2009 ECBC European Covered Bond Fact Book

European Covered Bond Council

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FOREWORD

The past year has been a dramatic journey for financial markets requiring a massive intervention by central banks and governments which in turn led to the creation of a new asset class – government guaranteed bank bonds. Although covered bonds were impacted, the robustness of their key features that helped build the strength of the asset class, also guided them through the storm. Though still in uncharted waters, these are also the qualities leading them towards recovery.

Covered bonds continue to be an important and open source of funding for banks, indeed, at the peak of the crisis, they were the only open market based source of refinancing available to banks outside of those subsidised by governments/central banks. This is underlined by a 30% rise in new issuance in 2008 to €650 billion, leading to a 13% overall increase in covered bonds outstanding to €2.38 trillion. This is the direct result of the underlying protection against risk built into the product: strict asset eligibility criteria, highly conservative valuation rules and the two fold protection of bondholder’s rights.

The smooth functioning of the covered bond market is obviously essential for market participants but there has also been an increasing recognition of its importance from policy makers and regulators. Above and beyond the benefits of close public supervision, covered bonds encourage prudent behaviour among banks and provide access to long term funding, thus enabling a better management of the maturity mismatch between assets and liabilities as well as mitigating liquidity risk.

With industry wide involvement, since its inception in 2004, the European Covered Bond Council (ECBC) has played a key role in representing and facilitating communication among covered bond stakeholders, for example, working as catalyst in reaching agreement on the key features characterising the asset class and in improving market practices, transparency and liquidity. The work completed under the ECBC’s umbrella has demonstrated the willingness and commitment of all industry participants to work together to continuously build and improve on the quality of covered bonds.

The Fourth Edition of the ECBC European Covered Bond Fact Book aims to build on the success of the first three editions, as the benchmark and a comprehensive source of information on the asset class. Chapter I presents an analysis of seven of the key themes of the year, including the European Central Bank’s covered bond purchase programme and policy on repo operations, before investigating work being undertaken to improve liquidity on secondary markets and reflecting on the theme of transparency. A comparative analysis of covered bonds and government guaranteed bank bonds is followed by an evaluation of changes in risk perspectives and covered bonds from the view point of investors. Chapter II provides a detailed explanation of covered bond fundamentals. Chapter III presents an overview of the legislation and markets in 29 jurisdictions. Chapter IV sets out the rating agencies covered bond methodologies, including an article comparing their approaches. Finally, Chapter V gives a description of trends in the covered bond market as well as a complete set of covered bond statistics.

Special thanks must be extended to Mr Wolfgang Kälberer, the Chairman of the ECBC Fact Book Working Group for guiding the Fact Book so expertly towards completion, as well as to the members of the “Fact Book” and “Statistics & Data” working groups, whose enthusiasm and dedication resulted in this 2009 edition of the ECBC European Covered Bond Fact Book.

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ABOUT THE ECBC

The European Covered Bond Council (ECBC) is the platform that brings together covered bond market participants which brings together covered bond issuers, analysts, investment bankers, rating agencies and a wide range of interested stakeholders. The ECBC was created by the European Mortgage Federation (EMF) in 2004. As of August 2009, the Council has around 100 members across more than 20 active covered bonds jurisdictions and many different market segments. The ECBC represents over 95% of covered bond issuers in the EU.

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

ECBC STRUCTURE

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

The Steering Committee, headed by the ECBC Chairman, and composed of representatives from the major covered bond issuing jurisdictions and industry experts, is responsible for the day-to-day activities of the ECBC. It comes together once every quarter and addresses strategy related questions. Furthermore, it coordinates the agenda of the various working groups.

ECBC WORKING GROUPS

> **EU Legislation:** The European Legislation Working Group, chaired by Mr Paul O’Connor, has over the past five years been closely following the debate on the Capital Requirements Directive (CRD) and has been successfully lobbying at EU level to obtain treatment that recognised the low risk profile of the instrument. In this respect, the group has drafted and passed comments to the European Parliament, Council and Commission, as well as monitor the implementation of the CRD into national legislation.

> **Technical Issues:** This Working Group, chaired by Mr Ralf Grossmann, represents the technical think thank of the covered bond community, drawing on experts from across the industry to tackle issues such as the use and treatment of derivatives in the cover pool, bankruptcy remoteness and collateral, producing a set of legal information unique at the European level which plays an important role in ensuring a high level of transparency of covered bonds.

> **Market Related Issues:** The Market Related Issues Working Group, chaired by Mr Richard Kemmish, discusses topics such as minimum standards for Jumbo issuance, conventions on trading standards and the market-making process. The Working Group is currently leading the discussions on improving liquidity in secondary markets and is very active in facilitating the work of systems providers to improve their electronic trading platforms for covered bond trading.

> **Statistics & Data:** The Working Group on Statistics and Data, chaired by Mr Horst Bertram, is responsible for collecting and publishing complete and up-to-date information on issuing activities and volumes outstanding of covered bonds in all the European market segments. With 25 different covered bond jurisdictions and numerous issuers, the collection of data is of utmost importance,
particularly given that the ECBC data is increasingly viewed as the key source of covered bond statistics.

> **Covered Bond Fact Book:** The Covered Bond Fact Book Working Group, chaired by Mr Wolfgang Kälberer, is responsible for the publication of the annual European Covered Bond Fact Book. This publication covers key themes in the industry, market developments, provides a detailed overview of legislative frameworks in different countries as well as statistics. It is increasingly being recognised as the reference for covered bond information.

> **Rating Agency Approaches:** Last but not least, this Working Group, chaired by Mr Reinolf Dibus, examines the rating approaches applied by rating agencies and has been active over the past year monitoring, analysing and reacting to the changes underway in covered bond rating methodologies.

An example of the type of output from the working groups can be seen in the identification by the Technical Issues Working Group of the a) common essential features of covered bonds and b) the Covered Bond Comparative Framework Database.

a) By analysing covered bond frameworks, it is clear that the various covered bond models that exist are all geared to offering investors the highest possible degree of security, but that the mechanisms deployed to achieve such security differ as a consequence of the different legal contexts within which these models are embedded. This diversity makes a definition of covered bonds very difficult to establish. Therefore, instead of proposing a standard definition of covered bonds, the ECBC has agreed upon the core features that are determinants of the quality in covered bonds as follows:

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Covered bonds are characterised by the following common essential features that are achieved under special-law based frameworks or general-law based frameworks:

> The bond is issued by – or bondholders otherwise have full recourse to – a credit institution which is subject to public supervision and regulation;

> Bondholders have a claim against a cover pool of financial assets in priority to unsecured creditors of the credit institution;

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

> The obligations of the credit institution in respect of the cover pool are supervised by public or other independent bodies.
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b) The Covered Bond Comparative Framework Database complements the essential features work by clearly showing the key features of different covered bond frameworks across Europe. Launched in May 2009, it is the result of covered bond analysts and country experts working together to describe the key features of each covered bond jurisdiction in an easy to use, comparable format on line, with nine chapters covering topics such as mortgage cover pool valuation & LTV criteria, asset-liability guidelines and how the cover pool monitor and banking supervision operate. The database is available from www.ecbc.eu.
Membership of the ECBC continues to grow and its agenda for the coming months is already filled with numerous activities. The ECBC’s objective now is to press ahead in its work with a view to further strengthening its role in facilitating the communication among the different covered bonds stakeholders, working as a catalyst in defining the common features that characterise the asset class in the different covered bonds jurisdictions and in facilitating improvements in market practices, transparency and liquidity.

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More information is available from http://ecbc.hypo.org/
CHAPTER I - KEY THEMES OF THE YEAR
1.1 INTRODUCTION

By Ralf Burmeister, Landesbank Baden-Württemberg

Many things could be written to describe covered bond markets over the past year, but boring is most emphatically not a word that springs to mind. After the Lehman default, the market came to a sudden and brutal stop – which was not a phenomenon observable exclusively on the Covered Bond market but a severe disruption across almost every asset class. We then saw the brave return to the Jumbo market of a few players in January 2009 at spread levels that seemed unthinkable just three months before. Credit spreads reached new heights in March 2009 when the debate about nationalising banks and sovereigns going into default on a broad scale was boiling. Fortunately, not every worst case scenario turned into reality and by early May 2009, the European Central Bank stepped up to stabilise the Covered Bond market by announcing a 60 billion Euro Covered Bond buying programme. Actual buying by European central banks did not take place before early July, but the mere announcement helped spreads to tighten and encouraged a lot of issuers to re-enter the market. The ECBC of course is pleased to see those measures bringing the market back into calmer waters. As the central banks in the euro area did not want to engage themselves in sovereign debt in the primary market for political reasons and also wanted to limit their credit exposure which they are willing to accept on their balance sheets, the ECB came up with the idea of buying Covered Bonds. Accordingly, the central banks obviously consider Covered Bonds as a highly safe and sound asset class, thereby having a highly positive impact on investors’ confidence towards this market.

Besides the emergence of such a highly creditworthy and experienced player in the market, there are still obstacles to be dealt with in today’s market. In the depths of the crisis, when it all came down to the liquidity of a bank, improving the liquidity situation was key to survival. Accordingly, as the central banks boldly stepped in and provided liquidity on a large scale to the financial system, the rules and procedures of the Eurosystem’s liquidity operations became almost crucial. Therefore, Niamh Staunton (Morgan Stanley) and Frank Will (RBS) shed light on how the Eurosystem lends to banks on a collateralised basis. Additionally, the two authors also outline the ECB Covered Bond purchase programme in the subsequent article.

Liquidity was the key last autumn for banks (and of course still is!), but it is also crucial for investors. As the trading situation, i.e. the liquidity, in Covered Bonds is still below standards which used to be one of the major arguments for investors to engage themselves with secured debt on a large scale, Richard Kemmish (Credit Suisse), Ted Packmohr (Commerzbank) and Sebastian Sachs (DZ Bank) investigate Covered Bond trading in this difficult environment as well as on the latest ECBC initiatives to improve the tradability of Covered Bonds.

With transparency often considered as a key element in restoring confidence, not only in Covered Bonds but basically for every asset class, Michelle Bradley (Morgan Stanley), Michaela Seimen (UBS) and Horst Bertram (BayernLB) reflect on this topic with regard to secured debt issuance. As a rapid response by authorities to mounting problems in late 2008, Government Guaranteed Bank Bonds (GGBB) emerged, offering banks a viable source of funding after several traditional funding channels dried up. However, this new asset class has also impacted on Covered Bonds and simply the outstanding debt already issued up to summer 2009 will have its effects on neighbouring markets in the medium term. An article by Florian Eichert (LBBW) in this section provides a detailed analysis of these developments.
Finally, it is important to understand the changes on the investor side in order to get a comprehensive picture of today’s market situation and possible changes or effects on the demand side. We therefore include two articles in this year’s Key Themes section: firstly, Franz Rudolf and Florian Hillenbrand (UniCredit) examine the different risk perspectives before and after the Lehman default, then secondly, Fritz Engelhard and John Maskell (Barclays) express views from the investor’s perspective.
1.2 COVERED BONDS AND REPO

By Frank Will, RBS, and Niamh Staunton, Morgan Stanley

Introduction

The financial crisis led to severe disruptions in the wholesale funding market across asset classes. The covered bond market was able to stay open longer than many others, but the collapse of Lehman Brothers in September 2008 marked the beginning of the longest period without a benchmark covered bond issuance, as the market remained shut until the beginning of 2009.

Although the markets have re-opened recently, spurred on by the ECB’s covered bond purchase programme (see box below), there are jurisdictions which have not been able to place an issue publicly since 2008. However, since 2008 the number of covered bond issuers has increased by around 75 to a total of more than 150 issuers. Many of these programmes were set up not just to have an additional source of capital markets funding for when wholesale liquidity returns, but also to make use of the repo facilities at central banks as means to access liquidity in a closed wholesale market.

The ECB has been a key source of liquidity for banks in the Eurosystem throughout this difficult period. In 2008 the average amount of eligible collateral increased by 17.2% compared with 2007, and the average of marketable assets put forward as collateral rose by €38% in the same period1. This increase was mainly due to the fact that counterparties put forward large additional amounts of collateral with the Eurosystem in response to the financial market turbulence. At the beginning June 2009 the ECB provided around €640bn of liquidity through its main and long-term repos. This is down from more than €830bn as of January 2009.

The role of covered bonds within the ECB’s liquidity operations has become an increasingly important one. As they are seen as a liquid asset class, covered bonds receive preferential liquidity class classification and thus haircut valuations for repo transaction with the ECB compared with, for example, ABS. Moreover, unlike senior bank debt, the ECB will accept self-issued ‘covered bank bonds’ (see below) as collateral. Thus, like certain forms of ABS, covered bonds allow issuers to make assets held on their balance sheets eligible for the ECB’s liquidity operations, where they could be funded, albeit on a short-term basis, at a lower cost than in the capital markets for much of the past 18 months.

In December 2008, the ECB published a report on the covered bond market, in which it noted that “in view of the main features of covered bonds, the smooth functioning of these markets is important from a financial stability perspective. In this context, it should be noted that covered bonds represent an important funding source for mortgage lending in several countries”.2 Various moves to support the liquidity of the product, the most notable of which is the €60bn covered bond buying programme, support the view that the ECB considers a properly functioning covered bond market to be in the interest of both market participants and regulators.

In terms of the covered bond buying programme, several factors have been noted by the ECB as contributing towards the decision to engage in purchases of covered bonds in particular, but that the motivation was that the Governing Council concluded that outright purchases of covered bonds by the Eurosystem “could help to revive this market, in terms of liquidity, issuance and spreads”3 and that, given

1 ECB Annual Report
2 The European Central Bank, “Covered Bonds in the EU Financial System”, December 2008
3 Keynote address by Jean-Claude Trichet, President of the ECB at the University of Munich, Munich, 13 July 2009 http://www.ecb.int/press/key/date/2009/html/sp090713.en.html
that Covered bonds had been a major source of funds for banks in the euro area before the intensification of the financial crisis last autumn, a revival of the covered bond market could help to support the lending to the non-financial sector.

The conservative nature of the product, in light of the "dire consequences of the imprudent evaluation of credit risk"\(^4\) has also been highlighted as a key reason why the ECB chose covered bonds rather than any other asset class for its buying programme. Whilst independent, from it, this is in line with previous ECB statement which note that "covered bonds possess a number of attractive features from the perspective of financial stability. Covered bonds as dual recourse instruments are less risky than most other bank securities and also increase banks’ access to long-term funding, thereby mitigating liquidity risks. In the context of the ongoing financial market turmoil, it is important to stress that, on the whole, covered bonds have proven themselves relatively resilient, in particular in comparison with securitisation.\(^5\)

On the following pages we outline the treatment of covered bonds within the ECB’s liquidity operations, and the role these operations, and specifically as relates to covered bonds, have played in maintaining liquidity throughout the financial crisis. We also look at the knock-on effects of the increased use of the ECB repo facility on covered bond issuers. The importance of the ECB’s €60bn covered bond purchase programme in supporting the proper functioning of the market is discussed on a separate article.

**Eligibility Criteria for Collateral in Eurosystem Operations**

Article 18.1 of the Statute of the European System of Central Banks and of the European Central Bank states that the ECB and the national central banks may conduct credit operations with credit institutions and other market participants, with any lending being “based on adequate collateral”\(^6\).

According to the ECB, adequacy means firstly, that collateral must protect against losses in credit operations, and secondly that there must be sufficient collateral potentially available to ensure that the Eurosystem can carry out its tasks.

Consequently, underlying assets have to fulfil certain criteria in order to be eligible for Eurosystem monetary policy operations. The Eurosystem has developed a single framework for eligible assets common to all Eurosystem credit operations (the “Single List”). There is no collateral differentiation between monetary policy instruments or intraday credit, and a single auction rate is applicable to different types of collateral in tender operations. The scope of eligible collateral is broad and includes secured assets like covered bonds and ABS, the latter of which can be backed by receivables such as residential and commercial loans (secured and unsecured), auto loans, lease receivables etc., provided they satisfy certain eligibility criteria (set out below).

