EMF ECBC

Market Insights & Updates

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Summary

- Energy Efficient Mortgage Initiative: Second Stakeholder Meeting 1
- Energy Efficient Mortgage Initiative: A Case Study on the First Green RMBS in The Netherlands 3
- Extendable Maturity Structures – The New Normal? 6
- News in Brief 12
- Agenda 14

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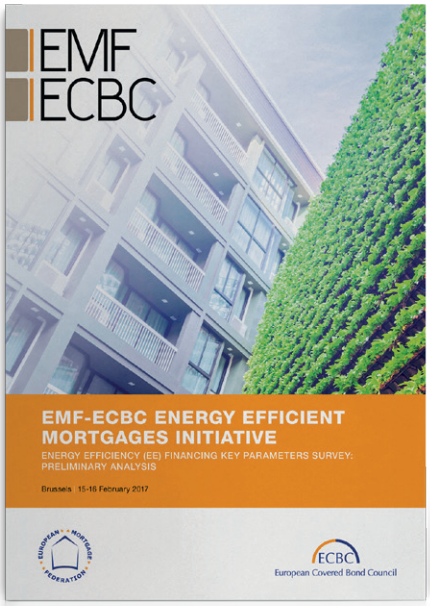
Energy Efficient Mortgage Initiative: Second Stakeholder Meeting



On the 16th of February 2017, the EMF-ECBC hosted the Second Stakeholder Meeting of its Energy Efficient Mortgage Initiative at the Bibliothèque Solvay in Brussels where over 80 key stakeholders convened to discuss the Initiative's progress to date and agree the next steps to be taken.

To recap, in September 2016, the European Mortgage Federation - European Covered Bond Council (EMF-ECBC) launched its ground-breaking mortgage financing initiative (see here) to support energy efficiency improvements in buildings, representing the first time a group of major banks and mortgage lenders, as well as businesses and organisations from the building and energy industries have come together to address the concept of energy efficient mortgages. The Initiative explores ways to mobilise private mortgage financing to boost energy efficient building renovation in Europe. The aim of the project is to create a suitable framework for a standardised Energy Efficient Mortgage product, which mortgage lenders in Europe can offer to borrowers seeking to purchase and retrofit an energy efficient property.

SUPPORTING ENERGY UNION, GROWTH AND JOBS

The Energy Efficient Mortgage Initiative responds to the European Commission's Energy Union agenda, which places energy and resource efficiency at the heart of achieving the EU's energy and climate goals. In the EU, buildings are responsible for 40% of total energy consumption and 36% of CO2 emissions. By improving the energy efficiency of buildings, the EU's total energy consumption could be reduced by 5-6% and CO2 emissions by 5%. Furthermore, the Initiative has significance for the larger growth and jobs agenda in Europe, as more funding to boost

energy renovation rates can lead to a significant increase in jobs in the building sector.

For banks and investors, a lower risk profile of green mortgages and a potential increase of value linked to more energy efficient properties can bring about tangible benefits, such as mitigation of risk and therefore a better capital treatment of banks' green assets and protection against 'brown discount' of loan and investment portfolios. To this end, the Energy Efficient Mortgage Initiative seeks to develop a better understanding of how to differentiate between 'green' and 'conventional' funding, and how to capture energy efficiency within financial institutions' lending practices.

In this context, the EMF-ECBC was delighted to open the event with a speech from **Paul Hodson**, Head of Unit, DG Energy, European Commission and to draw proceedings to a close with an address by **Jyrki Katainen**, European Commission Vice-President responsible for Jobs, Growth, Investment and Competitiveness.

ENERGY EFFICIENCY FINANCING KEY PARAMETERS SURVEY

The EMF-ECBC also took the opportunity of the event to formally present its preliminary analysis of its recent survey on banks' existing green lending practices in Europe.

Speaking at the event, Luca Bertalot, Secretary General of the EMF-ECBC said:

"We recognise that we have an ambitious task ahead of us; our work on Energy Efficient Mortgages has now gained clear support from market participants and in particular from the European Commission. Indeed, stakeholder consensus and institutional coordination are essential pre-conditions to enable us to move forward. We believe this Initiative to be crucial to help bridge the gap in investment needed to improve the energy efficient renovation of buildings in Europe.

The feedback from our survey on banks' 'green' lending practices reveals a strong interest in further developing the green market and underlines the importance of standardisation for energy efficient mortgages. We look forward to working together with our partners across the key sectors in developing solutions to meet these needs."

More information about the Energy Efficient Mortgages Initiative, including the preliminary survey analysis report and the agenda of the Second Stakeholder Meeting, can be found here.

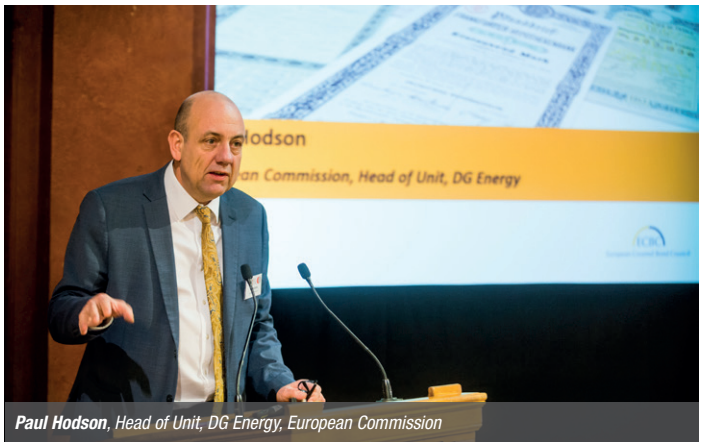
Partners of the Energy Efficient Mortgages Initiative are the Ca'Foscari University of Venice, RICS, European Regional Network of Green Building Councils, E.ON, and SAFE Goethe University Frankfurt. The Second Stakeholder Meeting was supported by European DataWareHouse, a key stakeholder of the project.

The Third Stakeholder Meeting is scheduled to take place in Rome, Italy on the 9th of June 2017.

