nordea. He holds a PhD from the University of Copenhagen in empirical market microstructure.



Claudio PACELLA

Chief Executive Officer, Centro Finanziamenti SpA

Claudio Pacella is the CEO of Centro Finanziamenti SpA, a financial company specialising in the origination of various types of credit and a strategic partner of Harley&Dikkinson. He began his career in the financial sector at Bain & Company, before serving as General Manager of Euvis, a joint venture between Cofide and JPMorgan focused on reverse mortgage origination.

He also serves on the board of 65plus, a company dedicated to the Silver and Longevity Economy. Currently, he leads the development of financing solutions for condominiums and private residences, including securitisation transactions, within the framework of Harley&Dikkinson's initiative dedicated to building renovation and urban regeneration.



Yeonmi PARK

Human Rights Foundation

Human rights activist and TED Speaker Yeonmi Park grew up in Hyesan, North Korea. At the age of 13, she and her family made a daring escape to China in search of a life free of tyranny. She recounts this incredible story in her searing memoir *In Order To Live: A North Korean Girl's Journey to Freedom*, and in the insightful, moving talks based on her experiences. In her viral talks, Park urges audience to recognise – and resist – the oppression that exists in North Korea, and around the world.

An insightful and candid speaker, Park is becoming a leading voice of oppressed people around the world. At the Oslo Freedom Forum and the One Young World Summit in Dublin, she became an international phenomenon, delivering passionate and deeply personal speeches about the brutality of the North Korean regime. Her latest book, *While Time Remains*, sounds the alarm on the culture wars, identity politics, and authoritarian tendencies tearing America apart. The BBC named Park one of their “Top 100 Global Women.”



Stefano PATRUNO

Head of Regulatory Impact Assessment, Intesa Sanpaolo Chairman, ECBC

Graduated from Rome University in Economics, Stefano started his career with Crédit Agricole in Paris Head Office, dealing with the foreign subsidiaries of the group. He subsequently joined Intesa Sanpaolo where he worked for Planning, CIB and Treasury. In the latter position he was involved in structuring proprietary securitisations and covered bond programmes, heading the management of all the CB programmes of Intesa Sanpaolo. Eventually he took responsibility of Supranational and Intragroup Funding.

Stefano spent recent years in Brussels, as Head of the European Regulatory Policy, entrusted with the analysis and advocacy on the EU banking and financial markets legislative files, including prudential, crisis management, securitisation, cov-

ered bonds, retail and financial markets. He is now Head of Regulatory Impact Assessment, contributing to the activities of the Institutional Affairs Department of Intesa Sanpaolo, with the responsibility of assessing the impact of incoming banking and financial regulation.

He is an active participant to the various working groups of the European Covered Bond Council – notably he is the Moderator of the European Secured Notes (ESN) Task Force. In January 2024 Stefano was appointed Chairman of the ECBC and since January 2025 he is the President of the CBMC. He also participates to boards and working groups of other EU banking associations representing Intesa Sanpaolo.



Pablo PÉREZ

Director of the Regulation Department, Banco de España (BdE)

Pablo Pérez is Director of the Regulation Department at Banco de España (BdE), responsible for the institution's active role in the design and development of global, European and domestic financial regulation, and setting out the related interpretive criteria. His team coordinates BdE's contribution to FSB, BCBS and EBA-related work, framing the development of institutional and cross-sectoral positions domestically and in other international organisations. In this context, the Regulation Department leads BdE work on various policy-related topics, and conducts analysis, impact assessment and evaluation in the field of financial regulation.

With a background of 25 years in regulatory bodies and international organisations and responsibilities intersecting financial stability oversight and the role of capital markets, Pablo has

represented the regulatory community in dialogue with the financial industry, standard setters and global service providers.

Prior to his current position, Pablo was Head of the Global Regulatory Policy and Impact Analysis Division at the Regulation Department. Besides other roles at BdE, he has held positions at the FSB Secretariat, the Financial Assets Acquisition Fund (Spanish Treasury), and the ECB.

He is author of several publications and has lectured at numerous venues, his research having focused on topics such as the contribution of financial intermediation to market transparency and financial stability, the link between underwriting practices, loss recognition and procyclicality, or market-based finance and systemic transmission channels.



Armin PETER

Senior Advisor, ICMA

Armin Peter is a seasoned investment banking professional with over 25 years of experience in capital markets and banking. As the former Global Head of Debt Syndicate and Head of Sustainable Banking EMEA at UBS Investment Bank, he led global debt issuance across various sectors and currencies.

Armin has been instrumental in driving business transformation, sustainable finance initiatives, and digital innovation in capital markets. He played a key role in developing the ICMA Bond Data Taxonomy and contributed to groundbreaking digital green bond transactions. As a former GFMA Board member and Chair of the ICMA FinTech Advisory Committee, Armin

has been at the forefront of industry-wide systemic changes, focusing on new infrastructure, standards, and governance. His expertise spans strategic thinking, problem-solving, and fostering collaboration to drive the industry towards a more digitalised and decarbonised future.

Currently, Armin is a Senior Advisor to ICMA, Global Partner for Capital Markets at GIST Impact, Senior Advisor to Maanch, Code Gaia and the Emerging Market Investor Alliance (EMIA). He is also an Ambassador to The Capitals Coalition and a member of the Advisory Board of the Digital Climate Group (DCG).



Olaf PIMPER

Portfolio Manager, Treasury Department, Commerzbank AG

Olaf Pimper works at Commerzbank AG Treasury Department where he manages the LCR eligible Liquidity Portfolio. Starting at Dresdner Banks Treasury in 1998, he took over responsibility for the Collateral Portfolio in 2001. Since then

he has gained an in-depth knowledge of the whole covered bond universe. Olaf joined Dresdner Bank in 1989 and moved to Commerzbank's Treasury in May 2009 after the take-over.



Anna PINEDO

Head of the Global Capital Markets Group, Mayer Brown LLP

Anna Pinedo is a partner and the head of the Global Capital Markets Group at Mayer Brown LLP in New York. She represents issuers, investment banks and other financial intermediaries as well as investors in financing transactions, including public offerings and private placements of equity, equity-linked and debt securities. She also advises on structured products and derivatives matters.

Anna works closely with financial institutions to create and structure innovative financing techniques, including new securities distribution methodologies and financial products. She has particular financing experience in certain industries, including technology, telecommunications, healthcare, financial institutions, REITs and consumer and specialty finance. Anna has worked closely with foreign private issuers in their securities offerings in

the United States and in the Euro markets. She also works with financial institutions in connection with international offerings of equity and debt securities, equity- and credit-linked notes, and hybrid and structured products, as well as medium term note and other continuous offering programmes.

Anna is ranked as a leading lawyer by Chambers Global 2025, Chambers USA 2025, IFLR1000 2025, and The Legal 500 US 2025. She was named the “North America Capital Markets Lawyer of the Year” at the IFLR Women in Business Law Americas Awards 2025. Anna was the first inductee into the International Financial Law Review’s Women Dealmakers Hall of Fame presented at the 2022 IFLR Americas Awards, and was honoured with Corporate Counsel’s 2024 Women, Influence & Power in Law “Lifetime Achievement” Award.



Tomás RODRÍGUEZ-VIGIL JUNCO

Senior Vice President, Sector Lead | European RMBS and Covered Bonds Group, Morningstar DBRS

Tomás Rodríguez-Vigil Junco is a Senior Vice President in Morningstar DBRS’ European RMBS and Covered Bonds group in Madrid. With over 15 years of analytical experience, he has covered European covered bond markets since joining Morningstar DBRS in 2021.

Prior to that, Tomás worked for 12 years at Moody’s as a lead analyst across different European covered bond jurisdictions

and two years in Ahorro Corporación in the Fixed Income Asset Management department.

Tomás holds a degree in telecommunications engineering from University of Cantabria and a master’s in banking and finance from AFI Escuela de Finanzas.



Vladimir RUBIN

Founder, EcoAsset.AI

Dr. Vladimir Rubin is an experienced data science expert and executive specialising in large-scale data architectures and AI-driven analytics for enterprise environments. He serves as an Executive Director of ADEAL Systems GmbH, an established German data consulting company based in Frankfurt. In this role, he helps banks and corporates transform complex data challenges into actionable solutions.

With over 20 years of international experience across Germany, the U.S., and Europe, Dr. Rubin combines deep technical expertise with strategic leadership. He is also the founder of EcoAsset.AI, a fintech startup focused on AI-powered asset management. EcoAsset.AI enables banks to optimise covered pool management, enhance ESG data for compliance reporting, and reduce operational costs through AI and automation.

Holding a PhD in Software Engineering and Process Mining, Dr. Rubin has successfully delivered data platforms, customer analytics, revenue management systems, and AI solutions for leading banks, tour operators, retailers, and industrial companies. His expertise focuses on data-driven decision-making, data quality management, revenue optimisation, and regulatory reporting.

Fluent in English, German, and Russian, Dr. Rubin works directly with enterprise executives to drive digital transformation and sustainable profitability through advanced data and AI technologies.



Erik SCHLOOZ

Chief Executive Officer, KATE Innovations

Erik Schlooz is a Dutch entrepreneur and the founder and CEO of KATE Innovations, a leading technology company serving the financial and real estate sectors. Driven by a passion for innovation and digital transformation, Erik has built KATE Innovations into a pioneer in software and AI solutions for property valuation.

The company's platform revolutionises the valuation process by combining advanced technology with deep industry expertise. Its solutions range from automated tools for drafting valuation reports to systems for real-time monitoring of property portfolios. This enables banks, asset managers, investors, and valuers to determine and manage property values more efficiently, transparently, and reliably.

Under Erik's leadership, KATE Innovations has forged strong partnerships with key market players, focusing on reducing operational costs, improving data quality, and accelerating decision-making. His entrepreneurial approach is characterised by a clear strategic vision, results-driven execution, and an acute awareness of emerging market trends.

With KATE Innovations, Erik aims to set the standard for the future of property valuation: fully digital, data-driven, and tailored to the needs of a rapidly changing market. His mission is to empower the industry with technology that transforms complex processes into streamlined, insight-driven workflows.



Maureen SCHULLER

Head of Financials Sector Strategy, ING

Maureen Schuller is Head of Financials Sector Strategy at ING. Her personal research focus is dedicated to covered bonds and sustainability topics impacting banks. She recurrently publishes comprehensive reports on regulatory, structural and market developments, covering among others covered bond market performance aspects, including from liability structure perspective. Maureen is a regular speaker on internal and external events and also an active member in different ECBC working

groups, including the ESG Bonds Task Force. Maureen graduated in 1998 in monetary economics at the University of Groningen (the Netherlands). She completed the one year postgraduate financial and economic policy (BoFEB) programme (Erasmus University Rotterdam/Dutch Ministry of Economic Affairs), before joining ING in 1999. Maureen is heading ING's financial research team since 2015 and has been fully responsible for ING's covered bond research coverage since 2012.



Patrick SEIFERT

Managing Director Global Head of Corporates & DCM, LBBW

Patrick Seifert is Global Head of Corporates & DCM at LBBW. Prior to that, he grew the FIG and SSA teams of LBBW into a leading European franchise. Providing funding solutions for the most sophisticated issuers, LBBW is particularly appreciated for its excellent distribution throughout economic cycles.

Patrick does leverage extensive capital markets and strategic experience with former employers BHF-BANK and ING Group to help clients turning regulatory changes and market trends into opportunities: Geopolitics, ongoing investor diversification and the need for liquidity, product innovation and smart hedging strategies.