Covered bonds, as dual recourse instruments, are on the Eurosystem’s single list of collateral, as they limit the risk of losses to the central bank while contributing to an effective implementation of monetary policy.\(^7\) “From a financial stability perspective, a crucial difference between covered bonds and securitisation is that covered bonds do not involve credit risk transfer. This gives the originating bank a stronger incentive to conduct proper credit evaluation when granting loans and proper credit monitoring of borrowers during the life of the loan.”\(^8\)

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\(^4\) ibid
\(^5\) The European Central Bank, “Covered Bonds in the EU Financial System”, December 2008
\(^6\) Protocol on the Statute of the European System of Central Banks and of the ECB, Article 18.1
\(^7\) European Central Bank, “Covered Bonds in the EU Financial System”, December 2008
\(^8\) ibid
The Eurosystem’s Refinancing Facilities are in principal open to all financial institutions subject to minimum reserves in the Euro area, provided they fulfil certain eligibility criteria. The Collateral Framework has been refined through the course of the past year, with the most recent enhancements to the Facility having been announced on 20 January 2009.

<table>
<thead>
<tr>
<th>Type of Asset</th>
<th>Standard Collateral Rules</th>
<th>Temporary Expansion of Eligible Assets (Effective on 14 November 2008 until end of 2009)</th>
<th>Further Specifications (Effective on 1 February 2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Debt instrument having a coupon that cannot result in a negative cash flow</td>
<td></td>
<td>Limits on the use uncovered bank bonds as of March 2009:</td>
</tr>
<tr>
<td></td>
<td>• Coupon should be zero coupon, fixed-rate coupon or floating-rate coupon linked to an interest rate reference or to rating of issuer or inflation-indexed</td>
<td></td>
<td>• The value assigned to uncovered bank bonds issued by an issuer or entity with close links must be less than a share of 10% in the value of the collateral pool of a counterparty, unless the market value of these assets is not higher than €50m</td>
</tr>
<tr>
<td></td>
<td>• Debt instruments, including covered bonds, but not including ABS, must have a fixed, unconditional principal amount</td>
<td></td>
<td>• Uncovered bank bonds submitted as collateral to the Eurosystem until 20 January 2009 are subject to this limitation as from 1 March 2010</td>
</tr>
</tbody>
</table>

| Definition of Covered Bonds | | | |
|----------------------------|• (The ECB doesn’t provide an official definition of what they classify as covered bonds in the context of eligible collateral) ‘Covered Bank Bonds’ for ECB collateral purposes means bonds issued in accordance with Article 22 (4) of the UCITS Directive, (i.e. subject to covered bond specific legislation) | • Covered bonds which do not meet these criteria (general law-based covered bonds) but meet all other requirements are eligible but classed as ‘Credit Institution Debt Instruments’ | |

<p>| Cash Flow Backing ABS | | | |
|-----------------------|• Must be legally acquired in accordance with the laws of a member state in a “true sale” | • Must not consist of credit-linked notes (i.e. cannot be a synthetic structure) | For ABSs issued as of 1 March 2009, the underlying pool should not contain tranches of other ABSs. ABSs issued before 1 March 2009 will be exempted until 1 March 2010 |</p>
<table>
<thead>
<tr>
<th><strong>Eligibility Criteria for Eurosystem Credit Operations</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard Collateral Rules</strong></td>
</tr>
<tr>
<td><strong>Tranche and Rating</strong></td>
</tr>
<tr>
<td>• Tranche (or sub-tranche) must not subordinated to other tranches of the same issue</td>
</tr>
<tr>
<td>• Minimum rating: A- (S&amp;P) / A3 (Moody’s) / A- (Fitch) / AL (DBRS)</td>
</tr>
<tr>
<td><strong>Place of Issue</strong></td>
</tr>
<tr>
<td><strong>Settlement Procedures</strong></td>
</tr>
<tr>
<td>• Held and settled in the euro area</td>
</tr>
<tr>
<td><strong>Acceptable Market</strong></td>
</tr>
<tr>
<td><strong>Type of Issuer/Guarantor</strong></td>
</tr>
<tr>
<td><strong>Place of Establishment of the Issuer/Guarantor</strong></td>
</tr>
<tr>
<td><strong>Currency of Denomination</strong></td>
</tr>
</tbody>
</table>

Source: ECB

The Eurosystem additionally applies risk control measures in the valuation of underlying assets. The value of the underlying asset is calculated as the market value of the asset less a certain percentage (“valuation haircut”). The haircut-adjusted market value of the underlying assets used in its liquidity-providing reverse transactions must be maintained over time. This implies that if the value, measured on a regular basis, of the underlying assets falls below a certain level, the national central bank will require the counterparty to supply additional assets or cash (i.e. it will make a margin call). Similarly, if the value of the underlying assets, following their revaluation, exceeds a certain level, the counterparty may retrieve the excess assets or cash.

One can determine the applicable haircut for the ECB assets by referencing the tables as set out here. By way of example, a counterparty enters into a repo transaction with the Eurosystem, pledging an asset which is a regional government bond, with a fixed coupon, maturing in 4 years. This asset will then be subject to a haircut of 3.5%.
### ECB Haircuts by Liquidity Category and Residual Maturity (since 1 February 2009)

<table>
<thead>
<tr>
<th>Residual Maturity (years)</th>
<th>Liquidity Category I (Government Bonds)</th>
<th>Liquidity Category II (Local &amp; Regional Govt, Supras &amp; Agencies, Jumbo Covered Bonds)</th>
<th>Liquidity Category III (Trad. Covered Bonds, Corporate Bonds)</th>
<th>Liquidity Category IV (Unsecured Bank Bonds)</th>
<th>Liquidity Category V (ABS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fixed coupon</td>
<td>Zero coupon</td>
<td>Fixed coupon</td>
<td>Zero coupon</td>
<td>Fixed coupon</td>
</tr>
<tr>
<td>0-1</td>
<td>0.5</td>
<td>0.5</td>
<td>1</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>1-3</td>
<td>1.5</td>
<td>1.5</td>
<td>2.5</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>3-5</td>
<td>2.5</td>
<td>3</td>
<td>3.5</td>
<td>4</td>
<td>4.5</td>
</tr>
<tr>
<td>5-7</td>
<td>3</td>
<td>3.5</td>
<td>4.5</td>
<td>5</td>
<td>5.5</td>
</tr>
<tr>
<td>7-10</td>
<td>4</td>
<td>4.5</td>
<td>5.5</td>
<td>6.5</td>
<td>6.5</td>
</tr>
<tr>
<td>&gt;10</td>
<td>5.5</td>
<td>8.5</td>
<td>7.5</td>
<td>12</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: ECB (*Assets in that liquidity category that are given a theoretical value will be subject to an additional 5% haircut*)

### Classification of Covered Bonds within the Eurosystem Operations

The Eurosystem does currently not provide an official definition of what is classified as Covered Bonds, and in general, the Eurosystem accepts both UCITS and non-UCITS compliant covered bonds as collateral as long as they otherwise fulfil the general eligibility criteria. Generally, debt instruments are classified as 'covered bank bonds' if they are issued in accordance with the criteria set out in Article 22(4) of the UCITS Directive. Those bonds are grouped either into liquidity category II in case of Jumbo covered bonds, i.e. bonds with a minimum issue size of €1bn and at least three market makers, or into liquidity category III in case of traditional non-Jumbo covered bonds.

As ‘structured covered bonds’ are issued under a general legal framework, rather than being subject to ‘special public supervision’, they do not fall within the UCITS definition and as such are not recognised as covered bank debt by the ECB from a liquidity haircut perspective. However, a structured covered bond (like any covered bond) is first and foremost a senior unsecured claim on the issuer. As such, if all other requirements are met (rating, maturity etc.) a structured covered bond is eligible with the ECB as ‘credit institution debt instruments’. This means that general law-based covered bonds such as the French covered bonds issued by, among others, BNP Paribas, Crédit Mutuel or Banques Populaires are treated as unsecured bank bonds (liquidity category IV) and are subject to notably higher haircuts.

### Covered Bonds and ‘Close Link’ Exemption

‘Covered bank bonds’ also have certain preferential treatment compared with non-UCITS compliant covered bonds and other bank debt when it comes to self-issued bonds. The ECB states that “irrespective of the fact that a marketable or non-marketable asset fulfils all eligibility criteria, a counterparty may not submit as collateral any asset issued or guaranteed by itself or by any other entity with which it has close links”9. This means that banks cannot, for example, use their own senior debt directly as collateral with the ECB.

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9 European Central Bank, "The Implementation on Monetary Policy in the Euro Area", November 2008
In the past, issuers were able to securitize assets on their balance sheet and retain them as collateral for central bank repo operations. However, in addition to certain other changes outlined below, as a result of the increased use of securitisation technology to create ABS assets solely for use as collateral for central bank liquidity purposes, the ECB broadened the definition of ‘close links’, which now extends to situations where a counterparty submits an asset-backed security as collateral when it (or any third party that has close links to it) provides support to that asset-backed security by entering into a currency hedge with the issuer or guarantor of the asset-backed security or by providing liquidity support of more than 20% of the nominal value of the asset-backed security.

Apart from the fact that swap counterparties and liquidity providers to a transaction may now also be precluded from using the ABS as eligible collateral, originators of ABS (which have historically been able to use their retained ABS as eligible collateral) are no longer able to do so if they provide a currency swap or liquidity above the requisite threshold.

The main exemptions from the ‘close links’ rule are ‘covered bank bonds’. Self-issued UCITS compliant covered bonds can be used by counterparties as collateral, i.e., an issuer can use its own covered bonds and there are no close links prohibitions. This may have been one of the drivers of the increase in covered bond programmes established in the past 12-18 months.

**Haircut Valuation Changes to ECB Refinancing Facility**

In response to the ongoing crisis, the ECB has taken a series of measures to help support the normalisation of the functioning of the euro money market in order to provide liquidity to solvent banks notwithstanding dysfunctional money markets. These include an increase in the level of funding being made available through the refinancing operations, and an alteration of the mix of funding by skewing supply away from 1 Week to the 3 Month term facility and also to the supplementary 6 Month term facility, introduced in response to the dislocation in money markets.

The list of eligible collateral was enlarged (until end-2009), to include subject to an additional haircut of between 5-10%, assets with lower credit ratings (from A- to BBB-, except for ABS), debt instruments issued by banks on certain non-regulated markets (e.g. CDs), debt denominated in USD, GBP or JPY and that fulfil all other eligibility criteria.

The ECB also moved to apply more stringent requirements on assets being pledged as collateral for its Eurosystem credit operations. Due to the market dislocation, many issuers chose to pledge their ABS assets as collateral in return for term funding. Given the ECB’s heightened exposure to these assets, they moved to increase haircuts applied to this collateral, while also demanding greater credit, legal and structural due diligence to be carried out by the issuer of new asset-backed securities.

The changes in the valuation haircuts related in particularly to ABS and senior bank debt, including general-law based covered bonds. The categorisations and haircuts for ‘covered bank bonds’, as defined by the ECB, were not affected.

**Increased Number of Covered Bond Issuers**

The use of covered bonds as collateral for repo business with central banks has been cited by Fitch as “a powerful driving force behind the increase in the number of financial institutions issuing covered bonds over the period. Indeed, the number of Fitch publicly rated covered bond programmes at end-April 2009 had almost doubled since mid-2007 (to 105 programmes issued by
90 financial institutions); the volume of rated covered bonds increased by 11.7% to €1.17trn\(^{10}\). As noted above, since 2008 the number of covered bond issuers has more than doubled, with at total of more than 150 banks now with covered bond programmes in place.

It should also be noted that, whether or not banks actually repo the covered bonds with the ECB or simply hold them on their balance sheet, there is the additional benefit that the covered bonds, as they are treated as liquid instruments under Basel II, meaning banks need to hold less regulatory capital against them that they would need to hold against the raw assets.

**Use of Covered Bonds as Collateral in Eurosystem Operations**

At the end of 2008, covered bank bonds (which includes only UCITS compliant covered bonds) comprised just under €175 billion of collateral used in Eurosystem credit operations. \(^{11}\) The use of covered bank bonds increased by around 50% during 2008, roughly at the same rate as total collateral use. Thus the share of covered bonds in total collateral remained stable during the year at 11%, although the ECB has acknowledged that since autumn of 2008, counterparties have made significant “own use” of (UCITS) covered bonds.

Since 2004, the outstanding volumes of eligible repo collateral have grown considerably from €7.7 trillion to €11.1 trillion by the end of 2008. Central government debt accounts for the largest share (44%) followed by uncovered bank bonds (20%) and covered bank bonds (11%).

> **FIGURE 1: Eligible ECB collateral by asset type**

Source: ECB Annual Report 2008

The actual breakdown by type of the collateral used for repo transaction differs significantly from the market composition of the available eligible collateral as relative value considerations are playing an important role in the banks’ decisions as to which collateral to post. Over the last few years, there has

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11 ECB Annual Report 2008
been a general trend to lower the overall quality and/or liquidity of the collateral used by the banks for repo operations. The share of central government debt has fallen sharply, from a 31% share in 2004 to just 10% in 2007, and the share of covered bank bonds (as defined by the ECB) in the repo operations dropped from 26% in 2004 to about 11% in 2008. Over the same period, the share of uncovered bank bonds (which include general-law based bonds) increased from 20% to 28%. The most notable increase over the period was in ABS, which grew from 6% to 28% in 2008. The share of non-marketable securities also rose significantly from 4% to 12%.

> **FIGURE 2: ACTUAL USE OF COLLATERAL BY ASSET TYPE**

The chart below shows the massive jump of main and long-term refinancing operations within the Eurosystem banks in autumn 2008. Only a few central banks publish figures of the national take-up of the repo facilities. The repo figures from the Deutsche Bundesbank, the Banco de España, the Central Bank of Ireland and the Bank of Italy show that banks in all four countries significantly increased the use of the ECB funding operations during that period.

Source: ECB Annual Report 2008
However, taking total ECB lending including fine tuning and marginal lending facilities into account, the pictures changes significantly. Ireland and Italy have considerably higher proportional shares in the last quarter of 2008 compared to previous months. The share of German banks, however, dropped from more than 50% in 2007 to about 30% in October to December 2008. The share of Spanish banks remain at around 10% and peaked in February and March 2009 with percentage figures of 12.5% and 12%, respectively.
Funding via the Eurosystem Refinancing Facility is awarded on an auction basis. Traditionally this auction has taken the form of a variable rate tender, whereby financial institutions bid for funds, bids with the highest interest rate levels are satisfied first and subsequently bids with successively lower interest rates are accepted until the total liquidity to be allotted is exhausted. However, over the past year the effective refinancing rate has tended to be above the target refinancing rate, as the number of banks bidding for funding through the ECB’s refinancing operations has spiked, pushing the effective rate higher due to the greater demand. To counteract this and to bring the effective rate in line with the target rate, the ECB decided to perform its refinancing operations on a fixed-rate tender basis. Since March 2009, the ECB prescribes a fixed rate and banks can apply for funds at that rate. This has meant that for many issuers, the cost of raising funds via the ECB has been significantly cheaper compared to issuing covered bonds in the capital markets.

**Potential Impact and Outlook**

Whilst this has meant that banks have been able to access liquidity relatively cheaply, it has had a negative effect in particular on the some banks’ ability to match the duration of their funding to their assets. As Fitch noted in its Comparative Study of Covered Bonds 2008/09, the “average residual maturities for outstanding covered bonds decreased significantly due to investor appetite, lower central bank repo haircuts, and for some pools, reduced issuance activity. Since the maturities of the cover assets have not shortened to the same extent, the average maturity gap has increased”\(^\text{12}\). This maturity gap is something that has become more and more of a focus for rating agencies, regulators, investors and issuers. In the

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same report Fitch notes that “the prevalence of short-term refinancing, using the refinancing mechanisms of the central banks, could in the long run have a negative impact”\(^\text{13}\).