Second Stakeholder Meeting, Bibliothèque Solvay, Brussels

***Luca Bertalot**, Secretary General, EMF-ECBC*

***Jyrki Katainen**, European Commission Vice-President responsible for Jobs, Growth, Investment and Competitiveness*



***Paul Hodson**, Head of Unit, DG Energy, European Commission*

Energy Efficient Mortgage Initiative: A Case Study on the First Green RMBS in The Netherlands

By Eirini Kanoni, Vice-President & Gisela Herkner, Senior Analyst, European DataWarehouse GmbH

European DataWarehouse (ED) is a centralised loan level, bond and document repository which currently hosts around 1,150 Asset Backed Securities (ABS) transactions and whole loan portfolios, including the world's first green RMBS transaction issued by Obvion in 2016. Christian Thun, ED CEO mentioned: *"ED fully supports the European Mortgage Federation - European Covered Bond Council (EMF-ECBC) Energy Efficiency Green Mortgage Initiative. ED encourages the use of existing infrastructures to bring transparency to a young market segment like energy efficient mortgages"*.

OBVION - GREEN STORM 2016

Obvion is one of the main mortgage providers in The Netherlands and a frequent and long-term issuer of Residential Mortgage Backed Securities (RMBS) bonds in the Netherlands with 36 RMBS transactions reported in ED.

Corporate Social Responsibility is of high importance to Obvion and therefore issuing a green RMBS bond was the natural next thing to do. In June 2016, Obvion successfully launched its first green RMBS, Green STORM 2016. This is a milestone deal as it is the first green RMBS issued globally, opening up a new market for other issuers following strong investor demand. According to Max Bronzwaer, Executive Director and Treasurer of Obvion: *"This is the first time that RMBS investors are offered the possibility to buy green residential mortgage backed bonds. We experienced a very strong investor demand, so it was no problem to fully allocate this green RMBS only to green investors who appreciate green asset selection and the unique character of the transaction"*. One of the main objectives of this innovative transaction, apart from the diversification of investors, was to place the green bonds in the hands of truly green investors. One of the unique features of the transaction is that the proceeds of the RMBS are used to refinance existing mortgage loans for energy efficient Dutch residential buildings. Obvion shows a strong commitment to responsible lending and is also promoting energy saving and supporting home owners to finance energy saving activities through these mortgages.

PORTFOLIO DESCRIPTION OF GREEN STORM 2016

The size of the transaction was €500 million with five years weighted average life of Class A Notes and final price set at 3m Euribor + 30 bps. The size of the initial portfolio was €271 and the final pool consisted of 2,408 loans or 5,225 loan parts with an average principal balance per borrower of €233,602 and a weighted average seasoning of 3.3 years.

EUROPEAN DATAWAREHOUSE — GREEN STORM 2016 B.V. — PCD 2016-05-31 — Exclude Outliers: Yes — Download | History | Strats | Alerts

Deal Status	Active	Data Owner	Obvion N.V.	Vintage	2016
Asset Country	Netherlands	Data Provider	LBL Data Services	Primary Exchange Listing	Netherlands

Bond Information

Bond Class Name	ISIN	Issue Date	Interest Payment	Principal Payment	Currency	Original Balance	Ending Balance	Legal Maturity	Const. Prepayment
Class A	XS1309695341	2016-06-30	2016-10-24	2016-10-24	EUR	500,000,000	500,000,000	2052-10-22	0
Class B	XS1309697982	2016-06-30	2016-10-24	2016-10-24	EUR	8,000,000	8,000,000	2052-10-22	0
Class C	XS1309698014	2016-06-30	2016-10-24	2016-10-24	EUR	6,000,000	6,000,000	2052-10-22	0
Class D	XS1309698360	2016-06-30	2016-10-24	2016-10-24	EUR	6,800,000	6,800,000	2052-10-22	0
Class E	XS1309698790	2016-06-30	2016-10-24	2016-10-24	EUR	5,400,000	5,400,000	2052-10-22	0

Bond Class Name	ISIN	Reference Rate	Current Coupon(%)	Coupon Reference Ra	Relevant Margin	Trigger Ratio	Drawings Under Liqu	Excess Spread	Ending Reserve Balance
Class A	XS1309695341	3 month EURIBOR	0.55	0.25	0.30	N	N	651,000	5,400,000
Class B	XS1309697982	3 month EURIBOR	2.25	0.25	2	N	N	651,000	5,400,000
Class C	XS1309698014	3 month EURIBOR	3.25	0.25	3	N	N	651,000	5,400,000
Class D	XS1309698360	3 month EURIBOR	4.25	0.25	4	N	N	651,000	5,400,000
Class E	XS1309698790	3 month EURIBOR	6.25	0.25	6	N	N	651,000	5,400,000

Loan Information

Loans & Borrowers		Current Balance - AR67		Original Balance - AR66		Borrower Concentration(%)		Interest Rate - AR109(%)	
Total Loans	5,226	Total	520,782,002	Total	562,370,085	Largest	0.17	Min	0.21
Active Loans	5,225	Average	99,671	Average	107,631	Top 10	1.50	Max	6.60
Distinct Borrowers	2,408	Avg. per Borrower	216,272	Avg. per Borrower	233,542	Top 20	2.72	W.Avg	3.85
		Min	5			Top 50	5.89		

CLTV - AR141		OLTV - AR135		Seasoning / Maturity		Dates	
Min	3.27	Min	5.86	W.Avg Seasoning	49.91	Min Orig Date	2002-09-01
Max	130.92	Max	121.21	W.Avg OTM	338.96	Max Orig Date	2015-07-01
W.Avg	85.60	W.Avg	90.34	W.Avg RTM	300.49	Max Maturity Date	2050-09-01
				Max RTM	412		

Chart 1 ▶ Green storm 2016 B.V.