Since 2020, providing FIG, SSA and Corporate clients with access to a more robust European capital markets has been a particular focus for LBBW's award-winning international franchise. This makes LBBW also a partner of choice for debut issuers seeking first-time entry to capital markets.

Patrick holds Master's degrees from the University of Applied Sciences in Mainz as well as the University of Chicago and regularly lectures with the Frankfurt School of Finance and Management. He also serves on the ECBC Steering Committee and is a member of the ESMA's FRWG Consultative Working Group.



Carsten TEGTMEIER

Managing Director – Head of DCM, NORD/LB

CT started his career in 1979 with a trainee program at NORD/LB in Hannover followed by different positions in NORD/LB's Fixed Income Division.

From 1983 – 1986 he worked for Citibank's International Sales Unit in Frankfurt.

Between 1986 and 1994 CT supported the set up of DG Banks Short Term Bond Trading and became Head of International Sales.

In 1994 he returned to NORD/LB to set up Fixed Income International Sales.

In 1998 he took over responsibility for NORD/LB's Bond Origination incl Syndication, International Funding Operations and Bank Capital Transactions.

CT is member of AEFMA.



Antonio TORIO

Senior Advisor, Asociación Hipotecaria Española (AHE)

Antonio is currently a Senior Advisor on funding-related issues to the AHE. As former ECBC Chairman and as a representative of the AHE, he participates in various ECBC Committees, Working Groups and publications, contributing to the advancement of the global Covered Bond market. Antonio is the former Group VP and Head of Banco Santander's capital markets funding and hybrid capital raising team, including commercial paper, senior debt, EMTN's covered bonds, subordinated debt and

preferred securities. Formerly he was responsible for fixed income origination at the Treasury and Capital Markets area of Banco Santander. He has held various positions at Lloyds Bank plc and Citibank N.A., in Madrid. Antonio holds an MBA degree in Finance and Business from the NYU Stern School of Business and a Bachelor of Science degree in Economics from Boston College's Carroll School of Management.



Johannes TRAUTWEIN

Director ESG Origination, DZ BANK AG

Johannes Trautwein is a Director in the Sustainable Bonds & Financing team at DZ BANK, where he focuses on financial institutions. He has been working in debt capital markets for more than 14 years, specialising in sustainable finance since 2014. In October 2020, Johannes joined DZ BANK as an ESG Originator, advising corporates, banks and SSA clients on their sustainable finance activities. In his previous role as a Sustainable Bond expert at Commerzbank, he supported numerous issuers in structuring and placing Green, Social

and Sustainability Bonds. Prior to specialising in sustainable finance, he advised clients in the banking, corporate and insurance sectors in structuring and issuing hybrid bonds and conducting liability management transactions. Johannes Trautwein has also been a member of several national and international sustainable finance working groups. He graduated with a Master's degree in Business Administration from Friedrich Schiller University in Jena, Germany.



Bart VERWAEST

Head of Structured Finance, Belfius

Bart Verwaest obtained a MSc in Chemical Engineering at the Katholieke Universiteit Leuven in 1998 and holds a Master in Accounting and Finance degree from EHSAL Management School.

He started his career in the securitisation department at Belfius Bank (previously Bacob/Dexia), structuring ABS/MBS deals and being active as a trader for ABS/MBS. Bart has been involved in the set-up of most transactions for Belfius and has advised different Belgian and Dutch issuers in setting

up securitisation and covered bond transactions. He has experience in different asset classes.

The Structured Finance team is responsible for the set-up and the daily management of securitisation transactions and covered bond programmes. It also provides related services such as rating advisory and green/sustainable structuring. In 2023-2024, Bart acted as the Belgian representative in the ECBC Steering Committee.



Guy VOLPICELLA

Head of Structured Funding and Capital, Westpac Australia

Guy has over 25 years' experience in banking and capital markets. He joined Westpac in 1995 and has held senior roles in Group Treasury, Westpac Institutional Bank and Westpac New Zealand during that time.

Guy was appointed to his current role in 2011. His primary responsibility is the structuring, execution and ongoing management of covered bonds, securitisation and capital management transactions for the Westpac Group, as well as strategic M&A activities that involve securitisation. Guy leads a team of 20.

In 2024, Guy was appointed to acting Treasurer for Westpac New Zealand, where he was responsible for the New Zealand treasury operations including balance sheet management, liquidity, global wholesale funding and capital management and execution.

Between 2004 to 2010, Guy was a director in Westpac Institutional Bank (WIB)'s securitisation team, responsible

for arranging, structuring and executing covered bond and securitisation transactions for Westpac and its clients. During this period, Guy also led the treasury and funding streams of the RAMS and CFAL (part of Lloyds) acquisitions.

Prior to moving into the bank's securitisation team, Guy was a senior relationship manager within WIB's corporate and institutional banking division, managing accounts including Lion Nathan, McDonalds, Metcash, Westfield, and Unilever.

Guy is the chair of the Investment Advisory Committee for Westpac Foundation, Westpac Scholars and St George Foundation, having been appointed as a representative in March 2018. Guy is also a member of the Regulatory and Prudential Sub-Committee of the Australian Securitisation Forum, having been the Chair of the committee and National Committee member from 2009 to 2016.

Guy has a Bachelor of Commerce and a Master of Commerce from the University of New South Wales.



Frank WILL

Global Head of Covered Bond Research, HSBC

Frank Will is Global Head of Covered Bond Research at HSBC in Düsseldorf. Before joining HSBC he was Head of Covered Bond/Supra & Agency Research at a global investment bank in London for almost nine years. Before that, Frank spent five years as a senior bank analyst for a German bank in London, covering the major European and US banks as well as various

covered bond markets. He is a regular speaker at conferences, chairman of the ECBC Working Group on EU Legislation and member of a number of ECBC and Association of German Pfandbrief Banks working groups. He is also one of the authors of the ECBC Fact Book on Covered Bonds. Frank graduated in Business Administration and holds a PhD in Economics.



Alexander ZEIDLER

Vice President - Senior Credit Officer, Moody's

Alexander Zeidler is a Vice President - Senior Credit Officer at Moody's in London. He coordinates Moody's efforts in the Nordic covered bond markets Sweden, Denmark, Finland, Norway, Iceland, the Baltic countries and in the Netherlands. Furthermore, he is responsible for a portfolio of covered bond programmes in Norway and Switzerland and was previously leading the analysis of the covered bond markets in Austria and Luxembourg.

As a senior member of the analytical team, Alexander has updated the rating methodology for commercial real estate covered bonds, coordinated and published a number of research reports and regularly speaks at investor and industry conferences. Prior to joining Moody's EMEA Covered Bonds team in 2010, Alexander was responsible for a portfolio of

CMBS transactions in the UK, France, the Netherlands and Germany for four years.

Alexander started his career in commercial real estate finance, working for over 10 years as an underwriter, credit auditor and corporate analyst at UniCredit in Germany. Alexander also holds a MBA from a Fulbright programme sponsored by the U.S. government at the University of Louisville, U.S.A. Moody's has a leading global covered bond franchise, rating over US\$2.5 trillion worth of covered bonds securities, which represents more than 80% of all public bonds issued globally in the sector. In total, over 20 senior analysts cover more than 240 covered bond programmes in over 30 countries globally. Moody's EMEA Covered Bonds team is located in London, Frankfurt, Paris, Madrid and Milan.

6th EEMI Sustainability and Digitalisation Pavilion

Facilitating the green efforts of the covered bond and mortgage industry



Energy
Efficient
Mortgages
Initiative

Building on the success of previous editions focused on digital innovation in the covered bond industry, the Seville event marks the sixth in this international series. Designed to encourage open dialogue and cross-sector collaboration, the series brings together financial institutions, SMEs, start-ups, scientists, academics, and local authorities to exchange insights, share experiences, and promote best practices.

The EEMI Sustainability and Digitalisation Pavilion offers a distinctive platform for participants to connect, engage, and explore forward-looking solutions in a collaborative setting.



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Bloomberg

Bloomberg is a global leader in business and financial information, delivering trusted data, news, and insights that bring transparency, efficiency, and fairness to markets. The company helps connect influential communities across the global financial ecosystem via reliable technology solutions that enable our customers to make more informed decisions and foster better collaboration.

The Bloomberg Terminal® revolutionized an industry by bringing transparency to financial markets. More than four decades on, it remains at the cutting edge of innovation and information delivery – with fast access to news, data, unique insight and trading tools, helping decision-makers turn knowledge into action.

Bloomberg comprehensively covers the global Covered Bond markets from instrument launch, price talk and final pricing throughout a bond's lifecycle to maturity, enabling market participants to trade electronically, follow market price development and analyse relative value and associated risks. Bloomberg offers relevant datasets for the Covered Bond asset class, such as Cover Pool information (including the FIGI instrument identifier linking bonds to pools) and regulatory classifications.



Driving ESG Innovation with AI

EcoAsset.AI

EcoAsset.AI is a modular data platform built for next-generation treasury and asset management in banks. Developed for covered bond issuers, securitisation teams, and structured finance desks, it solves the widespread problem of fragmented and incomplete asset data across mortgage and loan portfolios.

Banks face significant ESG data gaps, manual data processing, and outdated legacy systems, which block efficient cover pool management, securitisation monitoring, and ESG reporting. EcoAsset.AI addresses these challenges through four integrated modules: it automates EPC extraction and enrichment for green asset qualification, enables borrower segmentation and green lending growth, optimises and automates cover pool management, and provides real-time monitoring of securitisation portfolios such as RMBS and ABS.

Available as SaaS (cloud or on-premises), EcoAsset.AI combines AI-powered data enrichment, low-code automation, and seamless integration with over 100 data sources. It enables treasury teams to unlock cheaper funding, meet ESG compliance, and simplify reporting to investors and regulators.

Developed in Frankfurt by Adeal Systems, EcoAsset.AI is now seeking further pilot clients and strategic investors to grow as the core data backbone for Europe's green treasury ecosystem.



GlobalCapital

The primary capital markets insights and data business that helps you to transact with confidence

The trusted voice of capital markets for over 38 years, enabling transparency into primary debt capital markets and securitisation activity.

We provide the essential intelligence and data needed to empower DCM and securitisation markets to make informed decisions around mandates, transactions and strategy, and keep pace with sentiment, market mood and innovation through news and insights, data and tools, awards, events and special reports.



Harley&Dickinson

Harley&Dickinson is a fintech company focused on energy retrofits of residential buildings and condominiums, enhancing efficiency, safety, and sustainability through an integrated mix of technical, organizational, financial, and guarantee-based solution.



MorningStar DBRS

Morningstar DBRS is a leading provider of independent rating services and opinions for corporate and sovereign entities, financial institutions, and project and structured finance instruments globally. Rating more than 4,000 issuers and 60,000 securities, it is one of the top four credit rating agencies in the world. Morningstar DBRS empowers investor success by bringing more transparency and a much-needed diversity of opinion in the credit rating industry. Its approach and size allow it to be nimble enough to respond to customers' needs in their local markets, but large enough to provide the necessary expertise and resources they require. Market innovators choose to work with Morningstar DBRS because of its agility, tech-forward approach, and exceptional customer service. Morningstar DBRS is the next generation of credit ratings. To learn more, visit dbrs.morningstar.com



Storied Data

Storied Data revolutionises how banks, financial institutions, and data publishers present and share statistical reports, regulatory disclosures, and economic publications. In an industry that still relies heavily on static PDFs, spreadsheets, and complex books packed with tables and charts, Storied Data introduces a smarter, AI-ready format: **InfoApps**. These are dynamic, interactive applications that turn dense, hard-to-navigate content into engaging, explorable digital experiences accessible in any browser, on any device.