In its study on Covered Bonds in the EU Financial system from December 2008, the ECB notes has stated the importance of covered bonds as a means of accessing long-term funding: “Issuing covered bonds enhances a bank’s ability to match the duration of its liabilities to that of its mortgage loan portfolio, enabling a better management of its exposure to interest rate risk. Other secured funding products, such as repos, are unlikely to have the same asset-liability matching attributes offered by covered bonds. All these issues are all the more important today given the increasing role of short-term refinancing in banks’ balance sheets. In certain instances, rolling over short-term funding might be less expensive or better in terms of reputation, but this could pose challenges to the management of assets and liabilities at some point. In addition to improving banks’ structural asset-liability mismatch, covered bonds offer a wider geographical diversification, as issuers tap into a larger European market.”\(^\text{14}\)

The role of covered bonds as tool for long term funding was also noted by President Trichet in his comments following the announcement of the covered bond purchase programme, noting that they give banks “access to funding of a longer-term nature than the ECB’s refinancing operations. Covered bonds thus allow banks to manage the maturity mismatch between their assets and liabilities”. The motivation for choosing covered bonds rather than any other asset class for the programme was noted at this time as being two-fold: firstly, because the Governing Council felt that the programme would help revive the covered bond market, giving banks access to longer dated funding which in turn should support the flow of credit to the non-financial sector. Secondly, “covered bonds are different in nature from the various asset-backed securities that became so popular before turning sour with the financial crisis. Importantly, covered bonds do not involve the transfer of the credit risk implied by underlying assets from the issuer to the investor. The credit risk stays with the originator, preserving the incentives for prudent credit risk evaluation and monitoring.”\(^\text{15}\)

**Conclusion**

Despite the dislocation in the capital markets, covered bonds, with the support of the ECB, have continued to be a key source of liquidity for banks in the past 18 months. The product is, however, not just a means of providing liquidity to the financial sector, but also, as highlighted by its support from the ECB via the covered bond purchase programme, the flow of credit through the banks to the non-financial sector. Furthermore, the ECB has stated its view of the place of covered bonds in the longer term: “Given that the financial crisis clearly exposed the dire consequences of the imprudent evaluation of credit risk, the usefulness of more conservative asset classes such as covered bonds, which have proved to be safe assets over a long time, is obvious”.\(^\text{16}\)

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\(^\text{13}\) ibid

\(^\text{14}\) European Central Bank, “Covered Bonds in the EU Financial System”, December 2008

\(^\text{15}\) Keynote address by Jean-Claude Trichet, Munich, 13 July 2009 (see above)

\(^\text{16}\) Keynote address by Jean-Claude Trichet, Munich, 13 July 2009 (see above)
1.3 ECB’S COVERED BOND PURCHASE PROGRAMME

By Frank Will, RBS, and Niamh Staunton, Morgan Stanley

On 7 May 2009, the ECB surprised the market with the announcement to buy €60bn of euro-denominated covered bonds issued within the euro area. The statement had an unprecedented market impact; it revived the lethargic covered bond primary market and triggered a massive tightening of secondary market spreads across the curve and across covered bond categories. Though undeniably beneficial for the market, the initial announcement raised plenty of questions as market participants were not sure which covered bonds and maturities the ECB would target, whether it would buy bonds only in secondary or also in the primary market and how it would conduct the whole purchase process.

SPREAD DEVELOPMENT BEFORE AND AFTER ECB ANNOUNCEMENTS

> FIGURE 1: SPREAD DEVELOPMENT OF SELECTED 5-YEAR COVERED BONDS AGAINST SWAPS

Source: RBS
> **Figure 2:** Spread development of selected 5-year covered bonds against swaps

Source: RBS

NEW ISSUANCE BEFORE AND AFTER ECB ANNOUNCEMENT

> **Figure 3:** Jumbo CB supply pre vs. post initial ECB announcement in May

Source: RBS
On 4 June and 2 July 2009, the ECB provided further details on its €60bn covered bond purchase programme addressing most of the aforementioned questions. The ECB will conduct the purchase programme primarily through the 16 national central banks (NCBs) of the euro area and will buy only 8% of the €60bn amount directly. The ECB has set the major guidelines though leaving the individual national central banks some room to manoeuvre within these boundaries. The ECB and NCBs started to buy covered bonds on 6 July and will purchase covered bonds over a 12-month period until the end of June 2010. The ECB intends to “implement the covered bond purchase programme gradually, taking into account market conditions and the Eurosystem’s monetary policy needs”. As at the 10th August 2009, the ECB had purchased €5.69bn, more or less in line with the average daily amount which would be required for the ECB to reach €60bn over the period.

- **ECB Objectives:** The ECB wants to achieve four main objectives with its covered bond purchase programme. The first is to promote the ongoing decline in money market term rates the second is easing funding conditions for credit institutions and corporates, the third is encouraging credit institutions to maintain and expand their lending activities, and last but not least to improve market liquidity in the covered bond market.

- **Procedure:** There is no auction process and the covered bonds are directly purchased from eligible counterparties. Counterparties eligible for the purchase programme are those eligible for the Eurosystem’s credit operations, as well as euro area-based counterparties used by the Eurosystem for the investment of its euro-denominated portfolios.

- **Primary and Secondary Market:** The Eurosystem central banks purchase eligible covered bonds both in the primary market and the secondary market. How the ECB intends to split the €60bn amount between these two markets has so far not been disclosed.

- **Type of Covered Bonds:** In general only covered bonds issued in accordance with the criteria set out in Article 22(4) of the UCITS Directive are eligible. However, structured covered bonds that a Eurosystem central bank at its sole discretion considers as offering safeguards similar to UCITS-compliant covered bonds can be included as well.

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

- are eligible for the monetary policy operations of the Eurosystem;
- are denominated in euro (and are held and settled in the euro area);
- are issued by credit institutions incorporated in the euro area or other entities incorporated in the euro area. Such other entities shall (i) only issue covered bonds, and (ii) the covered bonds shall be guaranteed in a manner satisfactory to the relevant national central bank by a credit institution incorporated in the euro area, or, alternatively, have safeguards of a similar nature that satisfy the requirements of the relevant national central bank
- are issued under covered bond legislation within the euro area. In the case of structured covered bonds, the law governing the documentation of the covered bonds shall be the law of a euro area member state. This has been interpreted by the market to exclude covered bonds out of the UK, Sweden, Denmark, Norway, Switzerland, Iceland, the US and Canada and there is also some uncertainty with regard to some euro area structured covered bonds issued under UK law.
- **Class of covered bonds:** In order to qualify, covered bonds must have “underlying assets that include exposure to private and/or public entities”. This means that both mortgage-backed
and public sector covered bonds do qualify. Bonds backed by a mixed asset pool such as CFF’s Obligations Foncières are eligible as well.

- **Minimum size:** Generally, the minimum size for covered bonds is an outstanding volume of €500m. However, central banks can decide to buy bonds with lower issue sizes (but not below €100m) if specific market circumstances or risk management considerations require such purchases.

- **Maturity range:** The ECB and the 16 NCBs will perhaps be concentrating on buying covered bonds with medium to long-term maturities of three to ten years.

- **Minimum rating:** As a rule, covered bonds must have at least one double-A rating by either Fitch, Moody’s, S&P or DBRS. The ECB phrasing “as a rule” leaves room for exceptions and will allow the Eurosystem to buy lower rated bonds if necessary. The covered bonds must retain a rating of at least triple-B (BBB-/Baa3) to remain eligible.

- **Allocation key:** The ECB will buy 8% (or €4.8bn) of covered bonds directly under the €60bn purchase programme. The national central banks of the Euro area will purchase the remaining €55.2bn of covered bonds. The share of each NCB in the programme will be primarily allocated according to the percentage of ECB capital stock held (though there might be other undisclosed factors affecting the individual share of each NCB). While the final allocation levels will probably not be made public, taking the share of paid up capital as an indicator, the top-5 winners in terms of allocated amounts are likely to be the Bundesbank, the Banque de France, the Bank of Italy, the Bank of Spain and De Nederlandsche Bank which together make up 58% of the ECB capital stock (see table below).

### ECB Capital Shares of National Central Banks and assumed allocation of the €60bn covered bond programme

<table>
<thead>
<tr>
<th>National Central Bank</th>
<th>Capital key %</th>
<th>Paid-up capital (€m)</th>
<th>Capital key % (only euro area)</th>
<th>Portion of the €60bn (€bn)</th>
<th>Portion of the €60bn (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECB</td>
<td>-</td>
<td>5,760.7</td>
<td>-</td>
<td>4.8</td>
<td>8.000%</td>
</tr>
<tr>
<td>Deutsche Bundesbank</td>
<td>18.937%</td>
<td>1,090.9</td>
<td>27.134%</td>
<td>15.0</td>
<td>24.963%</td>
</tr>
<tr>
<td>Banque de France</td>
<td>14.221%</td>
<td>819.2</td>
<td>20.377%</td>
<td>11.2</td>
<td>18.747%</td>
</tr>
<tr>
<td>Banca d’Italia</td>
<td>12.497%</td>
<td>719.9</td>
<td>17.906%</td>
<td>9.9</td>
<td>16.473%</td>
</tr>
<tr>
<td>Banco de España</td>
<td>8.304%</td>
<td>478.4</td>
<td>11.898%</td>
<td>6.6</td>
<td>10.946%</td>
</tr>
<tr>
<td>De Nederlandsche Bank</td>
<td>3.988%</td>
<td>229.7</td>
<td>5.714%</td>
<td>3.2</td>
<td>5.257%</td>
</tr>
<tr>
<td>Banque Nationale de Belgique</td>
<td>2.426%</td>
<td>139.7</td>
<td>3.475%</td>
<td>1.9</td>
<td>3.197%</td>
</tr>
<tr>
<td>Bank of Greece</td>
<td>1.965%</td>
<td>113.2</td>
<td>2.815%</td>
<td>1.6</td>
<td>2.590%</td>
</tr>
<tr>
<td>Oesterreichische Nationalbank</td>
<td>1.942%</td>
<td>111.9</td>
<td>2.782%</td>
<td>1.5</td>
<td>2.560%</td>
</tr>
<tr>
<td>Banco de Portugal</td>
<td>1.750%</td>
<td>100.8</td>
<td>2.508%</td>
<td>1.4</td>
<td>2.307%</td>
</tr>
<tr>
<td>Suomen Pankki - Finlands Bank</td>
<td>1.254%</td>
<td>72.2</td>
<td>1.797%</td>
<td>1.0</td>
<td>1.653%</td>
</tr>
<tr>
<td>Central Bank of Ireland</td>
<td>1.111%</td>
<td>64.0</td>
<td>1.591%</td>
<td>0.9</td>
<td>1.464%</td>
</tr>
<tr>
<td>Národná banka Slovenska</td>
<td>0.693%</td>
<td>39.9</td>
<td>0.994%</td>
<td>0.5</td>
<td>0.914%</td>
</tr>
<tr>
<td>Banka Slovenije</td>
<td>0.329%</td>
<td>18.9</td>
<td>0.471%</td>
<td>0.3</td>
<td>0.433%</td>
</tr>
</tbody>
</table>
ECB Capital Shares of National Central Banks and assumed allocation of the €60bn covered bond programme

<table>
<thead>
<tr>
<th>National Central Bank</th>
<th>Capital key %</th>
<th>Paid-up capital (Cm)</th>
<th>Capital key % (only euro area)</th>
<th>Portion of the €60bn (Cbn)</th>
<th>Portion of the €60bn (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banque centrale du Luxembourg</td>
<td>0.175%</td>
<td>10.1</td>
<td>0.250%</td>
<td>0.1</td>
<td>0.230%</td>
</tr>
<tr>
<td>Central Bank of Cyprus</td>
<td>0.137%</td>
<td>7.9</td>
<td>0.196%</td>
<td>0.1</td>
<td>0.180%</td>
</tr>
<tr>
<td>Central Bank of Malta</td>
<td>0.063%</td>
<td>3.6</td>
<td>0.091%</td>
<td>0.0</td>
<td>0.083%</td>
</tr>
<tr>
<td>Total euro area</td>
<td>69.792%</td>
<td>4,020.4</td>
<td>100.0%</td>
<td>60.0</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total non-euro area</td>
<td>30.209%</td>
<td>1,740.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: RBS

Based on the expected NCB allocation figures as a percentage of the respective secondary market, the Italian covered bonds will benefit the most as the €9.9bn would represent about 200% of the outstanding benchmark volume in the three to 10 year maturity area (see table below; we would, however, expect the Banca d’Italia to buy also new issues as well as non-domestic bonds). Finland (165%), Austria (31%), the Netherlands (24%) and Portugal (21%) have also high ratios. Germany and France are in the midfield with ratios of 17% and 12%, respectively. At the bottom end would be Ireland and Spain with 5% each.

Expected NCB allocation share relative to domestic covered bond market

<table>
<thead>
<tr>
<th>Country</th>
<th>Expected NCB portion (Cbn) of the €60bn</th>
<th>Total size of domestic benchmark CB market (Cbn)</th>
<th>Share of NCB allocation to total domestic market (%)</th>
<th>Only 3-10yr maturity Jumbo bracket (€bn)</th>
<th>Only 3-10yr maturity Jumbo bracket (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>1.5</td>
<td>8.00</td>
<td>19%</td>
<td>5.00</td>
<td>31%</td>
</tr>
<tr>
<td>France</td>
<td>11.2</td>
<td>159.50</td>
<td>7%</td>
<td>91.58</td>
<td>12%</td>
</tr>
<tr>
<td>Germany</td>
<td>15.0</td>
<td>240.84</td>
<td>6%</td>
<td>88.72</td>
<td>17%</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.9</td>
<td>27.68</td>
<td>3%</td>
<td>17.68</td>
<td>5%</td>
</tr>
<tr>
<td>Italy</td>
<td>9.9</td>
<td>11.00</td>
<td>90%</td>
<td>5.00</td>
<td>198%</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>0.1</td>
<td>2.25</td>
<td>6%</td>
<td>1.00</td>
<td>14%</td>
</tr>
<tr>
<td>NL</td>
<td>3.2</td>
<td>15.65</td>
<td>20%</td>
<td>12.90</td>
<td>24%</td>
</tr>
<tr>
<td>Portugal</td>
<td>1.4</td>
<td>12.15</td>
<td>11%</td>
<td>6.65</td>
<td>21%</td>
</tr>
<tr>
<td>Spain</td>
<td>6.6</td>
<td>248.52</td>
<td>3%</td>
<td>142.03</td>
<td>5%</td>
</tr>
<tr>
<td>Finland</td>
<td>1.0</td>
<td>4.60</td>
<td>22%</td>
<td>0.60</td>
<td>165%</td>
</tr>
</tbody>
</table>

Source: RBS (as of 1 July 2009)

These calculations assume that the allocation key is based on the capital share of each NCB and that the ECB will not use additional factors to determine the individual share of the national central banks. It also assumes that the NCBs will primarily buy domestic covered bonds and does not take into consideration the ECB share and the behaviour of those euro area central banks without a domestic covered bond market. In case of underdeveloped covered bond markets we would expect central banks to buy primarily non-domestic bonds.
• **Disclosures:** The ECB publishes daily on its website the settled total amounts of covered bonds it has purchased so far. Since the ECB will only report bonds that have been settled the figures are subject to a time lag of usually at least three days as bonds purchased in the secondary market have generally have a three-day settlement period while new issues have even longer settlement periods. Hence, the published figures slightly understate the real buying activity of the ECB – in particular its primary market purchase volumes. So far, the ECB does not disclose which bonds they bought, or at which price. However, the ECB reports on a monthly basis how much has been done in the secondary and how much in the primary market.

• **Open questions & outlook:** The ECB has addressed many of the open questions in regards to its covered bond purchase programme. However, several points have not been disclosed including the maximum share the Eurosystem can purchase in one single issue, the maximum participation limit in new deals, the exit strategy and whether the ECB will hold the bonds until maturity or will actively manage the portfolio. The several ECB statements and the first purchases have had already had a very positive market impact and it seems as if the ECB has already achieved most of its targets just by announcing its commitment to the covered bond market.