Chart 2 ▶ Property type

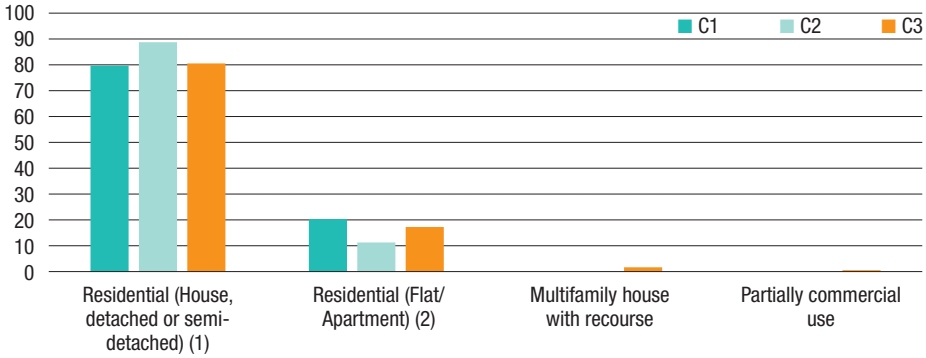
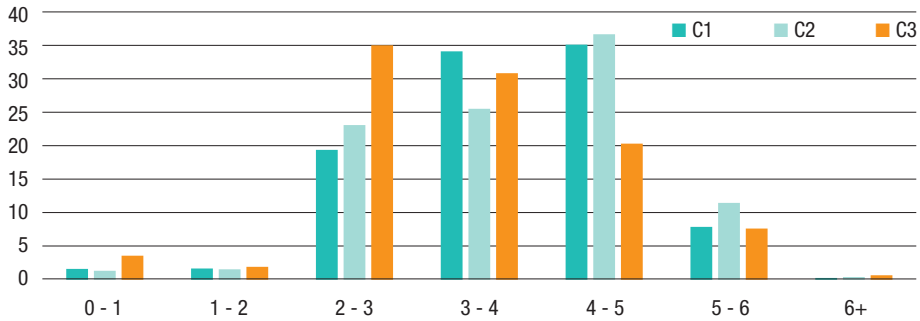


Chart 3 ▶ Current interest rates



The mortgage pool is diversified in terms of geography and generally consistent with the rest of the Dutch RMBS 2016 deals (see Chart 1).

The breakdown by property type is similar to the rest of the Obvion 2016 deals and the other Dutch RMBS issued in 2016 (see Chart 2).

The weighted average current interest rate is 3.85% with the distribution of interest rates in line with the other Obvion RMBS transactions issued in 2016 and slightly higher than the overall Dutch RMBS deals issued in 2016 (see Chart 3).

The weighted average Original Loan to Value (OLTV) is 90.3%. This is in alignment with the OLTV reported for the rest of the Dutch RMBS transactions issued in 2016. Unlike the rest of Dutch RMBS 2016 transactions, Green STORM 2016 has a lower number of mortgages in the portfolio with an OLTV greater than 110% (see Chart 4).

The selection of the underlying mortgages was based on certain eligibility criteria. As per the Dutch law Directive 2010/31/EU, all properties in The Netherlands have been assigned energy performance certificates with a rating ranging from 'A' which qualifies for the best performance to 'G' which represents properties with the lowest energy efficiency. Most mortgages included in the pool have either an 'A' definitive energy performance certificate, or any energy performance certificate of 'B' or higher and a construction year of 2002 or later. Additionally, there are also mortgages with a definitive energy performance certificate of 'C' or higher which have demonstrated a calculated improvement of an energy performance certificate of at least two notches.

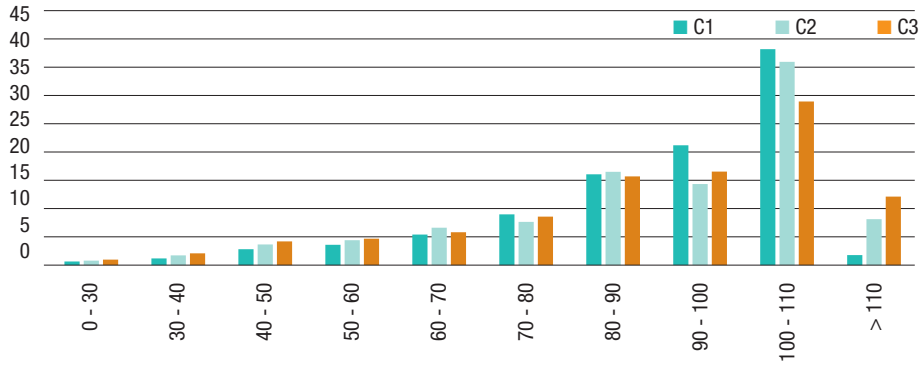
GREEN STORM 2016 NOTES

The true 'greenness' of the transaction is also evident in the Notes. The Green STORM 2016 Notes meet the requirements of the ICMA Green Bond Principles 2015 and are certified by the Climate Bond Initiative. They have also been assigned the 'GB1', which is the maximum rating of Moody's Green Bond Assessment for the management, administration and reporting on environmental projects financed with the proceeds from the Notes. In addition, a CO2 impact analysis conducted by DWA, a service provider in the sustainable built environment and industry, has shown that the selected residential properties related to the pool have a lower CO2-emission compared to a comparable group of residential properties with average energy efficiency.

OUTLOOK

The concept of green bonds has been available in the market for some time and has taken off in recent years with BerlinHyp issuing the first European covered bond in 2015 and Obvion the first ever green RMBS in 2016 with more deals

Chart 4 ▶ Original loan to value



to follow. Transparency of energy efficient underlying assets is increasing overtime. European DataWarehouse, as a member of the ECBC, plans to expand the coverage of green mortgages in the platform and also differentiate based on their energy rating information to support the EMF-ECBC Energy Efficient Mortgage Initiative. As a result, ED will act as a catalyst for the collection of information that can lead to evidence on any correlation between energy efficiency and borrowers' Probability of Default and Loss Given Default, and possibly also to a different development of the value of the property. Access to green mortgage data will allow to establish and record any correlation between the property, energy rating, credit performance and value development.

LEGEND:

C1 stands for Green STORM 2016 B.V.

C2 stands for the following four Obvion deals:

- PURPLE STORM 2016 B.V.
- STORM 2016-II B.V.
- STORM 2016-I B.V.
- STRONG 2016 B.V.

C3 stands for the following Dutch RMBS deals issued in 2016

- Orange Lion 2016-15 RMBS B.V.
- Essence VI B.V.
- Orange Lion 2016-13 RMBS B.V.
- Hypenn RMBS VI B.V.
- Orange Lion 2016-14 RMBS B.V.
- Arena NHG 2016-I B.V.
- DCDML 2016-1 B.V.
- Dutch Residential Mortgage Portfolio II BV
- Hypenn RMBS V B.V.

Extendable Maturity Structures – The New Normal?

By By Franz Rudolf, UniCredit & Karsten Rühlmann, LBBW

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

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

WHAT ARE THE MAIN DIFFERENCES BETWEEN THE REDEMPTION REGIMES?

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

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

In cases involving hard-bullet structures, issuers try to enhance the effectiveness of the tools by regularly calculating pre-maturity tests or by maintaining a certain amount of liquid assets in the cover pool – a costly exercise for issuers since liquid assets usually come with a negative carry. Soft-bullet structures that have a limited extension period (usually one year) aim to manage the liquidity challenge at the expense of investors. However, since the soft-bullet timeframe might still turn out to be insufficiently long, the idea of pass-through aims to completely eliminate any refinancing risk by eliminating pressure to sell assets at the expense of a maximum timeframe for the payment deferral.