For central banks, financial analysts, or economic research teams publishing regular statistical reports or bulletins, InfoApps make data instantly understandable. Users can drill into time series, apply filters, visualise changes, and cross-compare indicators -without exporting to Excel or flipping through hundreds of pages. Whether it's an inflation snapshot, banking sector overview, or macroeconomic dashboard, every publication becomes searchable, explorable, and shareable.

Storied Data enables publishers to embed narrative, visuals, and logic directly into their content, guiding users through key insights. Reports can be bundled, stacked, and personalised, making it easy to release monthly updates, historical comparisons, or regional editions – all without duplicating effort. And because InfoApps are AI-ready – structured, labeled, and machine-readable – they're prepared for seamless integration with future AI agents and analytics systems.

In a sector where precision, transparency, and trust matter, Storied Data modernises the way financial and statistical content is delivered - turning traditional reports into intelligent tools for insight and communication. It's not just digital publishing - it's the future of financial information design.



vdpResearch & VIDA

VIDA, a Munich-based data and software company, offers site-specific analyses of natural hazards, climate risks, and biodiversity for the real estate industry. Developed by experts in AI, data science, and engineering, VIDA's models are accessible via API, PDF, or its map-based software. The company prioritises transparency, timeliness, and user-friendliness. Trusted by major financial institutions worldwide, including the World Bank and KfW, VIDA was recognised as an innovation leader by the European Space Agency and won the 2022 German Innovation Prize for Climate and Environment. It has been nominated twice for the Earthshot Prize.

vdpResearch, the market research arm of the Association of German Pfandbrief Banks, analyses and forecasts real estate prices from a lending perspective, considering natural hazards due to climate change. Accurate property valuations that factor in these risks help protect against financial burdens. To address biodiversity loss and climate change risks with up-to-date, scientific data, vdpResearch and VIDA.place formed a strategic partnership starting 1 January 2025. This collaboration allows financiers to assess real estate locations and portfolios more precisely, supporting informed decisions aligned with sustainability goals..

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the views or positions of the EMF-ECBC.

Towards an Operational Standard for Truly Effective Energy Efficiency: The EACCP* Proposal



By Claudio Pacella, partner of Harley&Dickinson

THE CHALLENGE OF ENERGY CERTIFICATION TODAY

Amid the ecological and energy transition, the building sector is called to play a strategic role. In Europe, approximately 40% of total energy consumption and over one-third of greenhouse gas emissions originate from buildings. This is no surprise: most of the European building stock is old and inefficient, constructed in times when energy performance was not a concern.

In this context, renovation projects aimed at improving energy efficiency are a key lever to reduce consumption, curb emissions, and enhance living quality. However, to be truly effective, such interventions must be carefully designed, executed according to best practices, and, above all, **certified** in a transparent and reliable manner.

Harley&Dickinson, a leading company in the development of digital platforms dedicated to the energy efficiency supply chain, has developed a clear vision on this matter. In our view, it is not enough to carry out technical interventions: a **structured verification system** is needed to distinguish truly effective upgrades from those that, although formally compliant, yield marginal or negligible results.

To address this need, we propose the introduction of an operational standard based on the logic of critical process control, inspired by the long-standing model of HACCP (Hazard Analysis and Critical Control Points) used in the food industry. This is the foundation of the ***EACCP – Environmental Analysis Critical Control Point** standard, which we present in this article, starting from the regulatory context and leading to its practical application.

EUROPEAN TAXONOMY AND THE COMPLEXITY OF THE CURRENT FRAMEWORK

One of the regulatory pillars of Europe's green transition is the EU **Taxonomy for sustainable activities** – a classification system that determines whether an economic activity can be considered environmentally sustainable. In the construction sector, the taxonomy sets strict criteria: for example, a renovation can be labelled "sustainable" only if it results in at least a 30% improvement in energy performance, demonstrable and documented.

These standards are undoubtedly useful in countering greenwashing – the tendency to label as "green" those interventions that, in fact, are not. However, in the day-to-day work of technicians and businesses, full compliance with these requirements often meets with several challenges: architectural constraints, structural limitations, outdated systems, or the complexity of condominium management.

As a result, many interventions, though virtuous, fail to meet the thresholds set by the taxonomy and are left outside the recognized "sustainability perimeter." This creates a paradox: those who carry out tangible projects with measurable outcomes and a significant improvement in building performance may still be penalized by being excluded from full certification.

A solution is needed to also recognize and **valorise intermediate interventions** – those that, while not meeting the 30% threshold or other legal requirements, still represent meaningful steps toward a more efficient and sustainable building stock.

WHY WE NEED AN INTERMEDIATE "GOOD PRACTICE" STANDARD

In the energy sector, the binary classification of interventions as either 'taxonomy-compliant' or 'non-compliant' risks oversimplifying a complex reality. The actual landscape is significantly more nuanced. There are many renovations that achieve substantial improvements but do not exceed the critical threshold required by EU regulations. Completely excluding these efforts from official recognition is short-sighted and counterproductive.

For this reason, Harley&Dickinson believes it is essential to define an **intermediate operational standard**, not as a replacement for the taxonomy, but as a complementary technical **tool for good practice**. The standard should:

- Provide clear guidance for technicians and contractors to implement effective interventions;
- Offer a quality benchmark for clients and condominium administrators;
- Facilitate traceability of actual energy performance results;
- Encourage gradual convergence toward European targets, by recognizing even partial results.



This approach helps bridge the gap between regulatory ambition and everyday operational practice. Moreover, it serves as an incentive for professionals to continuously improve the quality of their work, knowing that a recognized methodology exists to certify the value of what they accomplish.

EACCP: A STANDARD INSPIRED BY FOOD INDUSTRY HACCP

Harley&Dikkinson's proposal is the definition and dissemination of the **EACCP standard – Environmental Analysis Critical Control Point**. The name is no coincidence: it echoes the well-known **HACCP** (Hazard Analysis Critical Control Point), a well-established method in the food sector that guarantees safety and quality throughout the entire production chain.

The underlying concept remains the same: to **establish a structured process** of analysis and control that identifies the critical aspects of the energy efficiency upgrade and enables continuous monitoring, ensuring alignment between design and outcomes.

In the EACCP method, the first step consists of a thorough energy audit. Through instrumental analysis, thermographic inspections, and digital simulations, the building's energy profile is defined: current consumption, thermal losses, system status, and critical points. Based on this data, specific targets are set: energy class upgrade, reduced operating costs, emission cuts.

Next comes the design phase, with a focus on **critical control points** such as the building envelope (insulation, windows), HVAC systems, renewable energy integration, and mechanical ventilation. Each step is tracked and monitored through a digital platform, providing full project transparency, documentation, and the ability to promptly address deviations.

After the intervention is completed, a **post-intervention assessment** is carried out, comparing expected and achieved results. The environmental impact is also calculated in terms of avoided CO₂ emissions, allowing for potential valuation of generated carbon credits.

We can therefore consider the EACCP as operating along two dimensions in terms of control points: one concerns the breadth of the interventions, taking into account the various technical components involved; the other relates to the renovation process and its operational chain, covering all phases from simulation and design to the measurement of actual performance.

Unlike the taxonomy, EACCP **does not require a fixed threshold** (e.g., the 30% improvement). Instead, it measures the **effectiveness of the intervention**, assessing the gap between the starting condition and the achieved result. This rewards tangible commitment, high-quality planning, and reliable execution.

THE INTEGRATED DIGITAL SUPPLY CHAIN: THE HARLEY&DIKKINSON MODEL

The EACCP standard delivers its full potential when integrated into a digital supply chain, allowing for comprehensive management, monitoring, and documentation of every phase of the intervention. Harley&Dikkinson has developed a proprietary platform that makes this possible – supporting the entire process from initial financial simulations and energy design to digital site management and post-intervention performance verification.

All stakeholders – designers, contractors, building managers, and certified technicians – access the platform to input data, receive notifications, compare performance, and automatically generate the required documentation. The worksite thus becomes **transparent, traceable, and remotely manageable**.

The platform also includes tools for calculating **carbon credits**, which are increasingly relevant in the context of sustainable finance. This allows for the economic valorisation of the most effective interventions, opening new opportunities for condominium communities and property owners.

OPERATIONAL APPLICATION OF THE EACCP STANDARD: TWO EXAMPLES OF IMPLEMENTATION

To assess its real-world effectiveness, we present two examples of implementation. The first involves the energy upgrade of a 15-unit condominium built in the 1970s in Climate Zone E. The second refers to an apartment that improves from Energy Class F to Class D.

Example 1 – Energy Renovation of a 15-Unit Condominium

The initial audit revealed Energy Class G, with major thermal losses, an outdated heating system, and no renewable sources. Annual heating costs exceeded €1,800 per household, with estimated CO₂ emissions of 60 tons per year for the entire building.

The project, developed using the EACCP methodology, included:

- External wall insulation (thermal coat);
- Replacement of windows and doors;
- Installation of a centralized heat pump system powered by photovoltaic panels;
- Controlled mechanical ventilation (CMV).

All project phases were tracked through the Harley&Dikkinson platform, with continuous documentation uploads and real-time digital checks.

Upon completion, the building reached Energy Class B. Total energy consumption was reduced by approximately 55%, and emissions were lowered

by an estimated 35 tons of CO₂ per year. Although not fully compliant with EU Taxonomy criteria, the intervention earned **EACCP certification**, confirming its documented and independently verified real-world effectiveness.

The property value increased, energy expenses decreased significantly, and the condominium could demonstrate its commitment to sustainability through a recognized technical certification.

1 – SUMMARY TABLE: ENERGY RENOVATION OF A 15-UNIT CONDOMINIUM

RETROFIT ACTION	BENEFIT TO ENVELOPE / SYSTEM	IMPACT ON ENERGY CONSUMPTION	SAVINGS ON BILLS
Thermal insulation on façades	Reduction of transmittance and thermal bridges; more stable indoor temperature.	Significant decrease in heating demand.	High savings on heating costs.
Replacement of windows and frames	Improved insulation and airtightness; fewer heat losses and drafts.	Reduced transmission and air infiltration losses.	Medium-high savings on heating costs.
Centralized heat pump system powered by photovoltaic panels	High-efficiency thermal generation; shifts consumption to the electric vector.	Reduction in primary energy use for climate control.	High savings (further benefit if partially powered by PV).
MVHR (mechanical ventilation with heat recovery)	Air exchange with heat recovery; improved comfort and indoor air quality.	limits ventilation losses compared to natural ventilation.	Medium and constant savings over time.
EACCP digital traceability (H&O platform)	Real-time checks and documentation; execution quality and compliance.	Indirect impact: ensures that designed performance is achieved.	Indirect impact: prevents inefficiencies and extra costs.
Combined effect (package)	Building envelope + systems + renewables certified under EACCP; monitoring and documented quality.	–	Estimated global savings: -55% consumption; -35 t CO₂/year; significant reduction in overall energy expenditure.

Example 2 – Energy Class Upgrade from F to D for an Apartment

Achieving a two-class upgrade requires an integrated approach and the use of the most efficient technologies. The goal is not only to improve the **Energy Performance Certificate (EPC)** but also to deliver real energy savings and increase property value, in line with new EU directives.