**Other central banks**

The ECB has not been the only central bank purchasing covered bonds to support the market. Between the beginning of April 2009 and mid-June 2009, the Swiss National Bank (SNB) bought CHF 2.5bn of Swiss franc Pfandbriefe of private domestic borrowers (and CHF 300m of domestic corporate bonds), in both the primary and the secondary market. The SNB stated that it was happy with the success of its purchase programme (“risk premia have come down significantly” and “several issuers found their way back to the issues market for the first time in a long time”). The Swiss central bank said that it intends to continue buying bonds on a selective basis and that it has not decided on any purchase limit and would like to remain flexible.

Given the strong success of the buying initiatives from the SNB and the ECB, it is conceivable that other non-euro area central banks with a strong domestic covered bond market such as the Bank of England or the Danish and Swedish central banks might consider similar purchase programmes to avoid an undue disadvantages for their domestic covered bond markets, although no indication of such has been given at this stage.

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SECONDARY MARKET TRADING

The financial markets crisis has turned the covered bond market on its head. At the beginning of the crisis, covered bonds were a stand-out market segment that – apart from a handful of exceptions – just refused to be cowed by negative sentiment and stood as firm as „rocks in the crashing surf”. In summer 2009 however, when this factbook went to press, we have to state that, as far as secondary market liquidity is concerned, covered bonds as an asset class have (so far) benefited less from the marked recovery of the last months than one could have hoped. On the positive side, the European Central Bank’s (ECB) announcement to launch a EUR 60 billion programme of covered bond purchases has boosted primary-market activity and supported a substantial re-tightening of swap spreads since early May 2009. At the same time, however, secondary trading remained relatively sluggish, based on fairly thin volumes and wide bid-offer spreads. Liquidity, any healthily functioning market segment’s most precious asset, therefore still seems in short supply. While the ECBC was quick in recognizing and addressing such shortcomings during the crisis, as already discussed in the 2008 edition of this Fact Book, the respective initiatives taken were of little avail so far. This has not only been due to the accelerating speed of the crisis, but also to a fundamental shift of the market’s ways of functioning.

Spread determinants in a changed market environment

The factors influencing the spread landscape at the time of writing have changed remarkably compared with the pre-crisis era, and the market is still miles away from equilibrium prices that respond solely to supply and demand. The most important reason for this is the fact that the observed spread movements – both the surge of swap spreads at the beginning of the crisis and the recent spread compression – have largely taken place without major investor involvement and therefore also in the absence of the (high) liquidity normally associated with this market segment.

That said, however: is it right to regard higher liquidity as an unqualified positive development? Or could it – in a crunch – slow or even reverse the swap spread-tightening trend? The current state of the market is comparable with the situation that prevailed soon after the collapse of Lehman – only the prefixes are the other way around. Just before the end of 2008, spreads were shooting higher largely without any involvement from investors; at this time dealers were quoting deterrent prices since they did not want to – and/or were under orders not to - take any new paper onto their books. Any negative newsflow increased the selling pressure and drove spreads even wider - the market was trapped in a vicious cycle. At present, in contrast, the covered bonds segment is caught in a virtuous cycle: Investors as well as traders do not want to sell because they expect spreads to tighten further, dealers are no longer making their banks’ balance sheets available as a source of liquidity, and finally spreads are reducing because the market is getting „squeezed” – most existing buy orders cannot be fulfilled, and isolated trades have the capability to trigger substantial spread movements. Swap spreads are reducing in this context precisely because liquidity is low.

Another important factor shaping swap spreads is the assignment of covered bonds to specific segments of the wider bond market. For a long time – especially during the days when swap spreads were tightening on an almost daily basis – covered bonds were subsumed under the heading of Bund surrogates. This
particular customer-side compartmentalization has been increasingly abandoned. One reason – again – is the lack of liquidity. Before the crisis, covered bonds were typically seen as highly liquid products and were nearly always adorned with a best-of-breed rating from the three big agencies. When liquidity dried up, covered bonds suddenly fell between two stools; although they were no longer regarded exclusively as rates products, investors were not ready (yet) to push them into the credit corner. In the meantime, however, the secure triple-A status of covered bonds has been increasingly challenged by all rating agencies applying an ever tighter linkage between their covered bond assessments and issuer ratings. While at the time of writing, the outcome of S&P’s hotly debated methodology adjustment has not been published yet, it seems realistic to expect a large percentage of covered bond ratings to be negatively affected rather sooner than later. Hence, the former ‘always-AAA’ world is history, and covered bonds are much more likely to become firmly established as credit products than to regain a rates product standing ever again.

We have to state at this point, however, that this change will probably leave the market in a healthier state. Some investors have already tentatively sub-divided covered bonds’ top-grade ratings, experimenting in some cases with AAA+ or AAA- categories (therewith differentiating between “better” and “weaker” AAA). The agency actions are likely to put a stop to this trend by producing more differentiated ratings. While this could once again increase spread differentiation, it should bolster ratings’ credibility and thus help market transparency.

That said, investors’ in-house evaluation of different products is already an increasingly important factor in the market in any case – including with regard to the swap spreads that are demanded or considered fair. Analysing and ultimately valuing credit products takes a lot more investor time than just relying on the rating agencies’ judgments to guide investment decisions though – with the result that mentally re-labelling covered bonds as credit products will probably leave swap spreads generally wider than before the crisis.

Investors are already focusing most of their attention at the moment on the issuing bank’s rating and the strength of the underlying national covered bond regime. Analysis of the cover pools, the real heart of any covered bond issue, is increasingly seen as a secondary issue. This is why current swap spreads are so closely aligned with the levels of senior unsecured bank bonds, adjusted by a discount for the safety mechanisms built into covered bonds.

We have to state in conclusion that it is barely possible at the moment to provide a purely economic explanation for why swap spreads are where they are. Although we can roughly measure several of the factors referred to and their weighting in the relevant swap spreads (including the trend of the real estate markets), the applicable weighting nearly always varies from covered bond to covered bond. As a result, the process of spread determination in the secondary market is equally skewed.

**From ‘big is beautiful’ to ‘lean and mean’**

In addition to clients adjusting their investing policy as a result of the crisis, the rule book by which market markers are playing has changed as well. In many cases, investment banks’ trading desks had to undergo rather painful changes, putting their old volume-based business model to rest. Keep in mind that in the ‘old world’, covered bond trading was mainly a support function of the bank’s primary business, including the new issue-related swap business. Hence, its main service was to provide liquidity for an issuer’s bonds in the market and thereby support the latter’s placement targets. Based on their variety
of market making requirements, major houses had a fairly large trading headcount and many desks were running substantial books. With bid-offer spreads regulated at relatively tight levels by the market making agreements, and turnover with investors often occurring at even tighter margins, however, a trader’s direct P&L was mainly influenced by his outright positions on the market direction.

The financial crisis has caused this volume approach to turn into a margin approach. Instead of ‘big is beautiful’, ‘lean and mean’ has become the more promising model. The major reasons for this paradigm shift are fairly self-explanatory:

First, soaring market volatility caused asset portfolios’ VARs to go through the roof, thereby requiring a downscaling of risky positions. With the covered bond segment having posted marked valuation losses despite its alleged high-grade status, internal credit departments became increasingly restrictive, meaning traders had to significantly cut down on their books and thus on their function as liquidity providers.

Second, once losses started eating into banks’ capital cushions at alarming rates, balance sheet access became an increasingly valuable and costly asset. After the reduction phase in 2008, banks seem to try and keep their risk-weighted asset base at a comfortably low level to bolster their capital ratios and thereby strengthen their credit standing. Naturally, this implies lower covered bond limits as well.

Third, as a result of lower issuance volumes, it had become far more difficult to generate sufficient revenues in the primary market business to compensate for the higher price risks in secondary trading. Hence, fees had to increase.

Against this background, it came at no surprise to see the old Jumbo market making rules finally being abandoned last year. With interbank quotation only taking place on a voluntary basis, trading desks could be rescaled more efficiently and refocused more strongly on trading through investor turnovers. With less warehousing done by investment banks, bid-offer spreads became determined more directly by the real demand/supply situation. While this meant that turnovers have shrunk and became more difficult to generate, they now offer significantly higher margins, determining the bank’s P&L.

As quotes have become increasingly dependent on the trader’s holdings as well as on investor and order quality, price homogeneity and transparency has suffered accordingly. Even after the spread recovery posted in Q2-2009, published prices frequently continue to provide relatively poor indications of “true” market levels, at which turnover of significant size could be expected to take place. This is also evident in the development of market barometers such as the iBoxx covered bond index family, swap spreads of which often display the typical pattern of low liquidity instruments, i.e. they are characterized by longer-term sideways trading interrupted by large spread swings.

One might have hoped for the ECB purchase programme, which was kicked off on 6 July, to increase price transparency and encourage traders to quote more aggressively to investors again, given that they could pass on unwanted amounts to the central banks. Given that the latter’s purchases in the secondary market were fairly substantial during the programme’s first month of existence, accounting for almost two thirds of total July buying, however, any hope for a resulting revival of secondary liquidity would have been misplaced. As a result, market participants would not be well advised to blindly trust solely in the ECB’s purchases to redirect the market into calmer and clearer waters again. In contrast, it remains an important task for the community to actively try and reposition the covered bond market with investors.
Given that investment banks’ profitability can directly benefit from a market’s intransparency, however, achieving such progress in a collective manner remains a challenge the ECBC continues to pursue.

**Electronic trading – a solution for enhancing liquidity?**

So, what of the future for market making? When this handbook went to press several initiatives were underway. Collectively these showed both the market’s willingness to embrace creative new solutions and an appetite to reinvigorate what should be a highly liquid and therefore lucrative trading environment. And this in spite of the new realities of risk aversion, volatility, and cost of holding securities on bank trading books.

Covered bonds are currently traded on many trading systems, as well as by phone. Some of these platforms are better suited to the new market realities than others. And they all have different trading protocols, participants and even definitions of what a covered bond is. It is our view that a single new platform for trading will not emerge, and would anyway not be in the best interests of the market, diversity aids flexibility. However looking at some of the initiatives currently underway gives a good idea of possible outcomes and competing views on what liquidity means.

The existing platforms, proposals and initiatives in progress differ in certain key interpretations:

- are they open to the market making community only or also to end investors? Originally the focus of the press and the scope of the market making commitments was limited to the inter-dealer market. However some feel that as banks have increasingly come under pressure to reduce their use of balance sheets, true liquidity in future will come from end investors.

- how much transparency? Active market makers have to some extent a commercial incentive to minimise transparency, particularly if they have just taken on the sort of large position that investors frequently require. On the other hand, issuers, investors and other market makers all want more, rather than less, price transparency - unless of course it negatively impacts the capacity of their market makers. And the transparency itself can take two forms, post-deal transparency, the reporting (with a suitable time delay) of levels at which bonds are actually traded, known to be preferred by the European Commission and similar to the TRACE system in the US markets. Or pre-deal price transparency, that is the ability to see on a screen firm, executable prices. And, on a related topic...

- what commitment to make markets? Formerly there was an understanding that a defined group of traders would make markets in a bond by way of a service to the issuers, partly as a quid pro quo for the fees that they were initially paid to underwrite the bonds (or in the domestic Swedish market as an explicit on-going market making fee). To the dismay of the issuers this understanding did not survive the market disruption, but the question of what will replace it has not yet been fully addressed. Should a trading system provide issuers with statistics on the performance of their market makers? Or would this discourage best-efforts market making?

Eurex bonds daily auction of liquid covered bonds has attracted perhaps the most attention in the specialist press. Their rational was to focus what liquidity there is in the market into a short time period - just two minutes each day for each group of bonds - and into a limited number of bonds, (initially 55) but increasing as the new functionality is better integrated into bank front end trading systems). This focus creates a transparent, liquid market in which bonds can be traded at a fair clearing level. The fact that it only applies to some bonds is an obvious limitation, it effectively introduces the concept of on-
the-run’ and ‘off-the-run’ covered bonds which is anathema to many issuers (who want their bonds to be defined as ‘liquid’) and market participants, in particular those who believe that all jumbo covered bonds should have similarly high levels of liquidity (as was once promised to investors). However it is expected that bonds not included in the auction should benefit at least in terms of price transparency by being benchmarked to their closest peers.

Bloomberg have approached the problem differently. Recognizing that, when the old market making system failed, traders needs were best met by ‘phone based trading, they introduced a replication of this with a Request For Quotes (RFQ) system (which runs parallel to their existing trading functions, such as firm anonymous orders and voice trade capture). In this rather than market makers phoning one another, they send each other electronic messages requesting bids and/or offers on specific bonds. Although there are marginal efficiency benefits in such a system the true benefit will be that the prices at which the transactions are executed can be captured and disclosed to the market in a way that is impossible with phone based trading.

MarketAxess have pointed out that a lot of the market’s true liquidity now comes from investors, rather than investment banks. They are looking into enhancing their system with functionality that allows investors to show an indication of interest to the entire market, both market makers and other investors. They do however propose that only market makers can trade with the investor showing an interest, requiring the respondent to channel their order through a market maker, who effectively takes on a brokerage role.

The ECBC, acting through the Market Issues Working Group, will continue to work with systems providers, brokers and other interested parties to help invigorate secondary market liquidity for covered bonds. For sure there is no one size that fits all and it is unlikely that the previous high levels of liquidity can be restored in the near future. The world has changed, price volatility, risk aversion and expensive balance sheets are here to stay. At the time of going to press the outcome of the ECB’s covered bond buying programme is unclear, but trading platforms will have to respond to its challenges.

Given the creativity and flexibility demonstrated by market participants so far, we fully anticipate further new initiatives and consequently a gradual improvement in levels of liquidity, price transparency and investor confidence.
1.5 TRANSPARENCY – THE KEY TO A SUSTAINABLE RECOVERY OF THE COVERED BOND MARKET?
By Michaela Seimen, UBS Investment Bank,
Michelle Bradley, Morgan Stanley and Horst Bertram, Bayerische Landesbank

THE COVERED BOND MARKET LACKS LIQUIDITY – WHY TRANSPARENCY MATTERS

During the current financial crisis, liquidity in capital markets has dried up and all bank funding sources have been gradually affected, as confidence in banks as debtors has eroded and investor risk aversion has increased. In line with this, investors have shifted their focus to short-term instruments. As a consequence of these developments, covered bonds have been affected by the crisis.

The turmoil in financial markets began as a so-called liquidity crisis. However, transparency and liquidity are closely related. Therefore, transparency seems to be “the topic of the day”, as we realise that the lack of market transparency and the lack of information provided by market participants are also part of the reason for some of today’s problems in capital markets. It is not just that we face a lack of transparency in the covered bond market; financial markets in general are affected, albeit to different degrees and with different impacts.

Many participants are talking about and demanding greater transparency; however, few ask whether just having more transparency would actually work. It is time to address some fundamental questions in this context:

- What do we really mean by our search for more transparency?
- How does the covered bond market actually lack transparency?
- Who has to be involved to provide which kind of information to make markets and information more transparent?
- And what – and how much – do we need to know to have a satisfactory degree of transparency?

In this article, we concentrate on how transparency – or rather the lack of it – affects the covered bond market, and highlight the issues that different market participants face in this respect.

A DEFINITION OF TRANSPARENCY

The term “transparency” derives from mediaeval Latin transparentis and means, in this context:

- Making information open, public
- Being obvious; readily apparent; easy to see or understand

As always, different recipients have different interests, requirements and abilities to assess information: some might need more information, others less, or others different information altogether, in order to come to the same conclusion. However, transparency is amorphous. It can be anything but transparent - meaning “easy to understand” - and, if implemented without guidance and thought, could harm the very interests it is intended to serve.

In financial markets, the word “transparency” is equivalent to the demand for information disclosure. However, even if disclosed, information could often be incomplete, irrelevant or outright incomprehensible.