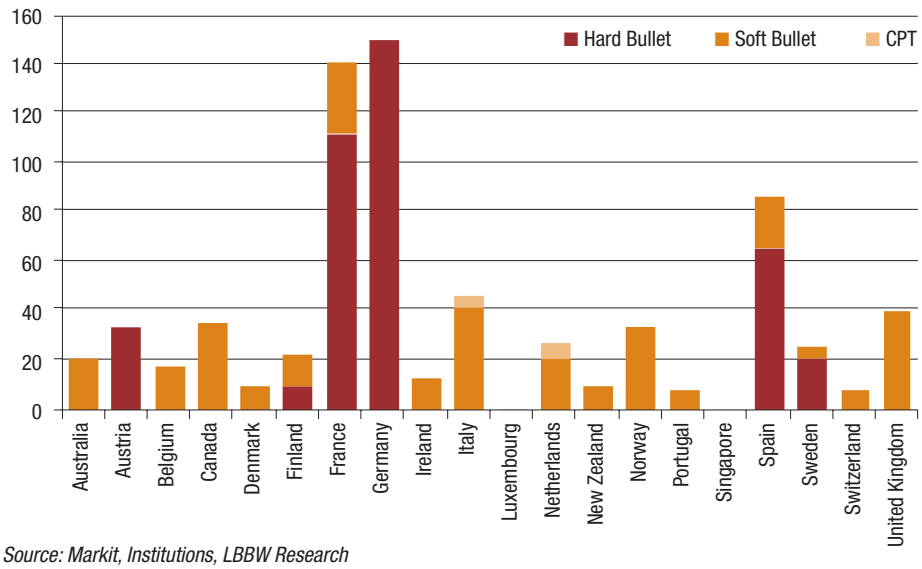
In a nutshell, the three major redemption regimes for covered bonds work as described below:

- **Hard-bullet covered bonds:** payments have to be made when due according to the original schedule. Failure to pay on the Standard Maturity Date (SMD) triggers default of the covered bonds, and the covered bonds accelerate.
- **Soft-bullet covered bonds:** payments have to be made when due according to the original schedule. Failure to pay on the SMD as a consequence of an issuer default does not trigger covered bond default. The extension period grants more time (typically at least 12 months) to repay the covered bonds, setting a new Final Maturity Date (FMD). Failure to pay on the FMD triggers default and acceleration of the covered bond.
- **Conditional pass-through covered bonds (CPTCB):** payments have to be made when due according to the original schedule. Failure to pay by the SMD as a consequence of an issuer default does not trigger default of that covered bond. The affected covered bond goes into pass-through mode. All other outstanding covered bonds are not affected and would only trigger the pass-through mode one after another if they are not redeemed on their respective SMDs.

ARE PURE HARD-BULLET JURISDICTIONS BECOMING A RARITY?

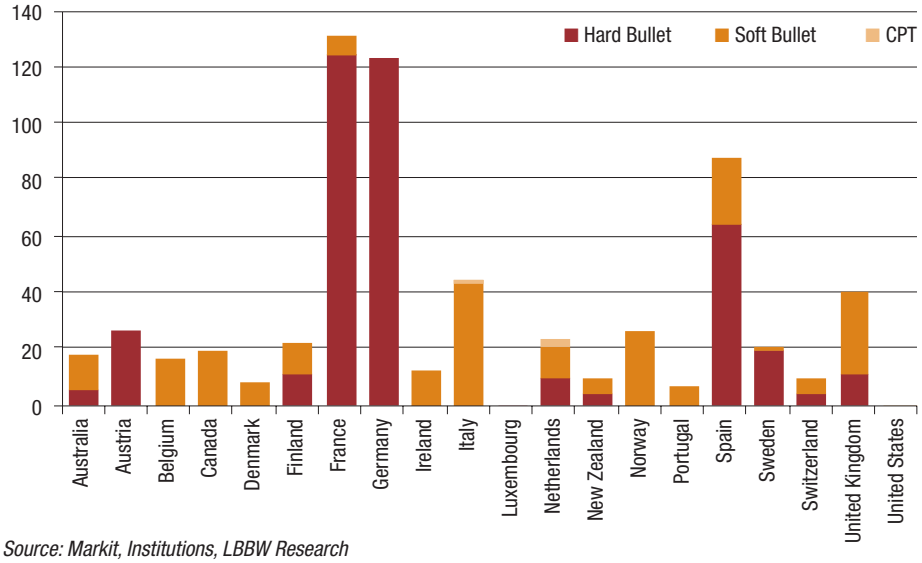
Covered bond jurisdictions in which only hard-bullet covered bonds are issued are rare in the meantime. A glance at the iBoxx € Covered benchmark index reveals that Germany, Austria, Luxembourg and Spanish single cédulas are still sticking to hard bullets. But also here are some changes in sight. In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

Figure 1 ▶ Distribution of EUR benchmark covered bonds by maturity profile as of April 2016



Source: Markit, Institutions, LBBW Research

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



Source: Markit, Institutions, LBBW Research

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

CURRENT DEVELOPMENTS IN THE MARKET FOR SOFT BULLETS

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

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

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

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

ISSUER	DATE	EARLY PARTICIPATION FEE	QUORUM	APPROVAL RATE	RESULT
Halifax Bank of Scotland	07.07.2015	5bp	Meeting 1: 2/3 Meeting 2: 1/3	3/4	First meeting on 29.07.2015 achieved consent for four out of seven bonds for which votes had been called; the second meeting produced a positive result for only one bond.
ING Bank	25.08.2015	5bp	Meeting 1: 2/3 Meeting 2: 1/3	2/3	First meeting on 15.09.2015 resulted in a positive vote for all covered bonds concerned. Consequently, all ING Bank benchmark covered bonds have a soft bullet structure.
Commonwealth Bank of Australia	01.09.2015	5bp	Meeting 1: 2/3 Meeting 2: 1/3	3/4	Full conversion of all outstanding benchmark covered bonds approved at the first meeting on 24.09.2015. Consequently, more than 80% of all outstanding CBA covered bonds have a soft bullet structure.
Barclays Bank	16.10.2015	5bp	Meeting 1: 2/3 Meeting 2: 1/3	3/4	Full conversion of all outstanding benchmark covered bonds approved at the first meeting on 09.11.2015. Consequently, more than 80% of all outstanding covered bonds have a soft bullet structure.
Westpac	01.03.2016	5bp	Meeting 1: 2/3 Meeting 2: 1/3	3/4	First meeting on 01.04.2016 achieved consent for five out of six bonds for which votes had been called; the second meeting also produced a positive result for the one remaining USD bond.
Crédit Agricole	01.04.2016	5bp	Meeting 1: 1/5 Meeting 2: -	2/3	First meeting on 21.04.2016 achieved consent for six out of seven bonds for which votes had been called; the second meeting also produced a positive result for the remaining bond.