We consider an apartment of approximately 100 m² in a 1970s condominium in Milan, with the following initial features (Energy Class F):

- **Building envelope:** Uninsulated brick walls, single-pane wooden windows, and poorly insulated roof;
- **Systems:** Traditional gas boiler (non-condensing) and cast-iron radiators;
- **Estimated annual energy consumption:** ~18,000 kWh/year (primary energy for heating).

Integrated Upgrade Plan for a Two-Class Jump

To reach Energy Class D, the upgrade strategy included:

- **Thermal insulation (envelope):** External EPS insulation (10 cm) on perimeter walls to drastically reduce heat loss.
- **Window replacement (envelope):** Triple-glazed, low-emissivity PVC windows with thermal break frames, eliminating drafts and thermal bridges.

- **Air-to-water heat pump (systems):** Replacing the gas boiler with a high-efficiency system that can also cool during summer.
- **Photovoltaic system (integration):** 3 kWp system on the roof, powering the heat pump and reducing grid dependency.
- **Building Automation (monitoring):** Smart system to monitor real-time energy use, PV production, and indoor/outdoor temperatures. It optimizes heat pump operations, automates shutters and lighting, and displays savings via a digital dashboard.

Validation and Monitoring of Savings

Building Automation is not a “luxury” but an essential tool for verifying performance. It monitors:

- Electricity use of the heat pump;
- PV system production;
- Indoor and outdoor temperature;
- System efficiency.

These data confirm the **real impact of the intervention**, validating the expected savings (see table).



2 – SUMMARY TABLE: ENERGY CLASS UPGRADE FROM F TO D

RETROFIT ACTION	BENEFIT TO ENVELOPE / SYSTEM	IMPACT ON ENERGY CONSUMPTION	SAVINGS ON BILLS
Thermal Insulation (External Wall Cladding)	Perimeter wall insulation	50-60% reduction in thermal losses	Heating costs halved
Triple-glazed Windows	Insulation of openings and thermal bridges	20-30% reduction in losses	Greater thermal comfort, lower consumption
Air-to-Water Heat Pump	High-efficiency heat production	50% reduction in gas consumption	Significant savings on gas bill
Photovoltaic System	Self-production of electricity	Covers 100% of the heat-pump's electricity demand and a large share of household usage	Lower electricity bill
Building Automation	Measurement and optimization	10-15% optimization of consumption	Guaranteed and monitored savings
Total Combined Effect	Envelope + System + Monitoring	Over 30% primary energy savings	Estimated annual savings of about €1,500

The **post-intervention analysis** confirmed a reduction from **18,000 kWh/year to 10,000 kWh/year**, a **primary energy savings of over 30%**, ensuring return on investment and significantly lower utility bills.

ALIGNMENT WITH EUROPEAN DIRECTIVES

This type of renovation aligns perfectly with the European regulatory framework and meets energy and sustainability performance targets.

- **EU Taxonomy:** Renovations that significantly improve efficiency, as in our case, qualify as “sustainable investments,” contributing to climate change mitigation.
- **“Green Homes” Directive:** The Energy Performance of Buildings Directive (EPBD) promotes upgrading Europe’s building stock. The case meets the directive’s target of reaching at least Class E by 2030 and Class D by 2033 for all residential buildings.

Energy renovation is no longer optional – it is essential for enhancing property value, reducing operating costs, and contributing to a more sustainable future in line with EU regulations.

CONCLUSIONS: A NEW CULTURE OF ENERGY EFFICIENCY

The EACCP standard represents a cultural shift as much as a technical one. It calls for a new perspective: it is not enough to carry out compliant work – **we must prove, with objective data**, that such work achieves measurable, lasting, and environmentally meaningful results.

In this light, EACCP becomes a strategic tool for administrators, professionals, institutions, and citizens alike. It certifies only effective interventions, combats greenwashing, and builds trust in the market. It **complements the EU Taxonomy**, bridging the gap between ambition and reality. And most importantly, it contributes to developing a more mature, responsible, and aware energy efficiency supply chain.

Harley&Dickinson plays an active role in driving this change. Leveraging its technologies, expertise, and ability to digitally integrate the construction supply chain, it supports the sector’s transition towards a future where every intervention **is traceable, certifiable, and genuinely sustainable**.

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The primary market for covered bonds – review H1 and outlook H2

Helaba | 

By Florian Hillenbrand, Helaba

1. MARKET ENVIRONMENT AND ISSUANCE

2025, a year in which so much has happened that it would be enough for three years. Despite spillover effects from volatile government bonds, the negative background noise of the war in Ukraine, and the regularly recurring shocks of US trade policy, the covered bond year actually got off to a cautiously positive start right from the beginning. ‘Positive’ because the number of transactions developed swiftly in January – not record-breaking, but at a historically high level. ‘Cautious’ because transactions in the primary market were secured with some very attractive reoffer levels, which was primarily reflected in the oversubscription rates: only two of the 29 transactions closed in January had a book-to-cover ratio of less than 2x – the average was over 4.5x.

However, with 19 transactions in February followed by only 12 in March, it became clear that something was amiss. Covered bonds were caught between a rock and a hard place: on the one hand, rising yields on government and government-related bonds attracted investors’ attention. On the other hand, issuers took advantage of the narrower spreads between unsecured and secured paper to preserve their cover pool and refinance themselves unsecured. The latter can be seen as a sign that, despite all the uncertainty, confidence in the banking sector was and remains encouragingly high.

This sandwich position slowly dissolved between the end of March and mid-April: sovereigns became more expensive, which in turn created performance potential for covered bonds; and this was reasonably well exploited. By the beginning of May at the latest, issuance was in full swing. June 2025 was even

the most active June in 15 years; back then – in 2010 – it was supported by catch-up effects following the successful bailout of Greece. However, in contrast to the beginning of the year, this record-breaking run was no longer driven by perceived excessive caution: the oversubscription ratios for transactions in May and June averaged a sustained and stable 2.3x, with a few outliers above and below this level.

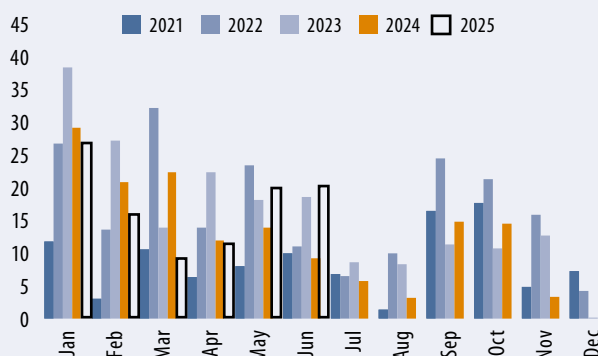
2. MARKET SEGMENTS AND MATURITIES

From January to June, around EUR 104 bn in covered EUR benchmark bonds were issued. This volume was distributed across a total of 125 transactions. Of this amount, EUR 51.7 bn were accounted for by 65 transactions in the second quarter.

These transactions originated from 23 countries, matching the broadest market coverage achieved so far in 2022. There is a good chance that a 24th country will be represented, given that there has been no benchmark activity from the Czech Republic to date. However, this has been the case regularly since 2021. A #25, on the other hand, would be a major surprise. Such a surprise, for example, was delivered in the Hungarian covered bond market after an absence of 16 years.

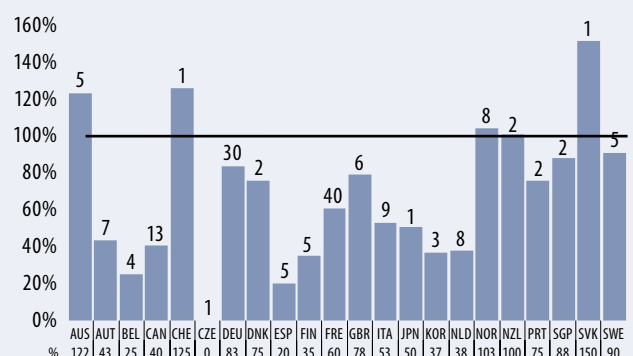
The pole position in the country breakdown has changed hands for the first time in six years: with EUR 24.55 billion, German Pfandbriefe are just ahead of French covered bonds (EUR 23.9 billion) at the end of H1 2025. There have also been changes in the ranks behind them. Norwegian issuers placed EUR

FIGURE 1 | MONATLICHE EMISSIONSVOLUM



Sources: Helaba

FIGURE 2 | EMISSIONSERWARTUNGEN VS.

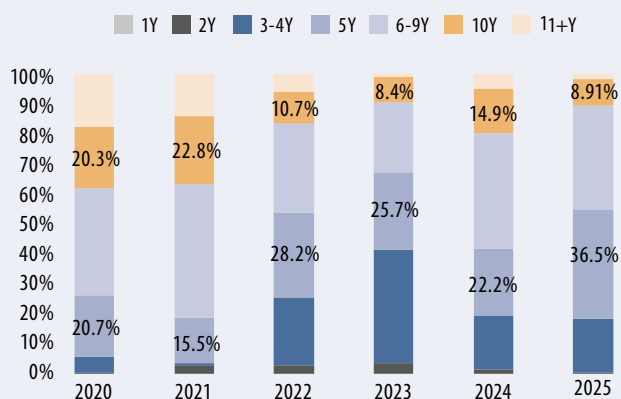


Sources: Helaba

8.25 billion in the first half of the year, followed by Australian issuers (EUR 6.1 billion) and Canadian issuers with EUR 5.25 billion. Compared with last year's activity, covered bonds from France, Canada, Italy, Austria, the Netherlands and Finland in particular have potential to catch up. Canadian issuers have already shown a high affinity for issuing in the third and early fourth quarters in the past. Covered bonds from Norway and Australia are already above expected volumes for the whole of 2025.

However, 2025 was not only record-breaking in terms of market activity in June and market breadth. At 36.5%, the volume-weighted share of 5-year securities was higher than ever since the beginning of the 'Jumbo era'. The flagship 10-year maturity accounted for only 8.9% of the volume placed – one of the lowest figures ever – undoubtedly reflecting the 'cautiously positive' market sentiment mentioned at the outset. The 20-year Pfandbrief issued by Deutsche Kreditbank is particularly noteworthy in this context. It is the first 20-year benchmark covered bond since 2022 and is also one of the top 10 longest benchmark covered bonds ever issued. Thanks to the clever choice of maturity date, it was also the longest EUR benchmark Pfandbrief ever issued.

FIGURE 3 | EMISSION NACH LAUFZ



Sources: Helaba

3. GROSS-NET ANALYSIS

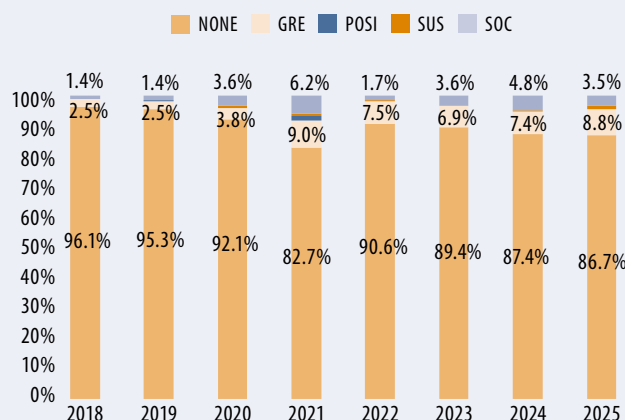
The EUR 103.8 bn in newly issued covered bonds in H1 has been offset by EUR 83 bn of maturities. This results in net market growth of EUR 20.8 bn. Excluding the pandemic years 2020 and 2021, this is the lowest figure since 2017. However, EUR 83 bn in maturities was also historically high. The reason for high maturity volumes is the strong issuance activity in 3- to 5-year tenors during and after the pandemic. There is no indication of a change in the near future, with high redemptions expected in the next six months: around EUR 57 bn is still due to be repaid by the end of December. By contrast, we expect new issues to total little more than EUR 50 bn by the end of the year, which translates to a market contraction in the second half of 2025. Overall, net market growth is likely to remain subdued in the coming years: at least EUR 150 bn will regularly fall due, reaching a peak of EUR 183 bn in 2027.