As we have seen in the case of sub-prime mortgage-backed securities, extensive documentation with prospectuses containing sometimes several hundred pages of intricate “legalese” astonishingly often failed to contain the information about individual loans that is needed to detect default risk. However, in
the same context we have also seen investors ignoring information, or others not being able to reason appropriately on the basis of the information given.

It needs to be noted that transparency does not come for free. Providing information to market participants incurs administrative costs, as well as costs in regard to compliance. Costs arise for all market participants: issuers, intermediaries and investors.

Nevertheless, transparency can be beneficial for all market participants, if information is

- Relevant
- Standardised
- Publicly available
- Easy to understand

It might be necessary to simplify transparency by streamlining information requirements, especially in regard to complex financial products. However, it must be ensured that the information provided, especially if it is simplified, is accurate. An example of this arose with regard to structured finance ratings. AAA ratings can do more harm than good when a rating is applied to a product which incorporates a higher probability of default (PD) than would be inherent in another AAA-rated product.

Given the costs involved, it might be also fair to ask who is actually responsible for making sure that full transparency is provided:

- The issuer – by providing all information possible?
- The intermediary – by processing the information in a timely, correct and user-friendly way?
- Or the investor – by asking the relevant and important questions?

TRANSPARENCY VIEWED FROM DIFFERENT PERSPECTIVES

The investor perspective

More transparency does not mean markets would be risk-free. However, transparency is important to make risk more calculable and to give investors a chance to find for themselves a justifiable and risk-adjusted fair price. This will help to improve liquidity, as every risk has a price, and different investors have different preferences, risk management abilities and price assumptions.

This leads to the question how much information do investors need to find the right price for their risk acceptance, and to fully understand the risk of a product? Another question is how much information an investor is able to actually use for a meaningful risk assessment. Furthermore, does the investor have the time and the technical and analytical resources to handle that information?

In the fast-moving environment of capital markets, time is a decisive factor and offers opportunities for investors. However, decisions often have to be made on an ad hoc basis, which can come at the cost of lacking a fully transparent risk profile of the investment in question. Time and resources are expensive, so instruments are needed which help to simplify this process.

RATINGS HAVE BEEN USED AS REPLACEMENT FOR INTERNAL RISK ASSESSMENTS

Ratings seemed to be the easiest instrument for investors to assess the risk of certain capital instruments. However, as seen in recent months, even with a triple-A rating, some credit risk remains. As a consequence,
investors have to remain responsible for their investment decision. They need to be in control, rather than simply rely on certain ratings.

One problem with covered bonds in this respect is that investors believed the covered bond market is a single market offering a homogenous product. The conformity and majority of AAA-ratings for covered bonds suggested as much. However, we have been disabused of this in recent months. Since earlier this year, rating agencies started publishing adjustments to their respective rating methodologies, so as to be able to better mirror differences in the arrangements of single covered bonds from different jurisdictions, and the respective probability of issuer default.

**A FAST GROWING MARKET AT THE COST OF HOMOGENEITY**

The covered bond market has experienced rapid growth in recent years. Germany has been the main provider of covered bonds in the past. However, limited supply from Germany for a few years has been accompanied by greater supply from other countries. In past years, newcomers to the covered bond market were always welcome, as there was a systemic supply shortage and an enlarged market helped to consolidate itself. Past experience was that whenever a new country joined the market, this brought greater depth to the market. However, now we have to live with the consequences of fast and diversified growth, and the lack of conformity that came with that growth.

For many years, German Pfandbriefe represented a standard in the covered bond market, and the German Mortgage Bank Act of 1900 provided the market's original regulatory framework. Over time, this framework has been adopted and enhanced by new countries issuing covered bonds, most notably Ireland and Luxembourg. However, any slight difference in the regulation and variations makes a clear distinction between the respective bonds necessary and confuses investors, as a simple portfolio assessment is nearly impossible.

**INVESTOR ASSUMPTIONS WERE BASED ON FEATURES OF INITIAL COVERED BOND PROGRAMMES**

While first-time investors usually tend to stay within their own jurisdiction, the more sophisticated they become and think they understand the underlying product, the more they will tend to diversify their portfolio with products from other issuers with different features. In this way, covered bond investment portfolios gradually became more and more international and complex.

Transparency is an obvious prerequisite when a market undergoes expansion. However, investors also need to use this transparency to differentiate risk. Fast development and short supply might have been one of the main reasons why investors ignored the details and relied simply on the overall bond type and rating classification.

**Decisive information for investors**

It is valuable to ask what information covered bond investors need for intelligent decision-making. They need to assess both components of a covered bond – the issuer risk and the cover pool risk. Furthermore, investors need all relevant information in regard to a default scenario, to better understand how they are protected.

A minimum of standardised and readily available and easy to understand information in regard to covered bond issuers should these days be available in most cases, simply through the respective bank’s webpage and annual reports.
legislation is being proposed in the US is testament to the suitability of covered bonds to the new market environment.

**The issuer perspective**

**Competition amongst issuers will help to push transparency**

Transparency is also an important topic for covered bond issuers. High competition in the covered bond market from an issuer perspective makes it necessary to highlight their respective competitive advantage to the investor community and all other market participants. Because a vast majority of investors regard covered bonds as a very safe and relatively liquid asset class, it is important for issuers to prove their own and their bonds’ credibility in this context. Furthermore, each issuer’s efforts in this respect will also contribute to the overall functionality of the respective national covered bond framework. A good level of information disclosure will support the confidence and trust of investors and help them to better understand any risks inherent to the issuer and the cover pool.

The demand for transparency has increased dramatically since the outbreak of the financial market crisis. Especially larger investors who maintain their own research departments demand an intense insight into business model, collateral pool, funding strategy and the liquidity situation – inside and outside the collateral pool. To continuously attract interest from the market, issuers should clearly cooperate with the investors to offer a satisfactory level of required information. Due to strong competition in the market, issuers may relatively easily differentiate themselves by providing state of the art and better and more information than their respective peers.

Issuers of law-based covered bonds have the impression that their instruments benefit from a greater trust in their information provided, due to mandatory oversight by the respective financial regulator. For example, German Pfandbrief issuers have to provide a quarterly report – the so called §28-transparency report – in a publicly accessible form, which includes information about total volume of outstanding Pfandbriefe and respective information on the corresponding cover pools (e.g. nominal, net present value and risk-adjusted net present value, the maturity structure, the share of derivatives etc.). As this information mirrors the information which has to be provided to the regulators, these publicly available reports could be seen as a reliable source of information.

**Associations help to provide data in a conform format**

Due to the long tradition of the German Pfandbrief market and its conformity, issuers were able to organise themselves in the form of the Association of German Pfandbrief Banks (VDP) to uniformly represent their interests with legislators, supervisory authorities, rating agencies and other market participants. Via the association, German Pfandbrief issuers are also able to bring more transparency to their asset class. German Pfandbrief issuers have, for example, agreed to provide the §28 data via the website of the Association of German Pfandbrief Banks and in a format which will allow investors and other market participants to make comparative research and studies easier. This service should be available from autumn 2009.

In 2004, the European Covered Bond Council was founded as a platform for all covered bond market participants with the purpose of representing and promoting their interests. As mentioned above, a comparative questionnaire has been published on the association’s webpage to describe the key features of different covered bond frameworks, helping to increase transparency in this respect.
Background information in regard to legal frameworks is often also available online; however, this is only rarely available in a standardised and comparable format. Recently, the European Covered Bond Council (ECBC) published a new tool on its webpage to help out in this respect. The ECBC Technical Issues Comparative Framework Questionnaire (www.ecbc.eu) breaks down and describes the key features in different covered bond frameworks in an identical format and offers a direct comparison of different frameworks.

Cover pool information is the most difficult information to gather in some cases. Many covered bond issuers provide only limited information on their websites, and some issuers do not provide any easily accessible information at all. Furthermore, this information is only standardised in so far as it meets minimum legal requirements. Overall, the information is rarely directly comparable across issuers and countries. In recent months, the rating agencies have introduced new features to assist this information requirement. Cover pool information on rated covered bonds should soon be more or less widely available on the rating agencies’ websites. This is a very welcome development, as this kind of information is difficult to evaluate by individual investors, since it involves reviewing huge databases. Rating agencies have access to cover pool information on a quarterly basis, and their rating methodologies include stress-tests based on this information.

**INTERMEDIARIES’ PERSPECTIVE**

**Iliquidity on secondary markets**

Covered bonds have suffered on two fronts during this crisis. On the one hand, the market was unsure of the creditworthiness of different European banks and on the other hand concerns of the value of the collateral in the cover pools arose. In this environment, the primary markets closed and there was very limited liquidity in the secondary market. But this was not only the fate of the covered bond market. Also secondary-market liquidity in government bonds was extremely limited, and indeed, there were days in the depths of the crisis when the European swap market was also in turmoil.

A major cause of illiquidity is asymmetric information. In financial markets, there are sophisticated and unsophisticated investors; unless they have symmetrical information, liquidity can dry up. This shows that not only the amount of information matters, but also symmetry and consistency. However, besides this, other factors are obviously decisive for trading and investment decisions apart from transparency issues and symmetrical information.

Before the crisis, it was regarded as one of the keys to transparency to have strong commitment from dealers to make prices and give liquidity to issues and issuers. This was achieved by issuers and dealers committing to a liquidity agreement, whereby dealers agree to become market-makers and adhere to specific criteria, such as quoting a set number of bonds for a given number of hours each day. Dealers disclosed their activity to issuers and in return, issuers committed to certain standards in terms of issuance size and transparency. Nevertheless, the transparency was either not sufficient or was not used appropriately, as market-making stopped when concerns about issuers arose. Consequently, covered bond investors had no systemic “safety net” for pricing of covered bonds after market making commitments came to a halt.

Several initiatives have been taken to get the covered bond market moving. One of the groups involved in these efforts is The Financial Markets Association (ACI) and the European Covered Bond Dealers Association. Currently, a new electronic system is being tested by this group and on the verge of
being introduced to the market. The hope is that this new trading approach will help restore liquidity, transparency and confidence in covered bonds. However, by just introducing a new electronic trading system, problems of the market cannot be solved. A combination of factors is necessary.

Nevertheless, by offering a platform to concentrate liquidity, market participants will have an alternative to permanent market-making. This will bring some transparency to prices, which could help to improve liquidity also outside the usage of the platform.

But an exchange-traded product is just one level of transparency. Another way to think about perfect transparency is perfect information. But is perfect information between buyers and sellers a realistic endgame for financial markets? A market of perfect information immediately implies fewer and simpler products. It is likely the market takes some steps towards reducing complexity, as a move towards full information seems unlikely and perhaps also unnecessary.

**What is the cost of liquidity?**

Transparency in markets is not without a cost. If the goal is to have a fully transparent and open market, then the cost of that is most likely going to be less potential upside. This is very clear when we compare products that are exchange traded and those that are not. An obvious example is the futures market for government bonds. Prices are quoted on screen, and buyers and sellers are aware of the trading volumes. But there are only a certain number of markets that can function in this way. The first characteristic of transparent markets is that, quite simply, they are large, in terms of volume and in terms of number of investors.

Only markets that are large enough will have sufficient economies of scale to make it worthwhile for participants to invest in the technology needed to allow the market to function. The market also has to be large enough to allow the participant to make money. If the bid offers are small, this needs to be counterbalanced with the ability to make money through processing large volumes.

**Regulation and implications on mortgage business**

The banking sector is still in a fragile state, and it is unlikely that draconian new regulation will be introduced immediately. However, the trend is clear and we have already seen some action from regulators.

As liquidity was one of the triggers of the credit crisis, it is not surprising that regulators are starting there. The FSA and the Committee of European Banking Supervisors (CEBS) have both produced proposals that involve banks holding liquid assets on their balance sheets to create a liquidity buffer. In a stressed market environment, this should give counterparties more confidence in trading with each other.

The mortgage market is also likely to come under further scrutiny. While the future of securitisation has yet to be decided, it is clear that there will be changes to that product. The model of “originate to distribute” has also come in for plenty of criticism. This model has blurred the relationship between the mortgage originator and where the mortgage is fund. In doing so, it has created additional levels of complexity between the mortgage originator and the investor.

Covered bonds will play an important role in the evolution of the mortgage market, in our view. As a funding tool, covered bonds already provide many of the features that regulators are looking for: in covered bonds, assets remain on the balance sheets of banks, covered bonds have a straightforward structure and one of their key features is the clarity on the eligible assets. The fact that covered bond
Issuers rely on rating agencies to adjust information to market standards

Issuers face the challenge that information about their covered bond programmes and respective collateral pools contain usually a vast amount of detailed and complex information. This information is usually too voluminous and complex for investors, who mostly have limited resources to carry out all necessary analysis on the different covered bonds they have invested in, or wish to invest in. Therefore it seems inevitable for issuers to try to harmonise the information they respectively provide – at least on a national basis – to help attracting investor’s money.

As mentioned above, rating agencies could help to provide a helpful link between issuers and investors, by providing formatted data on the covered bond programmes and cover pools. Insofar as covered bonds are rated, issuers have to provide the rating agencies on a regular basis with extensive and detailed information on the programmes. The agencies use the data to check the quality of the cover pools and to make sure that none of the rating triggers are breached. However, investors will find that the rating agencies sometimes do not disclose this information provided to them by the issuers. Reasons for a non-disclosure of those data by the rating agencies are manifold. In some cases, the issuer might not agree to disclosure; in other cases information on certain covered bond programmes has so far only been prepared for internal usage by the rating agencies. However, we understand that the rating agencies intend to improve and extend this service, which should be in the interests of issuers and investors alike.

Uniformly formatted data will contribute to more transparency in the covered bond asset class and will enable investors to more easily compare single covered bond issuances across jurisdictions.

CONCLUSION

The events of the past two years will force financial markets to change and, as a consequence, markets will undoubtedly become more regulated. Making the markets more transparent will be an important part of this evolution. Transparency is not the Holy Grail, but it is rather the interaction of transparency and other elements of the market to get back to normalised functionality and liquidity within single asset classes.

As mentioned above, trust in ratings as a measure of risk has diminished, and even covered bonds with a triple-A rating are viewed as credit products and no longer as a substitute for government paper. Therefore, investors need more regular and standardised updates on cover pool developments and the business strategies of covered bond issuers. Equally, issuers are therefore required to further improve their information policies, despite the improvements there have partially been already. Quarterly updates, standardised and easy accessible data supply via the internet and regular investor meetings are now essential to bring confidence back into the market. However, investors also need to use the available information appropriately.

It remains a question of how much transparency the market is willing to pay for.
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1. GGBB MARKET EVOLUTION AND INFLUENCING FACTORS

1.1. Market creation and evolution

Just as the financial market crisis has hit the markets quickly and intensely, the emergence of the government guaranteed bank bonds (GGBB) market that came as a direct reaction to it has been equally dramatic. Reacting to bank runs and equity market driven bank failures, the idea to guarantee certain bank debt in an effort to counter bank’s liquidity risk, quickly spread from government to government, from country to country worldwide. Besides recapitalisation measures and the protection of toxic or non-strategic assets, the guarantees became one of the major building blocks of the various bank rescue measures implemented since. Just a few weeks after the Irish government introduced its version on September 30th 2008, guarantee schemes existed in countries ranging from New Zealand or Australia, to almost all of Europe, Canada and the US.