Source: Consent Solicitations, LBBW Research

Générale and Crédit Mutuel Arkéa (since August 2015) – have given themselves the option to issue extendable maturity structures in their programme documentation.

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

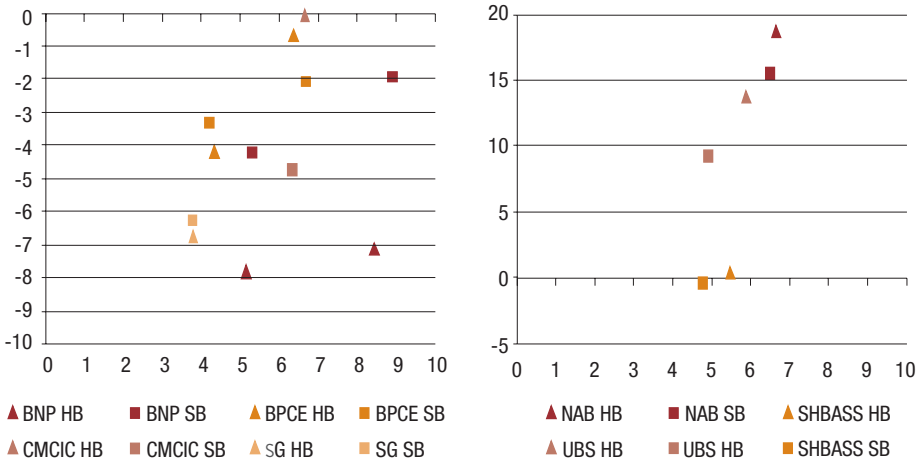
ASSOCIATION OF GERMAN PFANDBRIEF BANKS PLANS MATURITY DEFERRAL AS A FURTHER OPTION FOR THE COVER POOL ADMINISTRATOR

At the end of October 2015, the Association of German Pfandbrief Banks (vdp) presented its views on a possible inclusion of a maturity deferral option in the German Pfandbrief Act (PfandBG) to the German Ministry of Finance. According to the proposals, the cover pool administrator is to be given a further option to avoid the secondary insolvency of a cover pool. However, the aim is to clearly distinguish the option from the extendable maturity structures existing in the market. This is the reason why the term "soft bullet" is avoided. An important difference is that, unlike contract-based soft bullets, the maturity deferral is to be incorporated into the law. As of August 2016, only the Polish covered bond legislation contains such a feature. In addition, the rules on the extension period (proposal: 12 months) and the extension interest rate (proposal: 0.5 percentage points above a reference rate that is normally used by the banking industry for one-month payment periods in the respective currency) are to be the same for all bonds. A further important distinguishing feature is that the decision on an extension is not automatic – in other words it is not linked to a certain event. Instead, the cover pool administrator, who is normally appointed as alternative manager after an issuer's insolvency, may decide to extend the maturity at his discretion. No final decision has been taken whether to introduce the proposed change. If implemented, the planned change in the law is to cover Pfandbriefe currently outstanding as well. The new rule is not intended to affect the liquidity provisions for payments of principal and interest in the next 180 days under §4 (1) (a) PfandBG.

STILL NO SIGNS OF CLEAR SPREAD DIFFERENTIATION

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

Figure 3A & 3B ▶ Asset swap spreads soft bullet covered bonds vs. hard bullet covered bonds



Source: Markit, Bloomberg, LBBW Research

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

CONDITIONAL PASS-THROUGH STRUCTURES GAIN MOMENTUM

In 2013, conditional pass-through structures were introduced in the covered bond benchmark universe. NIBC was the pioneer issuing a EUR 500mn 5Y benchmark covered bond in October 2013, followed by further benchmark issues on a yearly basis. While for the first two years, conditional pass-through structures were widely discussed but remained a niche product, it was in 2015 that this redemption format gained momentum. Additional issuers took the conditional pass-through path with UniCredit SpA joining in February 2015 with a EUR 1bn 10Y OBG, van Lanschot Bankiers bringing its inaugural EUR 500mn 7Y benchmark in April 2015, followed by Aegon in November 2015 with a EUR 750mn 5Y, and Banca Monte dei Paschi di Siena converted its programme from soft bullet to conditional pass-through. In Portugal, Novo Banco has a CPT-programme in place and Caixa Economica Montepio Geral started a consent solicitation process to switch to CPT at the time of writing this article.

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

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

An important feature in the CPTCB is the minimum overcollateralisation (OC), which is needed to allow for the programme to switch to pass-through. Shortage of collateral, which could arise from paying administrative costs as well as covering potential credit losses, would otherwise instantly trigger a failure of the amortisation test and an acceleration of payments to bondholders. This is the reflection of the fact that cover pool credit risk is the key remaining source of loss in the cover pool asset-liability-management. In order to eliminate market risk completely, the legal final maturity is extended to beyond the maximum maturity date of the cover pool assets. The extension period usually ranges from 32 years to 38 years, depending on the respective programme documentation.

PASS-THROUGH VS. SOFT-BULLET

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

However, the one-year deferral period of most soft-bullet covered bonds provides the cover pool administrator with a relatively limited timeframe in which the required amount of cover pool assets can be liquidated. In contrast, the opportunities in a (conditional) pass-through case are technically unlimited. Hence, market risk is mitigated with soft-bullets covered bonds and eliminated with CPTCBs.