ESG trend slow but steady

ESG-compliant covered bonds accounted for a growing share of issuance volume in the first half of the year. Around EUR 13.6 bn in 18 transactions were placed in the form of green, social or sustainable covered bonds – this corresponds to around 13.3% of the total volume, compared with 12.6% in 2024, 10.6% in 2023 and 9.4% in 2022.

Despite the still much larger share of conventional cover assets, this signals the ongoing integration of sustainable financing structures in the covered bond market. However, a key challenge remains the lack of transparency at the cover pool level. The European Banking Authority (EBA) is currently reviewing whether standardised ESG disclosure requirements for covered bonds should be introduced.

FIGURE 4 | ESG COVERED BONDS



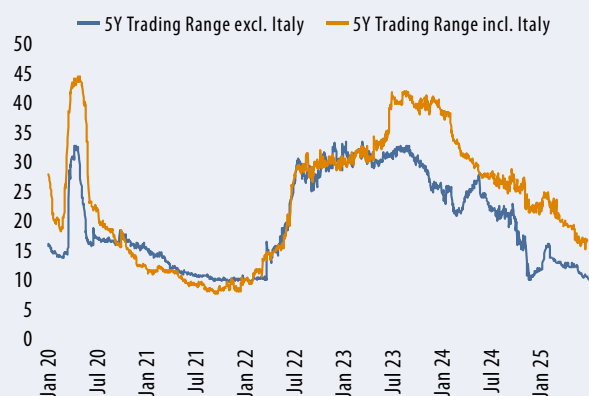
Sources: Helaba

4. SPREAD DEVELOPMENT: RESILIENCE

The shock waves from Russia's attack on Ukraine in March 2022 also reached the covered bond market, causing the trading range between more expensive and cheaper covered bonds to widen. In the 5-year segment, this range widened by around 25bp. The wave of TLTRO redemptions and the associated additional issues, primarily from Italy, provided a further boost in March 2023 and widened the yield spectrum for 5-year covered bonds to 41bp. A peak was last reached in August 2023; since then, the entire covered bond market underwent a sustained compression. Excluding Italian OBGs, trading ranges are back at February 2022 levels; OBGs still have around 5bp of catch-up potential.

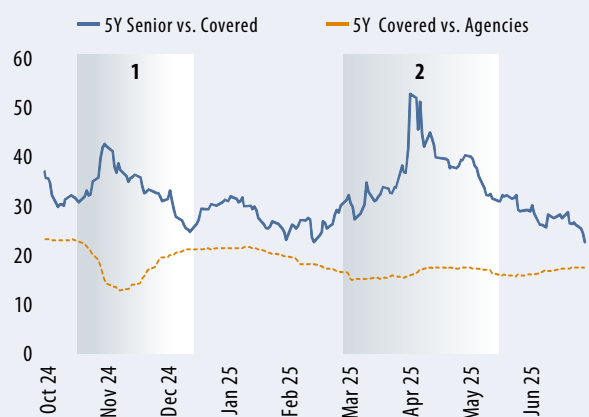
Compared to the 'neighbouring markets' SSA and senior unsecured bank bonds, covered bonds proved relatively resilient to the volatile news environment. Before and during the turn of the year, when political and fiscal uncertainties dominated the headlines, particularly in France and Germany, SSAs were significantly more affected (#1 in the chart), while trade policy developments across the Atlantic were far more of an issue for unsecured debt instruments (#2 in the chart).

FIGURE 5 | 5Y TRADING RANGES



Sources: Helaba

FIGURE 6 | VERGLEICH IT NACHBARN



Sources: Helaba

5. OUTLOOK FOR THE SECOND HALF OF 2025

Seasonal factors traditionally play a major role in the covered bond issuance calendar. In this respect, we expect business to remain brisk from mid-September to the end of November. Assuming gross issuance will reach approximately EUR 110 bn by the end of July, a good EUR 40 bn should still be printed in the 12 weeks to the end of November, which would equate to around four transactions per week. As already mentioned, Canadian issuers were often very active in the third and fourth quarters. Austrian, Belgian and Finnish issuers have also been conspicuous by their restraint to date, which allows conclusions to be drawn about potential issuance activity for the rest of the year.

With regard to spread development in the remainder of the year, Helaba Research expects Bund swap spreads of -10bp in the 5-year and 0bp in the 10-year range, which corresponds to a sideways movement of the trend that has been ongoing since around April. In view of the low or even negative net issuance of covered bonds expected until the end of the year, the supply side suggests that spreads against swaps will remain fairly stable. The compression of the entire covered bond spread spectrum is still active, but should slowly subside given that pre-pandemic levels have largely been reached. We still see potential for Italian covered bonds in this context.

From a regulatory perspective, we expect the EBA's proposals on the further development of the CRR and the CBD, particularly with regard to third-country equivalence, to reach us before the summer break. This would provide plenty of intellectual entertainment for the summer holidays and lay the foundations for fruitful discussions, for example at the Global Covered Bond Congress in Seville in mid-September.

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ESG covered bonds at a glance

LB BW

By Rodger Rinke, LBBW

IN A NUTSHELL:

- The ESG share of the EUR benchmark covered bond segment increases slightly in H1/2025 and reaches 12%
- Main use of proceeds involves affordable housing and green buildings.
- No systematic greenium for ESG covered bonds, but advantages are evident in the primary market

RAPID MARKET GROWTH OF ESG COVEREDS

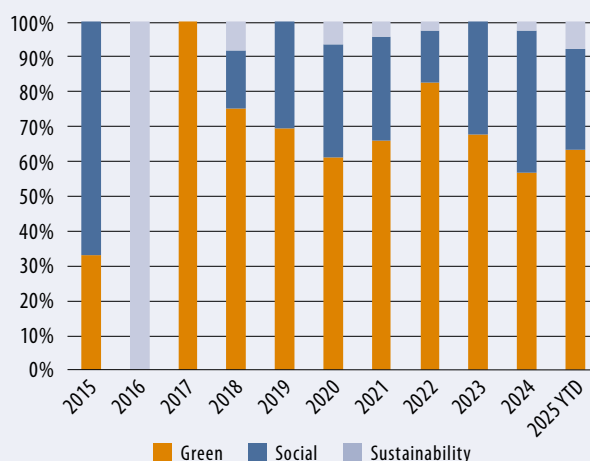
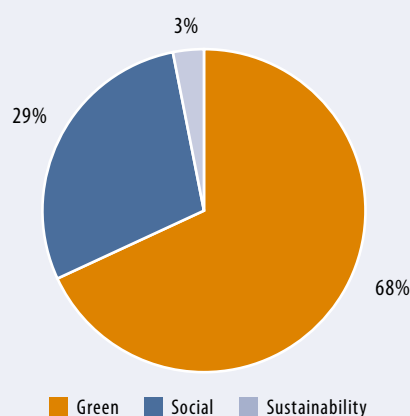
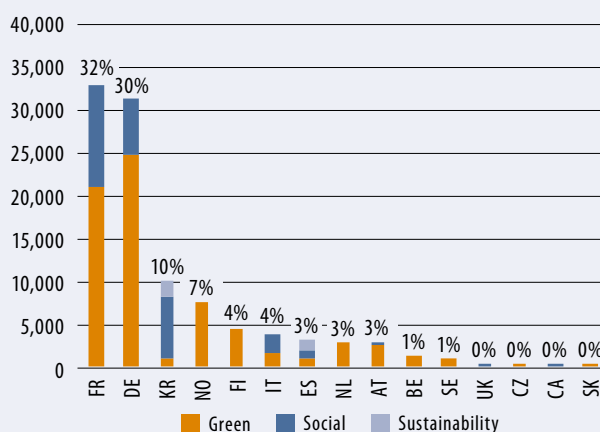
Since the first ESG covered bond was issued by Münchner Hyp in 2014, this asset class has developed into a significant market. In just over a decade, the journey has been remarkable. Following that initial issuance, only two additional ESG covered bonds were issued in the following year 2015. By 2024, the number of public and private ESG covered bonds issued had grown to 59 across various sizes and currencies, highlighting the rapid growth of this market.

As of the end of June 2025, the outstanding volume of publicly placed sustainable covered bonds stood at just under EUR 126.5 billion. These bonds have been issued in nine different currencies, with the EUR clearly dominating: over 75% of all issues and 86% of the outstanding volume are denominated in EUR. The second-largest currency is SEK, representing 11% of issues and 8% of volumes. Privately placed ESG covered bonds account for an additional volume of over EUR 18 billion, issued across three further currencies.

A LOOK AT BENCHMARK COVERED BONDS

Regarding outstanding benchmark issues, the importance of EUR becomes even more pronounced. In this segment, nearly 88% of all issues and over 89% of the outstanding ESG covered bonds' volume are denominated in EUR. At over EUR 105 billion, benchmark issues represent approximately 97% of the total outstanding ESG covered bond volume in EUR. A clear trend can be observed towards green covered bonds, which comprise roughly 67% of the total volume of outstanding ESG covered bonds in the EUR benchmark segment. Social covered bonds account for 29%, while sustainability bonds account for 4%. A time trend analysis of the outstanding volume by issuance year indicates no significant shift in this ratio in the near term. France holds the leading position with a 32% share of the outstanding EUR benchmark

FIGURE 1, 2 & 3 | OUTSTANDING ESG EUR BENCHMARK COVERED BONDS BY COUNTRY AND USE OF PROCEEDS



Volume in EUR mn

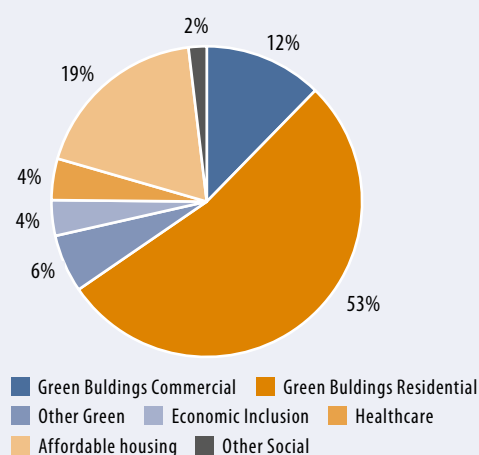
Sources: Informa global markets, LBBW Research

volume, followed by Germany (30%) and South Korea (10%). This dominance recently shifted in France's favor due to a strong wave of issuance activity.

FOCUS ON AFFORDABLE HOUSING AND GREEN BUILDINGS

ESG Covered Bonds (re)finance a broad spectrum of uses and are specifically tailored to support either green and/or social objectives. A defining characteristic of use-of-proceeds bonds is their function to (re)finance a distinct portfolio of new or existing eligible assets. While this portfolio may align with assets eligible as cover assets, such an overlap is not a prerequisite. An analysis of allocation reports from ESG covered bond issuers highlights the predominant role of sustainable buildings – particularly in the residential mortgage sector – and the central importance of social housing in these bonds.