GGBBs are bonds usually issued by banks that are guaranteed by a central government, a federal state (NordLB GMTN, HSH AöR) or as in the case of Dexia by three governments. The exception is the Société Financement de l’Economie Francaise (SFEF) from France which is set up more like an agency with the French state directly owning 34% which issues on behalf of all French banks and passes the proceeds on to them. The underlying credit risk of GGBBs is therefore that of the guarantor and not primarily of the issuing bank even though it has some impact on the pricing of the bonds. In return, the issuing banks pay a fee for the guarantee. Many of the guarantee schemes differ in detail but there has evolved some sort of standard for the market. With the exception of Ireland and Denmark, governments unconditionally and irrevocably guarantee new bond issues that fulfil certain criteria regarding the timing of issuance and the maturity of the bond (in Ireland and Denmark the guarantee also includes outstanding debt):

- Bonds included: As a rule, this includes senior bonds (covered bonds are only included in Finland, Ireland and Sweden, the Irish scheme even includes LT2 bonds)
- Bond terms: Initially starting with maturities of up to 3 years, maturities can now range from 1 year out to 5 years as a rule.
- Issuance windows: Issuance windows are usually open until year end 2009 (Denmark is the exception here, as the issuance window does not close before end 2010).
- Fees: 50bp + the average 5Y CDS of the issuer between 01.01.2007 until 31.08.2008
This time-factor also distinguishes the GGBB market from i.e. the covered bond market. Its sole purpose was and is to help banks get through the current crisis from a liquidity perspective. As soon as the crisis is over, the government aid is supposed to run out and banks shall be released to stand on their own two feet again. After no quick recovery emerged at the beginning of this year, guarantee schemes that were initially open for issuance until April 2009 such as the UK guarantee scheme have been extended to year end 2009. As already mentioned, maximum maturities have also been extended from 3 to 5 years in a number of countries including for example Germany. But even today with unguaranteed issuance been at the forefront of people’s thinking and the situation on the capital markets being much calmer than just a few months ago, things are still in motion regarding maximum maturities and issuance windows. The low issuance volumes recently should not disguise the fact, that the existence of the GGBB market is still significant, if only as a double insurance that calms down investor fears.

### 1.1.2. GGBB Market

The option to issue GGBBs was quickly embraced by issuers from around the world in a market in which investors kept a lid on jumbo issuance and even government bonds from peripheral countries widened significantly. After the first GGBB issue from Barclays on October 20th 2008, by year end, the worldwide GGBB market had reached a stunning €167bn and issuers from 9 countries, the EUR benchmark GGBB market stood at an impressive €50bn coming from 7 different countries. By mid July 2009, the global GGBB market had grown to over €650bn, the EUR benchmark market to just over €217bn.
**Figure 2:** EUR Benchmark GGBBs issuance volumes per country and ASW spread.

Sources: Bloomberg, LBBW Credit Research
At the same time, spreads didn’t react negatively to the issuance frenzy that was going on, demand for GGBBs seemed inexhaustible. The drastic widening of sovereign CDS by late February also had a much less pronounced negative impact on GGBBs. One of the reasons for this certainly was the high demand by bank investors that was due to the 0% risk weight attached to the GGBBs. In times of scarce capital, many bank treasuries bought GGBBs and funded them through repo transactions with their respective central banks to lock in an almost risk-free profit.

Just as quickly as GGBB issuance started last year however, it has calmed down after the announcement of the ECB to buy up to €60bn in covered bonds at the beginning of May. Since then, access to unguaranteed funds has improved significantly for issuers and covered bond issuance has surged with over €16bn jumbo supply in May alone and another €13bn in June. On the other hand, there has been no EUR GGBB benchmark issued between mid May and the beginning of June. This lack of supply has driven GGBB spreads even tighter both vs. swap as well as vs. the local government bonds.

1.2. Influencing factors

As can be seen from the previous spread chart, spreads in the GGBB market are quite heterogeneous ranging from well below swap in the case of French SFEF up to 150bp in the case of some Irish GGBBs. The GGBBs market mirrors the government bond market in this respect which has also become extremely heterogeneous since the start of the crisis. Since the individual governments guarantee GGBBs, the sovereign risk is the most relevant factor when it comes to GGBB spreads. One can generally divide the factors into market components such as the country risk, issuance forecasts or spreads over the respective local government bonds. Another important aspect is the way the guarantee is actually set up. There are slight differences in the various countries ranging from who has to make a claim and when, are there grace periods or not, etc.. This is also where the quality of the issuer plays a role in pricing GGBBs. The probability that investors have to act after an issuer default is naturally higher with weaker issuers. This also leads to the need for a tighter monitoring and therefore somewhat higher spreads. A last block includes two further points – risk weights (RW) and repo-eligibility. With the exception of US GGBBs, all other products feature a 0% RW by their national supervisory authorities. To our knowledge, authorities from one country accept the 0% RW decision by other local authorities for GGBBs. Looking at the ECB eligible assets data base for its repo operations, with the exception of French SFEF which is in liquidity category 3, GGBBs are classified as category 4 bonds at one level with unguaranteed senior bonds completely ignoring the explicit guarantee by the various governments.
**> Figure 3: LBBW GGBB Scorecard.**

<table>
<thead>
<tr>
<th>Country</th>
<th>Country risk</th>
<th>Spread € GGBBs over local € Govies</th>
<th>Expected total € benchmark issue volume 2009 in relation to GDP</th>
<th>Participa- tion of the domestic investor base</th>
<th>Issu- ance structure</th>
<th>Reinvest- ment risk</th>
<th>Making a claim</th>
<th>Grace periods</th>
<th>Claim becomes invalid after a certain time period</th>
<th>Risk weight</th>
<th>Repo- eligi- bility ECB</th>
<th>Number of + vs. -</th>
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</tbody>
</table>

Country risk (+: 5Y country CDS <50bp, 0: 50-100Bp, -: >100Bp)
Spread over local govie (+: gov spread >70Bp, 0: 40-70Bp, -: <40Bp)
Expected total € benchmark issue volume 2009 in relation to GDP (< >4%, 0: 3-4%, +: <3%)
Participation of the domestic investor base (< 15%, 0: 15-30%, +: >30%)
Risk weight (<: 20%, +: 0%)
Repo-eligibility ECB (0: category 4, +: category 3)

Source: LBBW Credit Research

**2. GGBBS vs. Covered Bonds**

**2.1. General comments**

While covered bonds are backed by a cover pool usually containing either mortgage or public sector assets, GGBBs are backed by a government guarantee. There are a number of similarities though between both products:

- Both products can be issued by the same issuers.
- Both products are sometimes bought by the same investors.
- Both products can be issued in the same maturity brackets.
- With exceptions, both products tend to have the same ratings – AAA.

The GGBB and covered bond market therefore come into contact in multiple ways. They are by no means two isolated parts of the capital market. In the following paragraphs, we therefore try to give a comprehensive picture of the two market’s interplay. For both investors and issuers, the decision for one or the other product has a number of facets to it ranging from credit line issues, risk weights, pickup and maturities for investors to achievable volumes, extending the investor base and ALM considerations for issuers.
> **Figure 4**: Average issuance size in €bn and term in years €Benchmark GGBB vs. Jumbo Covered Bonds

<table>
<thead>
<tr>
<th>Jumbo Covered Bonds</th>
<th>€Benchmark</th>
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<tbody>
<tr>
<td>Market exists since when</td>
<td>Covered bonds have a long history and are up to a few centuries old, the first jumbos were issued in 1995</td>
</tr>
<tr>
<td>Market will be around until</td>
<td>Covered bonds are in our view the most important long term capital markets funding tool for banks going forward</td>
</tr>
<tr>
<td>Goal</td>
<td>Long term funding of bank’s loan portfolios</td>
</tr>
<tr>
<td>Typical terms in 2009</td>
<td>Medium to long maturities</td>
</tr>
<tr>
<td>Impact of the quality of the issuer on spreads</td>
<td>High</td>
</tr>
<tr>
<td>Typical issuers in 2009</td>
<td>Strong issuers from strong countries</td>
</tr>
<tr>
<td>Liquidity situation on the secondary market (summer 2009)</td>
<td>Low</td>
</tr>
</tbody>
</table>

Sources: Bloomberg, LBBW Credit Research

### 2.2. Investor’s view

The emergence of the GGBBs posed a number of challenges for investors. It was at first not clear how to treat the bonds. Should they be attributed to the credit lines of the issuer or because of the guarantee to the government lines? What would the risk weight be? How would the ECB treat GGBBs as collateral? The answers to those questions decisively determine the interplay between covered bonds and GGBBs from an investor’s perspective.

In the first days of the GGBB market, many investors still had to count GGBBs on the credit lines of the issuing banks. In those instances, GGBBs competed directly with covered bonds for scarce credit lines. This however changed as the market grew and by now, as far as we are aware, the majority of investors count GGBBs on the credit lines of the guarantors. GGBBs and covered bonds are therefore not directly competing for the same credit lines anymore.

The question into which portfolios GGBBs are placed and how they are treated internally decisively depends on the size of the investor’s operations. For larger investors, they are often placed into the government bond/sub sovereign/agency space and also often handled in different portfolios by different portfolio managers than covered bonds. In those instances, the link between the two markets becomes very small. There are however also investors that segment the market into liquid and non-liquid portfolios. In those cases, both products tend to be placed in the same portfolios and compete if not for credit lines, then at least for cash that is available to be invested. For smaller investors, that often have a small number of portfolio managers to cover a vast range of markets, GGBBs and covered bonds are in the same boat, the link is much stronger.

But even apart from those technical issues, one can make a number of observations when it comes to the interplay between covered bonds and GGBBs from an investor perspective. For example, the maturity
structure of both markets already gives a hint as to how close both markets are interrelated, where the link is the strongest and for whom. GGBBs are issued at the short to mid part of the curve. Traditionally, ALM investors such as insurance companies and pension funds, who represent an important investor group for covered bond issuers, focus their attention on longer term issues. GGBBs are therefore not a huge topic for them. The part of the curve that interests them is GGBB-free zone. The big link between GGBBs and covered bonds is at the short end of the curve. This domain often receives a lot of attention from bank treasuries and money market funds. The attraction for bank treasuries is even increased because of the 0% RW argument that plays in favour of GGBBs and against covered bonds in times of scarce capital.

For fund investors that have to follow a covered bond benchmark on the other hand, it is often a difficult and lengthy process to change benchmarks. Any investment into GGBBs would therefore be an off-benchmark bet for them that has to be well thought through. They are not taking away substantial interest from covered bonds therefore. GGBBs are rather substituting agencies or sub sovereigns in the respective portfolios as they are also part of for example the iBoxx € Sub Sovereigns Index and in July made up a stunning 19% of that index.

Looking at distribution statistics of jumbo covered bonds and EUR benchmark GGBBs in 2009, there is some evidence for the points mentioned above. There are indeed some similarities between the two markets both geographically as well as for investor groups. Banks as well as German investors represent the biggest takers in GGBBs and in jumbo covered bonds in 2009 so far. The share of banks in jumbo covered bonds (37%) is however far below that of the same investor group in GGBBs (54%) and insurance companies are much stronger represented in the jumbo covered bond (16,1%) than in the GGBB market (6,2%). To talk about tough competition between GGBBs and covered bonds from an investor’s perspective would be stretching the truth a bit too much. The better way to describe the relation between both markets would probably be coexistence with some competition at the short end.

> Figure 5: Distribution statistics of EUR GGBB benchmarks and jumbo covered bonds in 2009 in %

Sources: Bloomberg, IIIA, IFR, LBBW Credit Research
2.3. Issuer’s perspective and motivation

Funding officials of banks have to follow a number of goals. They have to raise the funding volume necessary to refinance maturing bonds and fund the new business that is planned. They have to do this while minimising funding cost through accessing a broad investor base in a number of markets and possibly match the funding to the asset side of the institution as good as possible in order to reduce ALM risks that might otherwise arise. So the decision for issuers between GGBBs and covered bonds is based on achievable volumes, investor outreach, all-in cost and ALM issues. The specified limitations on business policy, such as caps on management salaries and dividends, mostly relate to drawing on capital assistance measures - not to the use of guarantees - and are therefore no decisive factor in the decision to issue either covered bonds or GGBBs.

Especially in times of stress at the end of last year up until spring 2009, GGBB funding was available in much bigger sizes, for many it was the only available option at the time. Cost or ALM considerations clearly stepped in the background, the major goal was to get the funding done and then worry about everything else (such as mounting maturities in 2011 and 2012). Usual GGBB volumes were far beyond €2bn, French SFEF as well as German Commerzbank and BayernLB for example each issued €5bn GGBBs in one go. Book volumes reached up to €12bn showing the massive demand that existed for this type of debt. At the same time, for those few issuers that were able to issue jumbos, the normal issuance size was €1bn and only recently reached up to €2bn. Availability of funding therefore pushed cost or ALM aspects back initially. Even issuers that were well funded and did not need money to refinance maturing liabilities sometimes chose to access this source of funds in order to avoid any competition distortions with those institutions active in the GGBB market.

In times, when rating agencies started to request more overcollateralization from issuers, one more attraction of the GGBB market was that since GGBBs are only backed by a guarantee and in most cases (exception is France and NordLB GMTN) not by additional collateral, through issuing GGBBs issuers could save collateral. They could then use it to either support their covered bond programme or for other means such as repo transactions.

In addition to this, through GGBBs, issuers could target new investors in the rates area that had not been active in either covered bond or senior markets. Some issuers still play this card these days accessing new markets with the additional safety of the government guarantee making it easier for investors to get accustomed to the issuers and hoping that they will subsequently also take part in unguaranteed issues. At the same time, those issuers are active in the covered bond and senior markets profiting from investors that already know the name and have lines in place. The existence of the government guarantee simply made it easier to approach investors. Questions concerning the business model of the issuing bank were pushed in the background. Only for a few special names such as German IKB for example did those points play a somewhat more important role. The major focus was clearly on the guarantee and on the guarantor. The more issuers came to the GGBB market from one specific country the more investors grew accustomed to the guarantee terms and the less work had to be done from issuers to answer existing questions. The execution risk was simply way below that of a covered bond.

The more markets returned to calmer waters however and especially after the ECB announcement from early May, jumbo covered bond spreads have compressed considerably and also investor interest has risen sharply. The big argument “availability of funding” for GGBBs lost a lot of weight and topics such
as funding cost and ALM issues started to come to the forefront again. Looking at funding cost, the low spreads of GGBBs vs. swap don’t tell the whole truth. From a funding point of view, the all-in cost is considerably higher as the guarantees provided by the various governments are not for free but cost a considerable amount of money. The guarantee fee for Commerzbank for example was 94Bp. Add on top the 25Bp that the bank had to pay on the market, makes 119 Bp all-in cost. This all-in level is the actual benchmark that unguaranteed funding has to beat, not the re-offer level. At the beginning of this year, some issuers issued GGBBs despite paying more than for unguaranteed bonds, but that was when jumbo spreads were still on a steady way up. These days, many issuers can by far beat those all-in levels, the best example being Deutsche Bank’s debut Hypothekenpfandbrief at MS+55Bp for 7 years which is two years longer than the maximum allowable for a Soffin backed bond.

This takes us straight to the last point, ALM issues. GGBBs are limited at 3, sometimes at 5 years. Mortgage portfolios that are used as collateral for covered bonds usually have a much longer duration, sometimes reaching over 20 years. Refinancing a 20 year + portfolio with relatively short term bonds is not exactly ideal from an ALM perspective. Through covered bonds, the bond terms can be much longer, especially the recent past has seen the vast majority of issuance in 7 to 12 years part of the curve.

3. SUMMARY AND THE WAY FORWARD
Covered bonds and GGBBs may look at first glance to be engaged in fierce direct competition. When the first GGBB markets moved into action, covered bonds seemed to be the big losers at first glance. The appeal of a government guarantee right in eye of the storm simply seemed too charming for investors compared to the additional protection of a cover pool and a segregation mechanism never actually tested in real life. The stage seemed set for a tough but rather short fight for the same investors in the same maturities with a clear expectation of who would win. The short end had been the favoured part of the curve for covered bond issuers for most of 2008 and GGBBs now seemed to conquer this area by storm. Moving out to longer maturities seemed only feasible for the strongest issuers from only the strongest countries. For everyone else, only GGBBs remained for the time being, leaving the jumbo covered bond market standing in the rain without an umbrella or anything of the sort to keep itself dry. Even worse, the issuance of GGBBs at initially very generous spread levels send the jumbo market into repricing mode at the short to mid part of the curve. This trend was then intensified at the longer end at the beginning of the new year once the first issuers from France and Germany, in trying to avoid the direct competition from GGBBs, moved out to 5 years and beyond. The deals they brought to the market were priced at spread levels previously thought impossible for both investors and issuers in the jumbo covered bond market.