ISSUERS' PERSPECTIVE

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

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

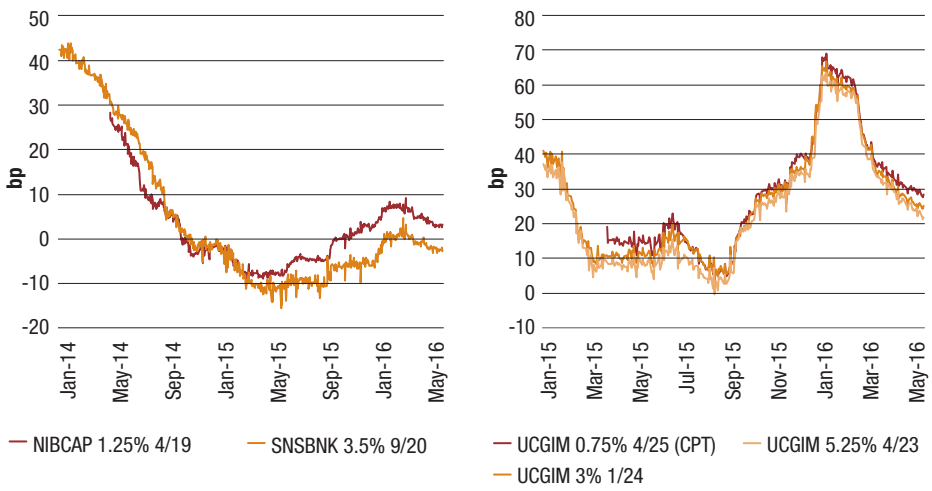
However, when comparing NIBC as an CPTCB issuer with SNS issuing soft-bullet covered bonds, the spread difference between conditional pass-through and soft-bullet appears very narrow and is rather attributable to a slightly better senior unsecured rating of SNS than to the difference in structure (see figure 4a). With the CBTCB of NIBC 19 at ms+2bp, the bond trades some 6bp richer than what would be considered a fair SNS spread for the same duration. A similar picture evolves when comparing UniCredit S.p.A.'s two OBG programmes (see figure 4b), with marginal spread difference rather relating to duration than to different formats. Hence, from the point of view of a mere funding spread, the efficiency gain currently comes almost for free. The lack of spread differentiation between maturity types might also be a reflection of the perception among investors regarding the importance of the maturity type in comparison with other drivers. This is demonstrated in Fitch's *Covered Bonds Investor Survey Year-End 2015*. One of the questions to investors was: *Apart from quantitative easing, what are, in your opinion, the most important factors driving pricing?* The answers provided ranked the covered bond maturity type (hard bullet, soft bullet, conditional pass-through) as the least important behind "country of the issuer" (which had almost double the score of maturity types), "covered bond ratings", "type of asset", "legal framework", "cover pool credit quality", and "bank rating".

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

INVESTORS' PERSPECTIVE

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

Figure 4A & 4B ▶ Pricing comparison of CPT-structure Vs. soft-bullet structure



Source: UniCredit Research

this is the case when all series of a covered bond programme, irrespective of the repayment regime, accelerate and become due, including fire-sales with large hair cuts.

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

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

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

First, we take a look at investors that consider the technical default of a claim more adverse than a payment deferral. In case of a default, the result in terms of cash-flows are quite likely to be similar for both cases, bullet and conditional pass-through. The result in a bullet case would, quite likely, be a creditors' meeting to decide how to treat the leftovers: fire sale or natural amortisation; result unknown ex ante. Thus is the case for a CPTCB; the roadmap is clearer in the CPTCB since there is an ex ante definition of what is about to be done. All bonds fall due and natural amortisation of the collateral will be split pari passu unless a bondholders' meeting votes for something different. The difference comes in the form of the likelihood of the adverse "default" event. In both bullet and pass-through cases, a default could be triggered by asset-quality deterioration and, therefore, in both cases the issuer ex ante would have to post the same amount of overcollateralisation for the same result of assessed credit risk. However, precautionary measures to address liquidity risk in the cover pool have to be performed by the issuer of bullet covered bonds only. Whether or not the liquidity buffer turns out to be sufficient can only be assessed ex post. In other words, any liquidity buffer is nothing but a suboptimal hedge for liquidity risk. By way of aligning the cash flows from the cover pool to the covered bond investors, CPTCB issuers perform the only existing perfect hedge against liquidity risk. Therefore, the likelihood of a default of the covered bond is lower for the CPTCB. Consequently, an investor that is sensitive to a default of a claim as opposed to being sensitive to payment disruption should rather be focused on CPTCB.

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

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

RATING AGENCIES' PERSPECTIVE

Rating agencies' methodologies have changed quite substantially in the past few years. Recalling Moody's plain and simple rating methodologies for covered bonds back in 2003/04, when covered bonds were all rated 2/3 notches (for mortgage and public covered bonds respectively) above the senior rating, which later was expanded to 4/5 without big analysis supporting it, life has become more complicated. However, analysis is also more precise and detailed from an academic point of view. The step-by-step analysis of assessing issuer credit risk followed by the assessment of legal/regulatory/market related etc. aspects, and finalised by the assessment of the credit risk/liquidity risk etc. of the cover pool, was a milestone. Starting from the joint default basis, the degree of detail of rating agencies' analyses increased exponentially. The high end of complexity is probably to be found in the analysis of the cost of raising liquidity against a static cover pool in a post insolvency situation. This necessitates an assessment of potential funding sources, assumptions on amounts that need to be raised, valuation adjustments and, last but not least, assessment of the role and the abilities of the cover pool administrator running the matter after issuer insolvency. Against this backdrop, rating agencies have unsurprisingly welcomed the development regarding CPTCBs. Default risk is essentially reduced to credit-risk-driven events.

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

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

CONCLUSION

Covered bonds with extendable maturities are becoming more and more common on the covered bond market. In the meantime, you can find them in

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

This article is taken from the 2016 edition of the ECBC's European Covered Bond Fact Book, the full copy of which can be accessed here.