FIGURE 4 | USE OF PROCEEDS OF ESG COVERED BONDS



Only EUR bonds >EUR 250 million
Sources: Allocation Reports, LBBW Research

2025: RISING SHARE OF ESG COVERED BONDS

By the end of June 2025, ESG covered bonds worth EUR 12.6 billion had been issued in the EUR benchmark segment. This represents an increase of approximately 10% compared to the previous year, when ESG covered bonds totaled EUR 11.3 billion. In contrast, the overall EUR benchmark covered bond segment experienced a decline. While EUR 111.5 billion was issued in H1/2024, the figure for the same period in 2025 fell to EUR 102.5 billion, equivalent to a decrease of 8%. Despite this, the share of ESG covered bonds within the overall EUR benchmark segment continues to show a positive trend, rising from around 10% in the first half of 2024 to approximately 12% in the same period of 2025. For the full year 2024, the ESG share stood at 13%.

FRANCE LEADS IN 2025

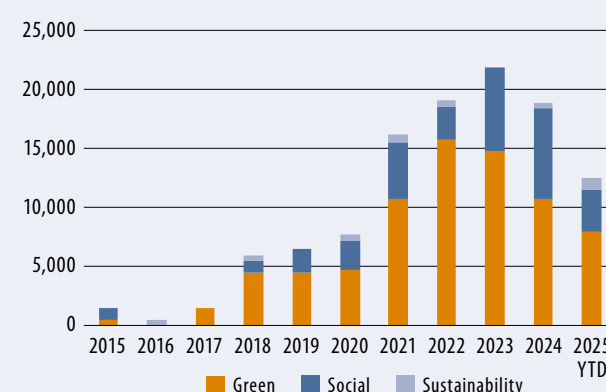
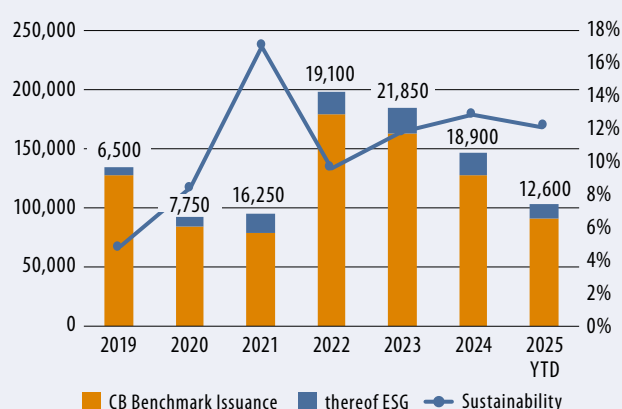
In 2025, French issuers lead the market with a volume of EUR 6 billion, followed by German issuers with EUR 2.5 billion. This ranking aligns with that of 2024, during which French issuers also held the largest market share. Regarding the

use of proceeds, green covered bonds have dominated so far in 2025, accounting for a 63% share – an increase of about 7 percentage points compared to the previous year. Social covered bonds, which performed particularly strongly in 2024, have seen less prominence this year. Historically, however, approximately two-thirds of ESG covered bond issuances have been “green” bonds, making 2025 a continuation of this long-term trend.

A SUB-BENCHMARK ESG DEBUT

There were no new entrants into the ESG Covered Bonds EUR Benchmark segment in 2025 up to the end of June. However, Kreissparkasse Köln made its ESG covered bond debut outside the benchmark segment this year, issuing a green covered bond with a volume of EUR 250 million.

FIGURE 5 | ESG EUR BENCHMARK CB NEW ISSUES: SHARE OF TOTAL MARKET AND USE OF PROCEEDS



Volume in EUR million
Sources: Informa global markets, LBBW Research

REGULATORY BASIS: ICMA STANDARDS

The voluntary ICMA guidelines typically serve as the foundation for the issuance of ESG covered bonds. With the introduction of the EU Green Bond Standard (EU GBS) in December 2024, a new (voluntary) European standard has been established. While initial EU GBS transactions – including some from the financial sector – have already taken place, none have yet been observed

within the covered bond segment. The EU Green Bond Standard aims to set a “gold standard” for green bonds. The key distinction between the EU GBS and the ICMA guidelines lies in the direct correlation between the use of funds and taxonomy-compliant economic activities. The establishment of a uniform EU standard offers the promise of greater transparency for both investors and issuers and could significantly accelerate the growth of the green covered bond market. Covered bond issuers are already aligning their green bond frameworks more closely with the EU taxonomy. In Germany, the Association of German Pfandbrief Banks (vdp) has revised its minimum standards for green Pfandbriefe, adapting the requirements for green cover assets to more stringently meet EU taxonomy criteria. However, given the complexity of the EU taxonomy and the current lack of sufficient taxonomy-compliant cover assets, it is expected to take some time before the first EU Green Covered Bond is issued. In addition, issuers in the senior financials segment have not yet seen any recognizable pricing advantage in using the EU Green Bond Standard. Until the challenges associated with the EU GBS implementation are addressed, green bonds will continue to be issued based on existing ESG guidelines.

GREENIUM IS NOT SYSTEMATIC

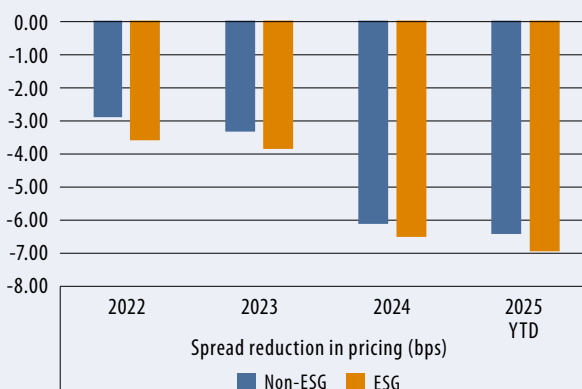
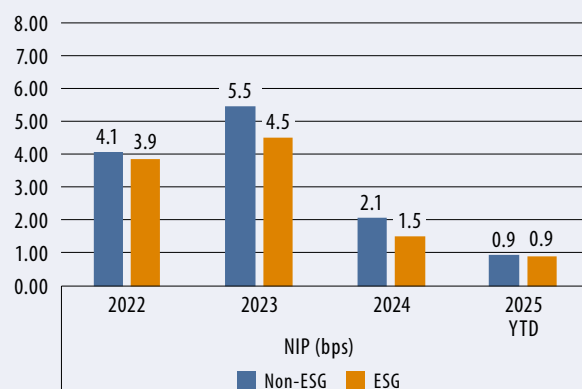
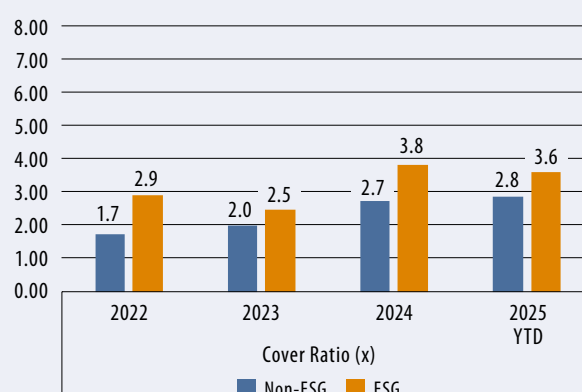
Growth in the ESG covered bond segment is supported by the increasing number of issuers. Nevertheless, the availability of ESG-compliant assets remains a limiting factor, as these serve as the basis for new issues. In addition, refinancing levels, achievable benefits (the so-called “greenium”) and the additional costs of ESG-based issues (e.g. reporting, ESG framework maintenance and second opinions) to support issuers’ decision-making. However, the cost advantages on the secondary market for ESG covered bonds remain limited. As ESG covered bonds are identical to conventional covered bonds in terms of security and risk profile, there are no systematic price differences for comparable bonds due to credit-related factors. Differences arise primarily from a broader investor base. An analysis of 400 benchmark issues, including 93 ESG covered bonds, shows no consistent greenium. Although there are isolated price advantages of usually 1 to 3 basis points – in rare cases up to 4 basis points, for example with Italian issuers such as Credit Agricole Italia – this only affects individual bonds and not the entire ESG curve of an issuer. A systematic premium is not recognisable. Social covered bonds benefit even less from a premium from the issuer’s perspective than green covered bonds. The results largely correspond to our earlier analyses at other point in times.

ADVANTAGES ON THE PRIMARY MARKET

On the primary market, the advantages of ESG covered bonds are particularly evident in stronger investor demand. This is typically reflected in larger order books – measured by the cover ratio – which reduces the risk for issuers and indicates stronger secondary market support. The demand for ESG covered bonds also exhibits a notable element of “sustainability,” as investor interest remains resilient over time. In addition, ESG covered bonds offer a slight advantage in the pricing process, as the narrowing between the initial price

range (IPT) and the final pricing is generally more pronounced. However, the benefit of a lower new issue premium has not been observed in the current year. The limited supply in the primary market so far in 2025, combined with generally favorable issuing conditions, has lessened the specific advantages of ESG covered bonds in this regard.

FIGURE 1, 2 & 3 | OUTSTANDING ESG EUR BENCHMARK COVERED BONDS BY COUNTRY AND USE OF PROCEEDS



Cover ratio x-fold, NIP and spread decline in bps
Sources: Informa global markets, LBBW Research

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Spanish Covered Bonds Have Come a Long Way



By Tomas Rodriguez-Vigil Junco & Ketan Thaker, Morningstar DBRS

KEY HIGHLIGHTS

- Since the European CB Directive was transposed in Spain in 2022, Spanish CBs tend to issue soft bullets, in line with most European programmes.
- Mortgage cover pools have evolved to feature a higher percentage of residential mortgage loans and fixed-rate assets and a lower WA LTV.
- Public-sector issuance is losing weight in Spain, but other alternatives to mortgage covered bonds have emerged.

OVERVIEW

Three years have elapsed since the European covered bond directive was transposed in July 2022 in Spain. Since then, things have changed a lot in the Spanish covered bond market. Both the covered bond programmes' features, like the maturity extensions and overcollateralisation levels, and the Spanish cover pools have changed fast, adapting to the new environment. However, some things remain – like scarce public issuance – where some alternatives to mortgage covered bonds emerge.

DIRECTIVE TRANSPOSED WITH ITS PECULIARITIES

On 8 July 2022, the Royal Decree-Law 24/2021 (the Law) entered into force in Spain, transposing the European covered bond directive, and began governing all existing and new Spanish covered bonds. After two modifications, the most recent in June 2023, it has remained unchanged. The Law has converged with European peers in most aspects but with its own singularities, the main one affecting the calculation of the liquidity buffer.

We understand that, in Spanish covered bonds, the scheduled maturity date should be used to calculate the principal amount for the dynamic liquidity buffer that covers temporary liquidity constraints, unlike in most European countries, where the extended maturity is typically used for this purpose. This is credit positive for Spanish covered bond programmes, although we still need to see what happens when the first soft bullets approach to maturity in 2026. More clarity from the regulator on this aspect would be beneficial. For more information, please see [Updates on Spanish Covered Bond Law: Welcome Clarifications](#).