On the other hand, since the ECB announced its plans to buy up to €60bn in covered bonds, things have turned in favour of the covered bond market in the blink of an eye with over €16bn in jumbo supply in May alone and another €13bn in June. The GGBB primary market turned rather quiet in no time with not one EUR benchmark issue from mid May to the beginning of June. It has since mainly with the exception of French SFEF turned into a niche market with issuers mainly becoming active with private placements in a number of currencies. After initially serving the biggest issuers, these days it is mostly the smaller names and institutions with weaker stand-alone ratings that access the GGBB market.
Those comments hint at the fierce battle. But after taking a closer look, the picture changes quite a bit and both markets rather seem to complement than to fight each other. GGBBs target the shorter end of the curve, their main goal was and is to help out issuers cover their acute liquidity needs and give them some breathing time until markets have returned to calmer waters again. The main focus of covered bonds on the other hand, is traditionally more towards the medium to long part of the curve and the long term funding of a bank’s loan portfolio. Last year’s massive trend of 2-3 year covered bonds was rather a result of the crisis and reduced investor risk appetite and did not reflect the true purpose of the product. The drastically wider spreads that issuers had to pay since the beginning of this year in order to successfully place jumbo issues was not directly the result of the existence of GGBBs. It is rather the result of the increased investor risk aversion in the first months of this year which was also the reason for the thriving GGBB market. On the contrary, had the GGBBs not been around at the time to divert investor’s fears about bank’s liquidity problems, the jumbo issues witnessed would have hardly been possible at all.

Also from an investor’s point of view, the link between both markets is not as close as one might think. Most of the times, both products are counted on different credit lines (guarantor vs. issuer) and often also held in different portfolios. For whole investor groups such as insurance companies and pension funds the GGBB market is not such a big issue as they are concentrated more on the longer part of the curve.

GGBBs were a product to counter the problems that came along with the financial market crisis and they have been a great success from the start. But they are only a temporary phenomenon, even though that phenomenon could just stay around for a little while longer than many people think. Covered bonds
on the other hand should be the major product for banks to get long term funding going forward. The GGBB market cannot take away those prospects from the covered bond market (the rating agencies might play a much bigger role here). Strong names and in the most recent past even smaller institutions can already do without reverting to the GGBB market and fund themselves cheaper on an all-in level in unguaranteed format. However, the possibility to still issue GGBBs should things turn sour again helps also the strong names and the covered bond market is still not open for everyone. Weaker names, and especially those that don’t have a traditionally strong domestic investor base behind the covered bond market still find it difficult to generate enough investor appetite to issue big volumes without the additional protection of a state guarantee. The presence of GGBBs is therefore still needed and even helpful to the covered bond market in the end. The latter will however in any case outlive GGBBs by far and remain or even strengthen their dominant position in bank’s funding plans. Investors that need a combination of duration and a high degree of safety such as i.e. insurance companies will in any case have to rely on the covered bond market going forward. The same holds true for investors trying to avoid the huge redemption wave of GGBBs that is coming up in 2011 and 2012. One of the major negative side effects of GGBBs was that they pushed the funding problems of banks forward primarily in those two years and then added a bit on top of the already existing redemption mount.
Without a doubt, September 15 topped everything known before with respect to capital market turmoil. When the US government decided to let Lehman opt for Chapter 11 bankruptcy, the quality of the crisis massively gained momentum. Due to the significant writedowns in structured credit investments, many banks were already looking quite tattered and hardly able to fight more than the current fire. However, the Lehman collapse not only sparked a new flame but also added fuel to the existing fires. The outcome is broadly known – practically without any barriers, market participants experienced spillover effects from the original crisis to practically all areas of the capital market.

In the following chapter of the ECBC fact book, we shed some light on what investing in covered bonds felt like before the subprime crisis, during the subprime crisis and after the Lehman collapse. We will particularly stress the mismatch between fundamental credit risk and the individual perception and how the latter was further fueled by market technical factors.

The Last Days of Pompeii
Talking about the golden age for covered bonds so far usually raises the association with the years 2005/06/07 when, driven by amazingly tight covered bond spreads, the export of the idea of covered bonds broke every limit. From 2005 to 2006, the number of covered bond countries increased by the week and consequently the number of inaugural transactions doubled. The record level set in 2006 was confirmed in the year afterwards. However, although it took until summer 2007 until the subprime crisis moved into full swing, the mood already changed a bit earlier. After peaking in summer 2006, Bund interest rates declined through March 2007 (1) but did not drag along swap rates, resulting in a – by then - significant underperformance of swap products vs. Bunds – a sign of increased risk aversion (2). When rates increased again in 1Q/2Q07, risk aversion increased further leading to – again by then – multi-year highs in the Bund swap spread (3).
However, the classical Bund swap increase as a sign of increased risk aversion was accompanied by other elements. The most striking one was the duration of the bonds that were issued. While issuers were able to place long and ultra-long covered bonds with maturities ranging from 2025 up to 2055 in 2005 and beginning of 2006, investors’ quest for higher yields by taking on higher duration was slowly but steadily replaced by a more cautious approach. As shown in graph 2, the average maturity of newly-issued bonds declined significantly from the record-highs (2005 and 2006) to a more modest level in 2007. The shortened maturities of the new bonds were the issuers’ compromise for the generally wider spread levels and thus helped to stabilized funding cost. However, in turn, this meant providing a relatively higher yield as funding was achieved for a shorter period but for the same spread over swaps.
While the party went on for German issuers in particular, the highly frequent issuers in Spain already felt the strong headwinds. Durations of the new deals shortened, absolute spread levels remained constant at best, with some names already being required to pay slightly more – a new experience since durations and spreads only headed towards the “better”-direction until then.

Nevertheless, the broad market perception was still unchanged. The Aaa/AAA obsession was in full swing, firm specific news was still rather unspectacular and therefore the impact on covered bond spreads was statistically not significant. Spreads were entirely driven by supply and demand considerations, such as the rarity appeal of Pfandbriefe vs. the hyper-liquid situation in Spanish paper.

**The Phase of the Subprime Crisis**

Historians will tell us when the crisis really started to surface, but for the time being we believe that the blow-up of Bear Sterns’ in-house “High-Grade Structured Credit Strategies Enhanced Leverage Fund” is an adequate mark: US house prices – declining since the turn of the year 2006/2007 – and interest rates - rising for one year –hit highly leveraged US home builders heavily on both sides. Increasing delinquency rates first touched base in capital markets by causing MBS based on subprime mortgages to no longer perform as anticipated. In-arrears rates sky-rocketed and led to massive downgrades, writedowns and losses. The secondary market for subprime MBS broke down completely. Lack of market transparency and heterogeneity led to massive spillover-effects also into the prime segment and even into relatively uncorrelated segments of the ABS market. Among the first ones to be under water were mutual funds heavily invested in ABS. Since secondary market liquidity fell to zero, the valuation of ABS investments required significant valuation haircuts, resulting in bad performance figures. The final consequence was severe cash-outflows – in particular, ABS-based money market funds experienced massive liquidity pressure. Some – mainly the pure ABS players - had to be closed while others with a more mixed strategy were able to compensate the outflows by sell-offs of paper that – by then – still
had a functioning secondary market and that still showed a stable performance such as covered bonds. In contrast to other high-grade types of bonds, covered bonds provided investors with a market-making arrangement – de facto an artificial form of liquidity to enhance tradability. Electronic trading automatisms allowed the liquidity-driven sell-offs of covered bonds to hit traders like a Tsunami.

In an unprecedented way, the size of traders’ long positions increased beyond any limit. Due to the trading rationale of many market participants – “liquidity at any cost” – price adjustments were practically meaningless. If the choice is between closing a fund or taking a loss on a trading position, price sensitivity tends to evaporate. By various measures, the covered bond community and various market maker sub-groups tried to keep the system alive by constantly implementing new rules, which as soon as effective turned out to be unsuitable to calm down the situation. Although it was the declared intention of many parties involved in the covered bond market, the basis for the market making as it used to be evaporated: tight and regulated bid-offer spreads (around 1.5bp running) and automatic execution for pre-defined lots require a non-directional market. However, the liquidity-driven sell-offs brought the system to the edge and for some sub-segments of the covered bond market even beyond. In particular, the already wider and more volatile types such as Cédulas Hipotecarias and Obrigacoes Hipotecarias experienced an unprecedented underperformance vs. swaps. Many players in the covered bond market based their expectations on a comparison to the AHBR incident. Back in 2005, when AHBR’s problems reached a peak, the bank’s Pfandbrief spreads widened from around swap flat or slightly below to the high twenties to mid-thirties. However in the current crisis, the sell-off combined with the knock-on effects on secondary market support led to a shift of spreads to the area above 30-40bp over swaps in Germany and France to around 50-80 in Spain and the UK – nota bene market wide and without the concrete fear of an imminent bankruptcy of a single name. The nature of the crisis had changed from a

> **Figure 3: Swap Spreads of the Different Covered Bond Segments in the First Phase of the Crisis**
The subprime crisis to a general crisis in capital markets, affecting not only directly or indirectly connected segments but also practically unrelated market elements.

However, the changed nature of the crisis in the aftermath of the subprime meltdown also changed the nature of covered bonds. Due to the long standing history in particular of the German, French and Danish market boosted by the service package of the Jumbo format, the most visible part of the covered bond market had the perception of a substitute for government and sub-sovereign bonds. The massive underperformance, the de-linkage of the spread landscape from the performance of the government and SSA market as well as the significantly lower tradability put the character of covered bonds as rate products into question. However, although the quality of the total covered bond package consisting of product quality and secondary market liquidity changed for the worse, it appeared that in the course of 2Q08 the market found a new equilibrium. Primary market activity recovered – certainly at unprecedented wider levels, but nevertheless still richer than any other bank product. Apparently, the wider levels still allowed profitable business while simultaneously compensating investors for the lower degree of liquidity and secondary market support. A more or less logical consequence was the higher segmentation: markets with a higher degree of support like the Pfandbrief or Obligations Foncières were characterized by comparably richer trading levels while less supported markets like the Spanish or the UK market suffered more. However, the changed perception of the product did not prevent its marketability. In fact, until only a few days before Lehman, the primary market machine was still running, while the secondary market lost transparency but showed a stable performance at a qualitatively lower level compared to before the crisis.

The Phase of the Capital Market Crisis

Although all market participants were convinced that they experienced a difficult time already until August 2008, the events before and on September 15 shifted the crisis to a whole new level. Bad news about a bank before July 2007 meant lower operating results, one-time adjustments resulting in lower net profits. The outbreak of the subprime crisis extended the "bad news range" to massive write-offs, eating up operating results and resulting in significant losses. However, the system (and finally also the sovereign) were broadly considered strong enough to prevent defaults. The failure of Lehman however defined a new reality: A failure of a covered bond requires a failure of the issuer followed by a failure of the pool accompanied by less than full recovery. Already the first step of this "checklist" was assumed to be extremely unlikely until Lehman proved differently. The effect of the Lehman disaster on money and capital markets had a direct knock-on effect on the covered bond community. The complete drought of short-term funding put Depfa and Hypo Real Estate in extreme financial hardship – the final step that made the financial crisis directly reach the covered bond market: While from July 2007 to 15 September 2008, the iBoxx € Covered on average widened by 38bp, the widening in the following six months reached 111bp (in the case of the iBoxx € Germany Covered the respective widening was 7bp vs. 88bp). Primary market activities in the period 1 January 2008 to 14 September 2008 summed up to a total volume of EUR 84bn, while no Jumbo covered bonds were issued after 15 September for the rest of the year 2008. In the case of benchmark senior unsecured bonds, the picture was similar: EUR 106bn issued from January 2008 to September, and EUR 6bn for the rest of the year 2008.

The first days after the Lehman disaster were characterized by pure panic. The entire capital market was turned upside down and so was the covered bond segment. Even the – until then – resilient Pfandbriefe experienced all-time wide spread levels, mainly triggered by the Hypo Real and Depfa events. With
respect to risk perception of covered bonds, the credit characteristic of covered bonds peaked—mainly for two reasons: the senior credit risk of the issuers which originally was seen as a relatively safe investment, at least for banks of considerable size/importance, deteriorated to an investment where, given the current conditions, a default is within the range of possibilities. As we indicated earlier, the range of possible news was extended on the downside, finally to the limit, i.e. default became a possible outcome. Simultaneously, the collateral of many covered bonds also came under pressure. Not for quality considerations but rather due to tradability concerns: in case of issuer insolvency, the liquidation of a pool given the bumpy market conditions could take longer than originally planned. Hence, the senior unsecured claim of covered bonds deteriorated in quality as much as the liquidity of the pool did. Interestingly enough, the fundamental credit quality of the collateral in combination with the legal framework rather improved (e.g. PfandBG amendment). The result was that the “total package” of covered bond risk shifted to the credit direction. The credit-like shift in risk perception slightly stabilized when European governments set up the guarantee schemes of which the GGBs (Government Guaranteed Bonds) emerged as the most prominent tool to stabilize banks. The chart below clearly demonstrates the shift from non-guaranteed paper (covered bonds and bank senior) to guaranteed paper (Government Guaranteed Bonds and Sub-Sovereign bonds). From October 2008 until the end of June 2009, EUR 149bn of GGBs were issued and EUR 326bn of Sub-Sovereigns compared to EUR 37bn in covered bonds and EUR 69bn in senior unsecured bonds. In November 2008, a new iBoxx category was created in the Sub-Sovereign universe: “Guaranteed Financials” as a sub-category of “Other Sub-Sovereigns”, acknowledging the size and importance of this new asset class.

Last but not least, another effect contributed negatively to the risk perception of covered bonds: the unprecedented wide trading levels as such were viewed as an indication of the more credit-like nature. The wide levels, however, were not only a result of the two effects described above but also a third effect aggravated the situation: the introduction of GGBs. The new government guaranteed bonds originally paid a pick-up compared to the SSA sector (Sub-Sovereigns and Agencies) despite providing only a marginally different quality. The result was a sizable widening of the SSA sector rather than a tightening of the GGBs. Investors feared a massive issuance wave of new guaranteed bank bonds and therefore caused primary market levels to rise higher and higher. The wider SSA levels, however, had a significant cross effect on covered bonds: since the overall yield levels of SSAs were lower despite the wider spreads vs. swaps, SSA issuers hardly felt uncomfortable with the situation and kept on issuing. This, however, pushed out the trading levels, in particular of the richer covered bonds such as Pfandbriefe. This is a purely technical rather than a fundamental effect. The result was the same – wider trading levels, higher volatility, nervous and cautious investors. While the first two effects, the “fear-of-default” as well as the “deteriorating-liquidity-of-collateral” decreased in effectiveness due to guarantee schemes and extended collateral requirements, the technical effect survived throughout the whole post-Lehman phase. Since this purely technical effect is quasi a market failure, an external shock was needed to overcome this inefficiency: this external shock came by way of the ECB announcement to invest as much as EUR 60bn in covered bonds.
The Aftermath

It was on 7 May that one of the most powerful investors, the ECB, announced its intention to acquire EUR 60bn in covered bonds throughout next year. Although the above words more or less contain the degree of detail the ECB unveiled about its plans, the impact was significant: market sentiment turned 180°. The implicit assumption was that the ECB and/or the national central banks will rather concentrate on the cheaper end of the covered bond market and therefore act as a backstop against the widening trend. The impact was measurable instantly. While the spread difference between, e.g., Mortgage Pfandbriefe (ex HRE) and KFWs in the entire post-Lehman phase practically remained rather constant at comparably wide levels (ca. 20bp), the spread declined noticeably. Since the announcement of the purchase program, all covered bond segments tightened dramatically (see chart below).