Figure 5 ▶ **Common conditional pass-through structure**

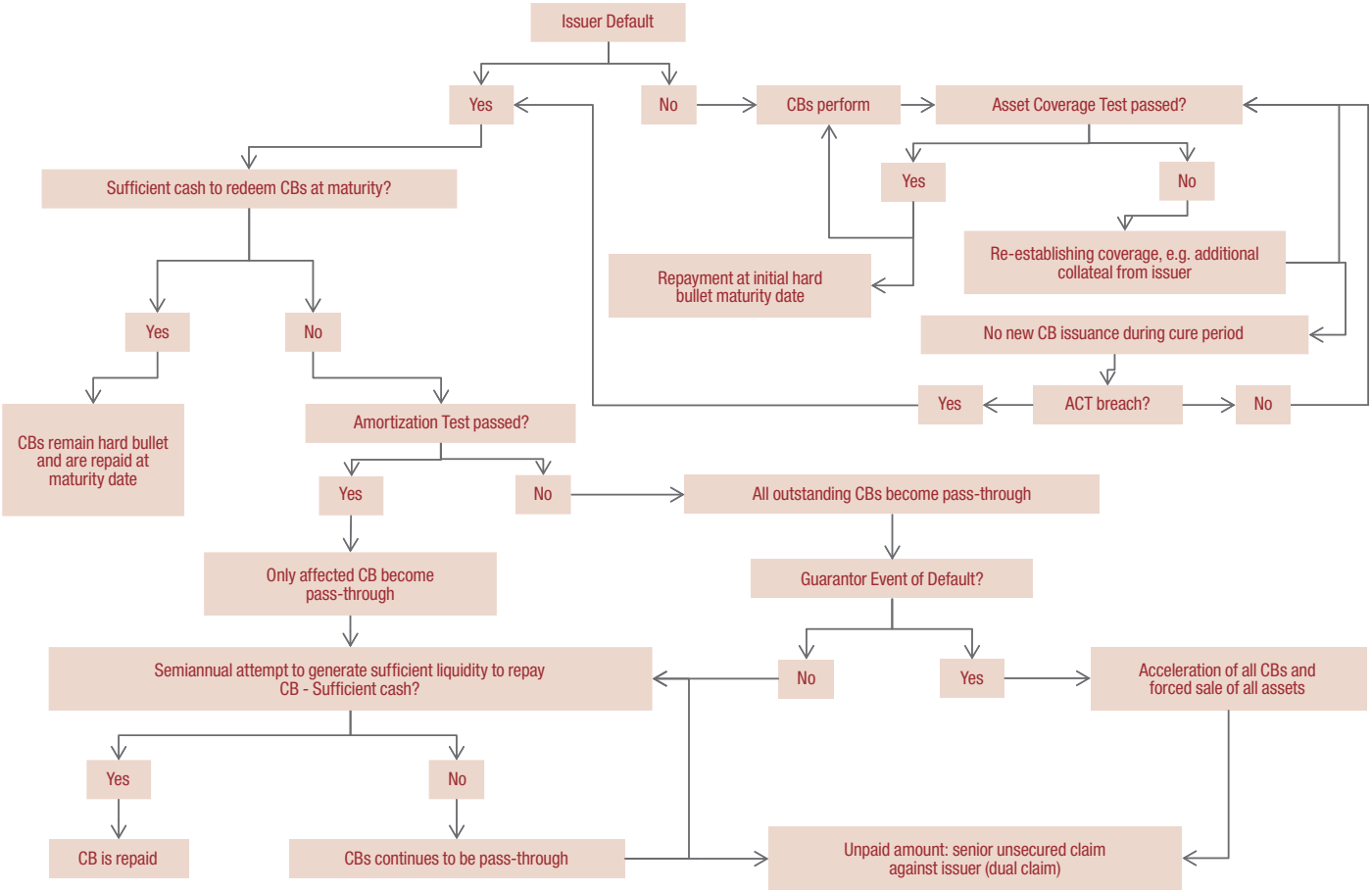


Figure 6 ▶ **Overview of key aspects in conditional pass-through structures (CPT)**

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

Source: UniCredit Research

NEWS IN BRIEF

Covered Bond Label Passes 100 Mark

On the 14th of February 2017 the **Covered Bond Label Foundation** (CBLF) celebrated the granting of its 100th Label to **Oversea-Chinese Banking Corporation Limited's** (OCBC Bank) cover pool. This was followed on the 23rd of February with **Toronto-Dominion Bank** (TD) becoming the 86th issuer to join the Covered Bond Label, taking the total number of cover pools under the Covered Bond Label to 102 across 16 jurisdictions globally.

Commenting on these developments, Luca Bertalot, CBLF Administrator, said:

"We are pleased to see that OCBC Bank has restated its commitment to transparency by recognising the value of the Label for its business and investors globally. Reaching 100 labelled cover pools is an important milestone, which demonstrates issuers' appetite for the Covered Bond Label and further strengthens the presence of our initiative in a key Asian market."

"We are equally delighted to welcome TD on board the Label Initiative. The growing support from the Canadian market is a confirmation of the importance of the Label across jurisdictions and shows that our Harmonised Transparency Template (HTT) has become the global benchmark for transparency in the covered bond market."

To recap, the Covered Bond Label is a quality Label which responds to a market-wide request for improved standards and increased transparency in the covered bond market. On the Covered Bond Label website, investors can retrieve key information, such as LCR eligibility, on over 4,200 different covered bonds, and consult the profiles of 86 issuers representing 16 different covered bond jurisdictions globally.

The primary purpose of the Label is to highlight to investors the security and quality of covered bonds, and to further enhance recognition of and trust in the covered bond asset class. The introduction of the Harmonised Transparency Template (HTT) requires the labelled issuers from all covered bond jurisdictions to disclose their cover pool information in a standardised way, regardless of their jurisdiction. As of the 1st of January 2017, all labelled issuers have to comply with the requirements of the 2017 Covered Bond Label Convention (available here), which entails disclosing their data by publishing the HTT.

BCBS Publishes FAQs on Basel III's NSFR

On the 24th of February 2017 the Basel Committee on Banking Supervision (BCBS) issued a second set of frequently asked questions (FAQs) and answers on Basel III's Net Stable Funding Ratio (NSFR) (available here). These respond to a number of interpretation questions received by the Basel Committee related to the October 2014 publication of the NSFR standard (see here).

To promote consistent global implementation of these requirements, the Committee periodically reviews frequently asked questions and publishes answers along with any necessary technical elaboration of the rules text and interpretative guidance. The questions and answers published on the 24th are combined with those published in the first set of FAQs and are grouped according to the following themes: (i) Definitions; (ii) Repo/secured lending; (iii) Derivatives; (iv) Maturity; and (v) Other.

EMF-ECBC Publications on STS Securitisation and NSFR

On the 8th of February 2017 the European Covered Bond Council (ECBC) published its **Response to the European Commission on the Treatment of derivatives associated with the cover pool of covered bonds or with securitisations in the draft proposal for a Regulation on simple, transparent and standardised (STS) securitisation** (COM (2015) 472 final). This response can be accessed here.