SOFT-BULLET MATURITIES EMERGED IN SPAIN

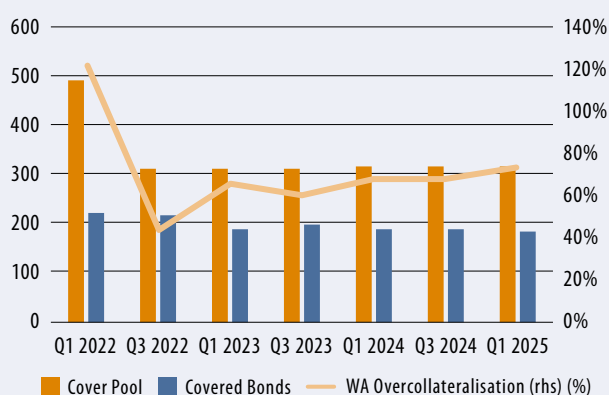
During the second half of 2022, all covered bond issuances placed by Spanish banks included a 12-month extension maturity, a novelty in the Spanish covered bond market at that time. Since then, issuers have followed this trend in most issuances, both placed and retained. In the second half of 2024, there were even a few retained issuances benefitting from a potential 24-month extension, something rarely seen in the covered bond market.

We view Spanish soft-bullet structures as credit positive because, if an issuer is unable to meet payments on the covered bonds, extension periods may reduce the stress on the potential liquidation of the cover pool to meet upcoming maturities on the covered bonds. However, the combination of soft bullets with hard bullets in covered bond programmes¹, together with the lack of clarity about the calculation of the liquidity buffer for these soft-bullet issuances, may pose some risks.

FLUCTUATION IN OVERCOLLATERALISATION LEVELS, ALTHOUGH STILL VERY HIGH

Immediately after the Law came into force in 2022, the weighted-average (WA) overcollateralisation level of Spanish mortgage covered bond programmes, which represent more than 90% of the outstanding Spanish covered bonds, fell

¹ There are a few covered bond programmes which are already 100% soft bullet, mainly covered bonds backed by public-sector loans or loans guaranteed by export credit agencies, and some which are still 100% hard-bullet.

FIGURE 1 | EVOLUTION OF MORTGAGE COVER POOLS AND COVERED BONDS (EUR BILLION)

Sources: Morningstar DBRS, Spanish issuers.

to around 40% from more than 120%. However, this WA overcollateralisation level increased to around 72% in Q1 2025, mainly because of deleveraging (a reduction in outstanding covered bonds²), as cover pool amounts have broadly remained stable. That said, the level of overcollateralisation maintained by our rated Spanish covered bond programmes is still materially higher than the statutory overcollateralisation level, which dropped to 5% under the Law from 25%³ under the previous law. A few small programmes currently maintain overcollateralisation levels lower than 25%, which is uncommon in the Spanish covered bond market but quite usual in others.

MORTGAGE COVER POOL FEATURES EVOLVED DIVERSELY

Percentage of Residential Loans

The percentage of residential mortgage loans in portfolios is now higher, which was expected given that:

- (1) the low 60% loan-to-value (LTV) threshold for nonresidential mortgage loans makes it more difficult to include them in cover pools;
- (2) the Law demands more detailed information when the loan is included in the special register, which is typically easier to source for residential mortgage loans; and
- (3) some issuers prefer a cover pool backed mainly or completely by residential mortgage loans because investors perceive the portfolio to have a lower credit risk. The latter is also our assumption, so we see the reduction of nonresidential mortgage loans in the cover pools as credit positive.

Fixed-Rate Assets

The percentage of fixed-rate loans in the Spanish mortgage cover pools has increased, mirroring the trend in the mortgage market. While this represented

only 15% in Q1 2019, it increased notably to 30% in Q1 2022 and is currently around 50% of the cover pools. Changes to cover pools resulting from the Law's eligibility criteria have also fostered further growth. Although this increase is typically negative for covered bond credit ratings, high overcollateralisation levels offset this negative effect.

Weighted Average Loan-to-Value

The WA LTV of the Spanish mortgage cover pools has decreased because, under the old law, there were no LTV limits and the issuer's entire mortgage book, excluding securitised assets, was included in the cover pool. Currently, the portion of loans whose LTV was higher than 80% (60% for the nonresidential loans) have been removed from the cover pools.

Other Features

The rest of the cover pool features typically remain unchanged. However, there are some programmes where certain portfolio characteristics, such as seasoning, remaining terms, or geographical distribution, altered because of the cover pool change in 2022.

	MORTGAGE COVER POOLS AT Q1 2022	MORTGAGE COVER POOLS AT Q1 2025
Mortgage Cover Pools (EUR Billion)	491	314
Outstanding Mortgage Covered Bonds	222	182
WA Overcollateralisation (%)	121	72
Percentage of Residential Assets (%)	83	90
WA Seasoning (months)	101	97
WA Remaining Terms (months)	217	212
Floating-Rate Assets (%)	73	50
WA LTV (%)	58	50

* WA overcollateralisation is calculated as mortgage cover pools divided by outstanding mortgage covered bonds. The average overcollateralisation of the covered bond programmes would be 55% as of Q1 2025 compared with around 300% in Q1 2022. This figure is distorted by a couple of covered bond programmes with plenty of overcollateralisation.

Sources: Morningstar DBRS, Spanish issuers.

PUBLIC ISSUANCES ARE RARE, SUSTAINABLE ISSUANCES ARE RARER

In the last three years, Spanish issuers have placed fewer than 20 benchmark issuances in the market. Banco Santander, S.A. (Santander; A (high), Stable) has issued half of them, and Santander together with Banco Sabadell, S.A. (A (low), Stable; covered bonds AAA), Cajamar Caja Rural, SCC (BBB (low), Positive; covered bonds AAA) and Caja Rural de Navarra (not rated), are the ones that

² In some cases, thanks to the early amortisation of retained covered bonds.

³ 42.9% for public-sector covered bonds.

can be considered as active in the market. The latter is the only Spanish entity that has issued sustainable covered bonds since 2022.

There are 18 issuers and 25 programmes with outstanding covered bonds in Spain. Furthermore, two additional issuers, Banco de Crédito Social Cooperativo, S.A. (BBB (low), Positive) and Caja Rural del Sur, S.C.C. (not rated), already have authorisation from the Bank of Spain to issue mortgage covered bonds. Most of the Spanish covered bond issuances are retained; in these past three years, there have been more than EUR 60 billion in covered bonds issued, but around 70% of this amount was retained.

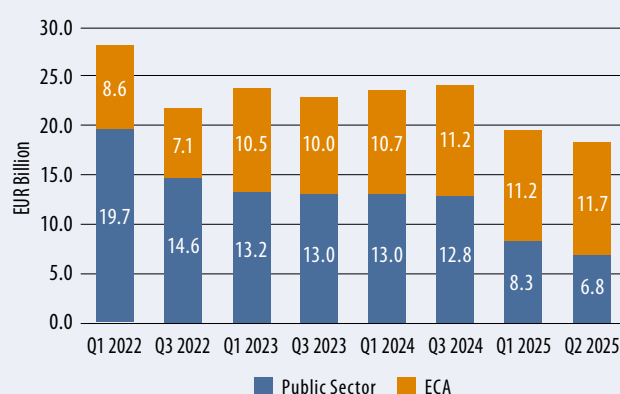
ALTERNATIVES TO MORTGAGE COVERED BONDS: PUBLIC SECTOR AND EXPORT CREDIT AGENCIES

Of the 25 Spanish covered bond programmes, four are backed by public-sector loans (public sector covered bonds) and three are backed by loans guaranteed by export credit agencies (ECA covered bonds)⁴.

Public-Sector Covered Bonds: Although outstanding public-sector covered bonds are retained, there used to be a few issuances every year. However, there have been no issuances (not even retained) in the last three years, and the outstanding amount of public sector covered bonds has decreased by more than half.

ECA Covered Bonds: All but three outstanding ECA covered bonds are retained, but there is currently some activity in this sector, mainly thanks to Santander's ECA covered bond programme. Although the ECA covered bond amount has recently increased slightly, the current amount almost doubles that of public-sector covered bonds, something that would have been hard to believe three years ago.

FIGURE 2 | COVERED BONDS BACKED BY PUBLIC SECTOR AND EXPORT CREDIT AGENCIES LOANS



Sources: Morningstar DBRS, Spanish issuers.

APPENDIX

MORNINGSTAR DBRS-RATED SPANISH COVERED BONDS AND LATEST CREDIT RATING ACTIONS

PROGRAMME NAME	ISSUER/REFERENCE ENTITY	TYPE	LAST RATING ACTION DATE	LAST CREDIT RATING ACTION	CURRENT CREDIT RATING	CURRENT LSF ASSESSMENT
Banco Bilbao Vizcaya Argentaria S.A. Covered Bonds (Cédulas Hipotecarias - Mortgages)	Banco Bilbao Vizcaya Argentaria, S.A.	Mortgage	6 June 2025	New Rating	AAA	Very Strong
Banco Sabadell S.A. Covered Bonds (Cédulas Hipotecarias - Mortgages)	Banco Sabadell, S.A.	Mortgage	27 June 2025	Confirmed	AAA	Very Strong
CaixaBank S.A. Covered Bonds (Cédulas Hipotecarias - Mortgages)	CaixaBank, S.A.	Mortgage	10 January 2025	Confirmed	AAA	Very Strong
Cajamar Caja Rural S.C.C. Covered Bonds (Cédulas Hipotecarias - Mortgages)	Cajamar Caja Rural Sociedad Cooperativa de Credito	Mortgage	4 June 2025	Upgraded	AAA	Very Strong
Cajamar Caja Rural S.C.C. Covered Bonds (Cédulas Territoriales - Public Sector)	Cajamar Caja Rural Sociedad Cooperativa de Credito	Public Sector	9 December 2024	Upgraded	AA	Very Strong
Cajasur Banco S.A. Covered Bonds (Cédulas Hipotecarias - Mortgages)	Cajasur Banco S.A.	Mortgage	24 June 2025	Upgraded	AAA	Very Strong
Kutxabank, S.A. Covered Bonds (Cédulas Hipotecarias - Mortgages)	Kutxabank, S.A.	Mortgage	4 June 2025	Confirmed	AAA	Very Strong

⁴ Loans granted to or guaranteed by central governments, the ECB, EU central banks, public sector entities, regional governments, or local authorities in the EU, and other entities, linked to the financing of export contracts for goods and services or to the internationalisation of companies resident in Spain or in other countries, provided that the borrower is not a Spanish public sector entity.



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Property Value under Art. 229 CRR III: Methodological Implementation and Practical Application¹

vdpResearch

By Andreas Kunert, vdpResearch GmbH

INTRODUCTION

With the publication of the amended Capital Requirements Regulation (CRR III) and Capital Requirements Directive (CRD) in the EU Official Journal on 19 June 2024, the implementation of the Basel III reforms in the EU was finalized. For real estate financing, the changes to the Credit Risk Standardized Approach (CRSA) are particularly relevant, as the implementation of the output floor based on the CRSA ensures that all banks must apply the CRSA, even if they use the internal ratings-based approach (IRBA).

The amendment to the CRR also provides for significant changes to property valuation. This includes the adoption of the definition of a prudent, conservative value under the term “property value” from the Basel III proposals. The choice between market value and mortgage lending value previously enshrined in Art. 229 CRR is replaced by “property value” as the sole value concept for equity capital requirements.

REGULATORY FRAMEWORK

The “property value” must be applied to new loans from 1 January 2025. The portfolio must be adjusted to this value concept by the end of 2027.

“Property value” is defined in Art. 229 (1) CRR III as follows:

“(b) the value is appraised using prudently conservative valuation criteria which meet all of the following requirements:

- (i) the value excludes expectations on price increases;*
- (ii) the value is adjusted to take into account the potential for the current market value to be significantly above the value that would be sustainable over the life of the loan;”*

Furthermore, the property value must not exceed the market value and must be transparent and clearly documented.

The European Banking Authority (EBA) already commented in 2019 in its recommendations on the implementation of Basel III in Europe on the application of the Basel concept of value. These considerations can be used as a basis², as they largely correspond to the new wording of Art. 229 (1) CRR III. In its Supervision Newsletter of 14 August 2024³, the European Central Bank commented for the first time on the new concept of value. It emphasizes the need for a prudent and conservative valuation of properties and refers to Art. 208 (3) CRR, according to which credit institutions must collect market data and monitor property values to identify significant losses in value. This data should be used to check whether the market value needs to be adjusted with a discount.

IMPLEMENTATION IN GERMANY

The national banking supervisory authority (BaFin) has stated that two approaches are possible for the operationalization of “property value” in Germany:

Mortgage lending value: The mortgage lending value pursuant to Section 16 (2) sentences 1 to 3 Pfandbrief Act in conjunction with the Regulation on the Determination of Mortgage Lending Values of Properties (BelWertV) fulfils the requirements of Art. 229 (1) CRR in all cases.

Market value-based approach: Alternatively, the market value can be used as a basis. In a step downstream of the market value determination, this value must be reviewed to determine whether an adjustment is necessary in order to meet the requirements of Art. 229 (1) letter b) CRR III. While the market value is of course determined on a property-related basis, this review

¹ This article is based on the contribution by (Kunert und Wünsche 2024). Any errors that may remain are the author's responsibility.

² Consideration has also been given to implementing the concept at European level. Cf. (Crosby and Hordijk, 2023)

³ (Darrieux u. a. 2024)

and, if necessary, adjustment of the market value can be carried out on a portfolio-related basis using statistical methods of relevant market data.

METHODOLOGICAL DEVELOPMENT: THE HP FILTER APPROACH

In close cooperation with vdpResearch GmbH, the Association of German Pfandbrief Banks (vdp) has developed a methodology for a discount procedure which, when applied to the market value, could meet the requirements for the “property value”.

Basic Idea of the Methodology

Starting from a property-specific market value determined by an independent and qualified appraiser at a specific valuation date, the approach for determining the “property value” is explained below.

The developed discount procedure is based on the theoretical insight that a property-specific market value, taking into account all property-specific information and the current general situation on the real estate market, consists of two essential components: the individual characteristics of the property and the current state of the general value relationships in the property market.

These general value relationships encompass the totality of circumstances relevant for price formation at the valuation date, including the general economic situation, capital market conditions, and economic and demographic regional conditions. This definition suggests that the general value relationships refer to the cyclical situation in the real estate market.

Operationalization via Real Estate Price Indices

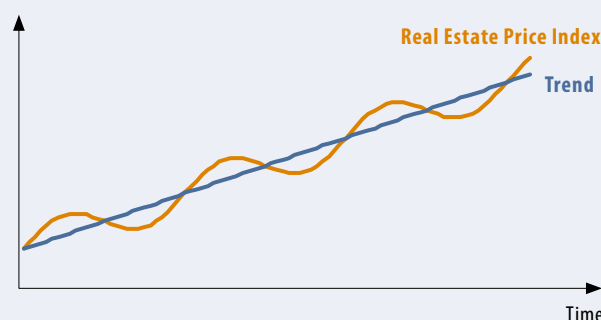
To identify phases of price exaggerations in the sense of “property value”, further analysis of the general value relationships is necessary. Since this term is not directly measurable from a statistical perspective, it must be operationalized through a measurable variable. For real estate markets, the general price development, measured by a eligible real estate price index, is suitable as a directly measurable variable for describing the general value relationships.

This operationalization forms the conceptual basis for the further methodological design of the approach for determining “property value”. Real estate price indices, such as the vdp real estate price indices, particularly reflect the cyclical fluctuations of the real estate market and statistically represent the circumstances relevant for the pricing of properties in ordinary business transactions.

For the implementation of the regulatory requirements of Art. 229 (1) CRR III, it is crucial to differentiate between sustainable and non-sustainable value

components. For this purpose, real estate price time series can fundamentally be decomposed into a trend and cycle component; this decomposition is stylized in Figure 1. The “property value” as a prudent, sustainable value that does not consider expectations regarding price increases corresponds at most to the long-term trend. Cyclical components, i.e., short-term market exaggerations, are filtered out via an adjustment mechanism.

FIGURE 1 | STYLIZED TREND



The Hodrick-Prescott Filter

The determination of long-term value developments in volatile real estate markets requires methodologically sound approaches for separating speculative price movements from sustainable market trends. The Hodrick-Prescott filter (HP filter)⁴ has established itself as a standard instrument for this task in empirical business cycle research and is now widely used in macroeconomic analysis as well as in macroprudential regulation.

The HP filter was originally developed to analyze cyclical fluctuations in macroeconomic data such as gross domestic product, unemployment figures, and inflation rates. Its relevance for real estate markets is based on the ability to differentiate short-term, possibly speculative price fluctuations from sustainable, trend-based price developments. The German Bundesbank has been using comparable filter procedures for years to calculate the countercyclical capital buffer (CCyB)⁵ as an instrument for regulating excessive lending.

The central principle of the HP filter lies in the mathematical optimization between two competing objectives: the most accurate possible adaptation to the observed market development on one hand and achieving a smooth, not too volatile trend progression on the other. The filter systematically minimizes the sum of squared deviations between the actually observed values and the calculated trend values, while simultaneously considering the smoothness of the resulting trend.

The central calibration parameter, the so-called smoothing parameter λ , determines the weight between adjustment accuracy and trend

4 Cf. (Hodrick und Prescott 1997)

5 Cf. (Tente u. a. 2015)

smoothing. Higher lambda values generate smoother trends that react less to short-term fluctuations, while lower values lead to more reactive but more volatile trend progressions. For quarterly data, as used in the vdp real estate price indices, a lambda value of 1,600 has proven optimal in scientific practice.

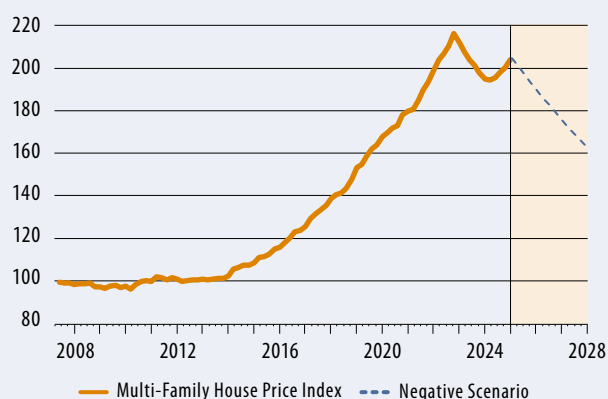
A methodological challenge of the HP filter is the so-called boundary value problem. Data points at the current end of the time series receive a disproportionately high weight in the trend calculation, as no future values are available for smoothing. This leads to the calculated trend reacting too sluggishly at cyclical turning points and potentially lying above the current market development during downturns.

To address this systematic problem, the real estate price series is extended by a negative scenario. The assumed negative scenario is based on a requirement that has been communicated by the German banking supervisory authorities for many years as part of the monitoring of property values. Accordingly, property values must be reviewed if, for example, property prices in the residential market segment fall by 20% over a period of three years.

PRACTICAL APPLICATION: MULTI-FAMILY HOUSES

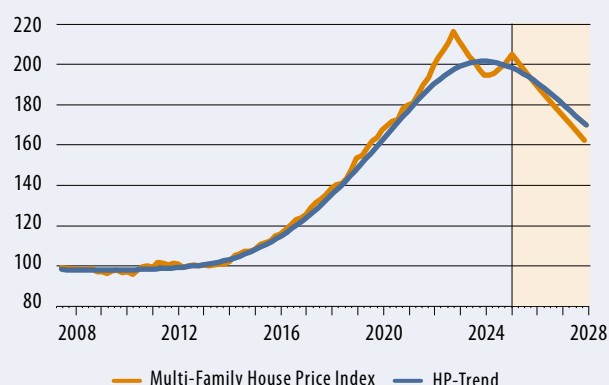
The methodological considerations for calculating the “property value” are presented below using the example of the multi-family houses market segment. Figure 2 shows the development of prices for multi-family houses up to and including the 1st quarter of 2025. The time series is now extended by the above-described negative scenario (dashed line) by three years until the 1st quarter of 2028.

FIGURE 2 | REAL ESTATE PRICE INDEX WITH NEGATIVE SCENARIO



Following the time series extended by the negative scenario, the trend is determined using the HP filter. The result is shown in Figure 3 below. To calculate the possible discount, a comparison between the value of the price index and the level of the trend at the time point 2025Q1 is decisive.

FIGURE 3 | TIME SERIES AND HP TREND



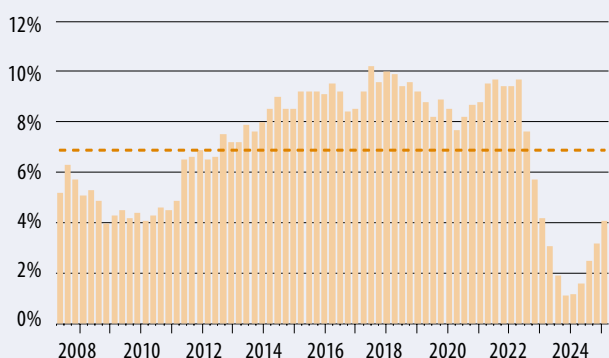
The calculation of the trend using the negative scenario is performed anew each quarter when a new observation for the price index is available. The decisive factor is always the value at the current edge of the time series. The results from previous periods remain unchanged.

Decision logic: If the price index lies above the trend at the current calculation time point, it follows that the percentage deviation between price index and trend is greater than zero. This is then simultaneously the applicable discount to be applied to the market values determined in this quarter. If the long-term trend is at or above the price index, it follows that the percentage deviation is zero or negative. In this case, no discount is applied to the market value.

Historical Development

Figure 4 shows the historical development of market value-based discounts for the “property value”. For the 1st quarter of 2025, the discount for multi-family houses was 4.1%. The real estate market is currently in a stabilization phase following the downturn from 2022 to 2024, so the discount is currently lower but is already increasing again at the current edge. During cyclical high phases, the discount was significantly higher and historically reached over 10%. Over the observed period from 2003 to today, the average discount for this market segment was 6.9%.

FIGURE 4 | HISTORICAL DISCOUNTS FOR MULTI-FAMILY HOUSES





CONCLUSION

The methodology explained here represents a possible way to operationalize the “property value” within the meaning of Art. 229 (1) CRR III. The starting point is always a property-specific market value prepared by a qualified and independent appraiser at a valuation date. This is reduced by the discount applicable at this date, which is derived from current market development, and thus becomes a “property value”.

The concept is already being successfully applied in Germany across the banking sector. The approach is sufficiently flexible to be suitable for international markets as well, provided that appropriate time series are available. Implementation for a variety of international markets is currently underway. To enable seamless integration into existing IT systems, the data are made available to institutions via a REST API, facilitating automated and standardized access to current discount factors.

In summary, it can be said that the combination of the negative scenario used by supervisory authorities with the HP filter offers a methodology for operationalizing a prudent value. This approach enables a transparent and comprehensible derivation of a “property value” that could meet the requirements of banks and supervisory authorities.

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