On the 17th of February 2017 the European Mortgage Federation - European Covered Bond Council (EMF-ECBC) published its **Position Paper on interdependent assets and liabilities in the European Commission's Proposal for a regulation (EU) No 575/2013 as regards the Net Stable Funding Ratio**. This paper can be accessed here.

ECBC Events in Singapore 6th-8th of March 2017

Following on from the success of previous years' events, the ECBC will be returning to **Singapore** on the **8th of March 2017** in order to host the fourth edition of the **ECBC Asian Covered Bond Investor Roundtable**. To recap, this event aims at:

- Educating potential new categories of investors and national authorities on the subject of covered bonds
- Providing detailed expert information on the different existing covered bond jurisdictions/issuers
- Highlighting the key qualitative features characterising the European covered bond market
- Facilitating the convergence of upcoming legislative developments in Asia towards the traditional key qualitative characteristics of covered bonds (i.e. the Covered Bond Label), which can then facilitate the recognition of the macro prudential value of covered bonds within the Basel Committee on Banking Supervision framework.

As such, the event will attract mainly investors, but also potential new covered bond issuers and national authorities currently working on drafting covered bond legislation. During the events participants will be able to discuss the current major developments in the covered bond space such as resolution regimes, liquidity, asset encumbrance, covered bond supervision/market best practices and the evolution of the Covered Bond Label – especially the implementation of the Harmonised Transparency Template (HTT).

As previously announced, we are delighted to confirm that the **European Central Bank** (ECB) will participate in these discussions, represented by Ad Visser, Head of the ECB's Financial Markets & Collateral Section, Market Operations Analysis Division.

As in earlier years, this event will be preceded on the 7th of March 2017 by the **Euromoney/ECBC Asian Covered Bond Forum**, which will also be held for the fourth time. Further details regarding the draft Agenda for this year's Forum, how to apply for a place and information on previous editions can be found here.

In addition to these events, we are delighted to announce that the third meeting of the **ECBC Global Issues Working Group** will also take place in Singapore on the 6th of March and will be kindly hosted by the **Association of Banks in Singapore** (ABS). A **Welcome Dinner** for all participants in the Roundtable meeting will also be hosted on the evening of the 7th of March with the kind support of **BNP Paribas**, **DBS** and **UOB**.

If you would like to know more about this Roundtable event, please contact the Secretariat at info@hypo.org.

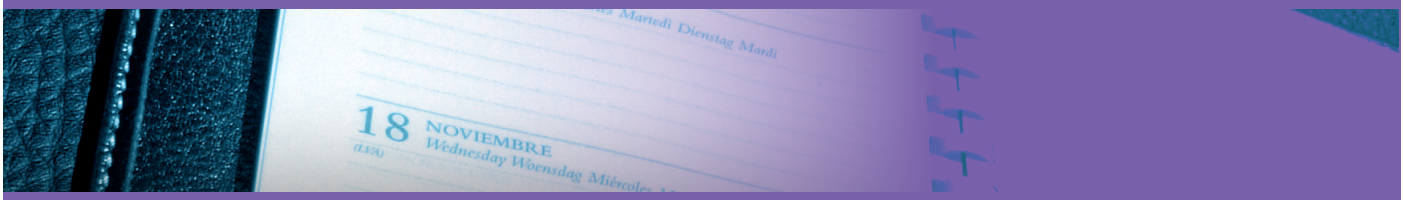
25th ECBC Plenary Meeting – Oslo, 6th of April 2017

We would like to remind readers that registrations are now open for the **25th ECBC Plenary Meeting**, which will take place in **Oslo**, Norway on the **6th of April 2017** with the kind support of **Finance Norway** and **The Norwegian Covered Bond Council**.

The provisional Agenda for the meeting will be published via the ECBC website in the coming days.

To register for the event, click here *(registrations are open until the 30th of March 2017).*

Please note that this event is only open to ECBC members and guests invited by the EMF-ECBC Secretariat. For further information, please contact us at info@hypo.org.



AGENDA

MARCH 2017

03/03	European Mortgage Federation – European Covered Bond Council (EMF-ECBC) Meeting with Reserve Bank of India – Mumbai
06/03	European Mortgage Federation – European Covered Bond Council (EMF-ECBC) Meeting with Monetary Authority of Singapore (MAS) – Singapore
06/03	European Mortgage Federation – European Covered Bond Council (EMF-ECBC) Meeting with National Mortgage Corporation of Malaysia – Singapore
06/03	European Covered Bond Council (ECBC) Global Issues Working Group Meeting – Singapore
06/03	2017 Climate Bonds Conference – London
07/03	Euromoney/European Covered Bond Council (ECBC) Asian Covered Bond Forum 2017 – Singapore
07/03	6th Energy Efficiency Financial Institutions Group (EEFIG) Workshop – Brussels
08/03	European Covered Bond Council (ECBC) Asian Covered Bond Investor Roundtable 2017 – Singapore
09/03	11th LBBW European Covered Bond Forum – Mainz
15/03	ING Think Forward Summit – Munich
17/03	European Mortgage Federation (EMF) Economic Affairs Committee Meeting – Brussels
20/03	DG FISMA Roundtable on Actions to Harness Capital Markets' Potential to Finance Growing Businesses – Brussels
21/03	European Banking Industry Committee (EBIC) Plenary Meeting – Brussels
23/03	European Commission Conference: #FinTechEU – Is EU regulation fit for new financial technologies? – Brussels
24/03	European Mortgage Federation (EMF) Legal Affairs Committee – Brussels
28/03	European Parliament Financial Services Forum (EPFSF) Event on the Action Plan on Retail Financial Services – Brussels
30/03	European Mortgage Federation (EMF) Statistics Committee Meeting – Brussels
31/03	European Mortgage Federation (EMF) & European Network for Housing Research (ENHR) Seminar – Brussels

APRIL 2017

05/04	European Covered Bond Council (ECBC) Steering Committee Meeting – Oslo
05/04	Covered Bond Label Foundation (CBLF) Label Committee Meeting – Oslo
05/04	Covered Bond Label Foundation (CBLF) Label Advisory Council Meeting – Oslo
06/04	25th ECBC Plenary Meeting – Oslo
25/04	European Parliament Financial Services Forum (EPFSF) Event on Capital Markets Union: Sustainable Finance – Brussels

DISCLAIMER

All articles in this newsletter reflect the authors' views and do not necessarily represent the views and opinions of the European Mortgage Federation – European Covered Bond Council (EMF-ECBC) and/or its members as a whole.