> Figure 4: The long and winding road

So after an enormously bumpy road during the crisis, it seems like the covered bond market as well as the risk perception of covered bonds at the time of writing is heading to more stability. Nevertheless, the pure “rates-product” characteristic of the time before the crisis is not yet within reach, even though trading levels are more than half-way back to pre-crisis levels. In order to re-set market perception to pre-crisis levels, a few critical points unveiled by the crisis need to be addressed, namely:

- a more robust structure of secondary market support;
- liquidity provisioning in the cover pool in order to;
- address a potentially worsening tradability of the collateral;
- steady improvement of legal frameworks as well as; and
- find reasonable ways to provide rating stability and reliability.
However, the long and winding road back to a risk perception similar to that before the crisis will take longer for the different types of covered bonds. While the classical German and French markets, which benefit from a strong domestic investor base, are likely to find their way back in the medium term, the Spanish, UK and Irish markets, for example, will have to show significantly more patience. In other words, the strong segmentation of the covered bond market with respect to spread levels but also with respect to liquidity and ratings will prevail for the foreseeable future.
1.8 THE INVESTOR’S PERSPECTIVE

By Fritz Engelhard, Barclays Capital and John Maskell, Barclays Global Investors

I. INTRODUCTION
In this chapter we track the development of secondary market conditions over the past 12 months. We describe how investors have been forced again to adapt to the very challenging market conditions in Q4-08/Q1-09 and how they could benefit from some improvements in the course of Q2-09. Finally we provide an outlook and particularly comment on the implications of the ECB’s covered bond purchase initiative.

II. WHERE IS THE BID?
In the course of H2-08, secondary market liquidity in fixed income benchmark instruments further deteriorated. Initially this reflected a deepening of disruptions to money market conditions in major currencies, mainly triggered by the Lehman default, but also by ongoing significant stress on bank balance sheets. The resulting drought in term liquidity has led to persistent illiquidity in interest rate cash and derivative products. In addition, not only banks but also an increasing number of real money accounts, in particular mutual funds and central banks, were faced with a situation, where they needed to reduce securities holdings and thus turned from important net regular buyers of covered bonds into net sellers, irrespective of the risk assessment for the individual product. The combination of these issues has had serious implications for covered bond markets. The most important consequence has been that price action in these markets was dominated by supply/demand imbalances more than by fundamental spread drivers, such as credit considerations, risk-weighting and soft factors, such as name recognition.

Following significant injections of liquidity by major central banks and the set up of protection mechanisms and financial market support measures by governments around the globe, money market conditions improved markedly and the rolling 3M FRA-OIS Spread contracted from a peak around 190bp in October 2008 to current levels of about 50bp. However, spreads of covered bonds continued to widen and market liquidity remained poor. Figure 1 below indicates that swap spreads of bonds contained in the iBoxx Covered index widened in Q4-08/Q1-09.

> Figure 1: Whilst Money Market conditions improved, spreads for covered bonds widened

Source: Barclays Capital.
Improved money market conditions were not reflected in improved trading conditions for fixed income benchmark products. Quite the contrary, secondary markets became more challenging than before, as pressure on spreads spilled over into the Supra/Sub-Sovereign/Agency (SSA) segment. There are a number of factors which help explain this pattern. First, the financial market stabilisation measures included a significant enhancement of central bank liquidity and important fiscal commitments for bank bail out schemes. This however made it more difficult to assess the medium to long term macroeconomic outlook. The range of possible outcomes for economic growth and inflation widened significantly. Thus, it became more difficult to evaluate the price for future cash flows, including those of long-term fixed-income instruments. Second, the fiscal measures worsened the perception of the credit quality of sovereigns and also triggered concerns regarding supply. Third, issuance of government guaranteed bonds (GGBs) led to a re-pricing of the SSA segment and covered bonds, as initially, primary market deals in this new and strongly growing area provided significant price concessions vis-à-vis outstanding comparable AAA debt.

In Q4-08/Q1-09, secondary market turnover for covered bonds was clearly concentrated in the 2-5Y maturity bracket. There are a number of reasons for this development. Importantly, the bull-steepening of the yield curve has led to a significant out-performance of shorter dated covered bonds from a total return perspective. As even many real money investors started to get under pressure for unwinding positions, their focus has been clearly on those areas where potential losses from such selling activity were minimal. This has been largely the case in 2-3Y maturities, as the fall in yields compensated for the significant increase in spreads. On the other side, available bids were also driven by recovery considerations. In particular in case of those covered bond names which suffered from significant headline risk and downgrades of their senior unsecured ratings, pricing was generally driven by negotiating on the cash price rather than considering any pick-up versus swaps. Consequently, credit term structures in particular for covered bonds flattened and eventually inverted in the course of Q4-08/Q1-09.

Supply/demand imbalances were exacerbated by the focus of primary market activity at the short end. In particular the SSA segment, but also covered bonds had to compete against the pick-up in issuance of GGBs. Most government guarantee schemes do not foresee an issuance of guaranteed papers beyond a five-year period and due to the focus of most bank treasuries on absolute funding costs, most GGBs were actually issued in the 3Y bracket. Thus, pressure on comparable AAA debt has been the most pronounced in this maturity bracket. On the covered bond side we additionally note that rising tensions in the sector throughout 2008 were responsible for the fact that gross issuance was heavily biased towards the ‘less than five years’ maturity sector. Whereas only 29% (€40bn) of all supply fell into that maturity bracket in 2007, the proportion surged to 65% (€53bn) in 2008.

From an investor’s point of view, the worsening secondary market conditions made it more difficult to fulfil their mandates in managing risk positions. Importantly, price discovery, which has already been hampered before Q3-08, has become even more challenging. Many investors adapted their approach and switched from price taker into price maker mode. Communicating the prices they are prepared to accept keeps them informed about market opportunities and helps them gauge the development of liquidity. Regularly, they have had the experience that achievable prices, both on the bid and offer side, have become largely dependent on the available timeframe for the respective transaction, seasonal factors and intra-day liquidity fluctuations. Generally, the longer investors can afford to spend on specific transactions, the greater the chance they can execute close to their price targets. The closer the date of execution is to the end of a quarter, the more difficult it gets to source attractive bids and the easier
it becomes to find interesting offers. The closer a pricing request is towards the end of a day’s trading session, the more challenging its gets again to source liquidity.

III. WHERE IS THE OFFER?

In the course of Q2-09, trading activity first became more balanced before moving completely towards the offer side. At the beginning of Q2-09 this was largely because primary activity in GGBs and SSA bonds calmed down following strong supply in Q1-09. But more importantly, the ECB’s announcement to purchase €60bn of covered bonds in early May, initially triggered short covering activity and there has been also a growing number of inquiries on the offer side from investors. The need of market makers to unwind short positions and the anticipation of a broader demand for covered bonds helped improve the bid. This was even true for non-euro area covered bonds which are not subject to the Euro system purchases. However, a lack of details regarding the purchase programme as well as the fact that so far there are no indications to what extent the Euro system would be prepared to open its portfolio for securities lending operations has led to persistently wide bid-offer spreads.

From an investor’s point of view the most attractive bids generally could be achieved in those cases where market makers have been forced to unwind short positions, routinely created by aggressive purchases from euro system central banks and/or accounts betting on such purchases. On the offer side, the focus concentrated strongly on the primary market again, as secondary quotes have been strongly distorted by the restricted ability of market makers to handle short positions. Given the very positive momentum in covered bond spreads, most new transactions performed strongly versus swaps shortly after their launch. Regularly, swap spreads tightened by 5-10bp in the course of 1-2 weeks. This in turn started to attract some speculative accounts and eventually led to inflated order books, which made it more difficult for investors to gauge the quality of new transactions.

III. WHERE DO WE GO FROM HERE?

The announcement of the ECB’s covered bond purchases has been an important catalyst for the recovery of covered bond markets. Already before the official purchases began on 6 July, it has led to a significant spread tightening, to a noticeable revitalization of primary markets and a broader use of the covered bond product across the euro area. However, there is also a flipside to this. In particular, the reluctance of the Euro system to make its covered bond holdings available for securities lending over time may hamper secondary market liquidity. Market makers will be inclined to behave defensively and avoid any major short or long positions, which will lead to a widening of bid-offer spreads. This, in turn, further increases the illiquidity of the respective covered bond and will eventually make it ineligible for bilateral repo operations. Once this becomes apparent, investors – who generally are more interested in potentially liquid collateral – will shy away from further building up positions in the respective bond, thereby potentially offsetting a vicious circle, as outlined in Figure 2 below. Whereas the overall situation is still relatively sound, some individual bonds have meanwhile approached crucial levels.
Furthermore, there is some risk that the market will split into a non-ECB sponsored and an ECB-sponsored market. In particular, in case primary market transactions become too heavily sponsored by the Euro system, they may persistently trade at tighter spread levels relative to comparables. This might be particularly true for some of the individual names and markets, which have fallen in disgrace with investors and where many usual buyers of covered bonds struggle to re-establish or enhance counterparty limits again. Such a development may further hamper secondary market liquidity, as the respective take up by the euro system is not transparent. In addition, this could eventually be exacerbated in case the Euro system gets more heavily involved in tap activity.

Finally, it is an open question how the market would react when the ECB purchase programme will be termed out. Ideally, the covered bond product will have been nourished sufficiently to be able to stand on its own feet. However, there is no certainty about this and clearly the direction of spreads will be one way again in case the market would have reasons to start supporting an unwind of the ECB’s covered bond portfolio.
The events of late 2008 raised many questions. Though there had been well documented failures of issuers in Germany, but the authorities there have a track record of sorting things out in a way that protects the investors. Such a tradition did not necessarily apply in other jurisdictions and as the covered bond has proliferated far beyond Germany's borders significant question remained over how other authorities might react. The resolve of non-traditional jurisdictions was put to the test when a number of covered bond issuers failed. On September 25th Washington Mutual, the US’s first covered bond issuer, went into insolvency and shortly thereafter UK mortgage bank, Bradford & Bingley had to pass into public ownership. These two events specifically and there were other high profile cases, including that of Depfa, caused considerable concern for investors. Indeed, as the parties most affected by the restructuring of an issuer, investors were worried that they were not consulted and often learned of significant decisions late on in the process. In the case of WaMu and Bradford & Bingley, although the relevant authorities did quickly resolve the issues, there were initial mis-communications that were unhelpful to investor interests. Addressing these concerns, a number of prominent investors from the covered bond sector decided that the solution would be to create a body to represent investors and articulate their needs in the market. Such an organisation would be a natural counterpoint to the ECBC and an appropriate partner, but one that has tangential interests at times. By March an organisation had been established under the auspices of the ICMA ('International Capital Markets Association') that included a cross section of money managers, insurance companies and other asset managers. Only investors are eligible to join the Council. Several prominent central banks joined as observers. The group has set out a straight forward set of aims which may be summed up as: ‘Seeking to promote the long term development of covered bonds as a highly secure product and promote covered bond market liquidity’. The CBIC announced their objectives at the Lisbon meeting of the ECBC. Besides working with issuers and traders to identify an appropriate mechanism or mechanisms for re-establishing and enhancing covered bond market liquidity, working groups would also be set up to examine standards of disclosure and transparency. Interaction with regulators as they modify covered bond laws and look to make changes will also be a legitimate matter of concern for the working groups of the Council. The Council members have also established a dialogue with the rating agencies to set out their agenda for ratings on covered bonds, a controversial subject given the significant changes to methodologies being implemented. It is likely that other urgent issues will emerge as the markets swing back into life. The ICMA secretariat will receive and channel questions or issues in need of discussion to the members of the CBIC. There will also be an open communications link to the ECBC secretariat to ensure policy coordination where appropriate. The priorities and objectives have been set. The market will benefit from the presence of a more cohesive organisation that will voice investor interests. Although the CBIC is not designed to respond to specific individual queries, industry issues and problems are legitimate areas of debate and it is hoped that the setting up of the CBIC will directly improve the level and quality of information across the asset class. It should be noted that the creation of a group such as this is unprecedented. International investor representative bodies have historically not existed. Indeed, investors have not generally come together in this way. The creation of an international group focused on a single product is an interesting development in its own right, but also reflects on
the importance and relevance of the covered bond sector. It is also a vote of confidence that major investors have agreed to commit resources to contribute towards the future growth and development of this part of the market.

In future, where there is the need for regulatory change or intervention, the constituency most exposed to the economic effects of those actions, namely the investors, will be better equipped and positioned to respond rapidly and participate in consultation processes. This will be beneficial for the market. Currently the Chairman of the CBIC is Claus Tofte Nielsen of Norges Bank, Oslo. Vice Chairman is Andreas Denger of MEAG in Munch. David Hiscock at ICMA acts as point person for inquiries and the CBIC can be contacted on cbic@icmagroup.org.
CHAPTER 2 – GENERIC SECTION
2.1 OVERVIEW OF COVERED BONDS
By Ralf Burmeister, LBBW, Ralf Grossmann, SG CIB
and Otmar Stöcker, Association of German Pfandbrief banks

2.1.1 INTRODUCTION
Over the past decade, the Covered Bond market has developed into the most important segment of privately issued bonds on Europe’s capital markets, with volume outstanding at the end of 2008 amounting to EUR 2.38 trillion. Covered bonds were one of the first non state-guaranteed funding instruments of credit institutions to resume issuance activity after the Lehman default. It is generally accepted that the covered bond market should play a pivotal role in the exit strategies from government and central bank support as they provide lenders with a cost-efficient instrument to raise long-term funding for mortgage or public-sector loans and offer investors the (non state-guaranteed) top-quality credit exposure on credit institutions. The high importance of covered bonds for the financial system was also demonstrated by the decision of the European Central Bank to launch a EUR 60 bn covered bond purchase program.

Today there are active Covered Bond markets in about 25 different European jurisdictions and there is a strong expectation that the Covered Bond market will continue to grow, especially as national legislators across Europe have adopted modern Covered Bond regulations or modernised existing ones.

> Chart 1 – Covered Bond Legislation in Europe (as of July 2009)

Source: vdp

Regulatory developments in national markets and the enactment of new Covered Bond legislation have enhanced the quality of the Covered Bond instrument. Diversification in the group of Covered Bond issuers now means that this group not only includes specialised mortgage banks, but increasingly diverse players, such as Dutch and UK issuers, Spanish savings banks, German universal banks etc.

1 Source: EMF/ECBC. http://ecbc.hypo.org/content/default.asp?PageID=302
In this Fact Book, you will find more information on all Covered Bond markets in Europe, including recent regulatory changes in the different Covered Bond systems.

2.1.2 HISTORY

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

The creation and the expansion of Covered Bond systems in their different structures and features are a perfect example of a fruitful and effective exchange of ideas across all European borders. It is very impressive to see how the huge benefit of experience and exchange of international know how contributed to create the Covered Bonds in Europe during more than 230 years. In the 19th century, nearly every European country had a Covered Bond system. Their success influenced each other. Covered Bonds also played an important role in stabilising financial systems at the end of the 19th century, a time of high bankruptcies of companies and banks.

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

The situation changed, when the first German Pfandbrief in benchmark format (Jumbo) was issued in 1995. The bond was issued in order to meet liquidity needs of investors and to provide increased funding for public sector loans. Since then, the Jumbo market has expanded strongly. The introduction of the Euro meant that investors could no longer diversify regarding currencies, but intensified their search for liquid products. Banks needed to look for new funding sources via high credit-quality liquid bonds to attract international capital investors. Therefore, banks in Western countries revitalised their Covered Bond systems to create a competitive capital market instrument. At the end of the 20th century Central and Eastern European countries reintroduced real estate finance techniques. Covered Bonds were an important element of this process to fund the growing number of mortgage loans, due to the booming housing markets. The consequence of this is that today we again find Covered Bond systems in nearly all European countries.

2.1.3 THE PURPOSE OF COVERED BONDS

From the issuer’s perspective the purpose of covered bonds is basically to use a pool of high quality assets, being separated from other assets of the issuer in order to achieve the following benefits.

First of all, Covered Bonds offer cheap funding in absolute and relative terms and secondly -due to the high credit quality of Covered Bonds- also offer longer term funding for the issuer compared to other funding sources banks usually have at hand. One major experience motivating the introduction of such a high quality funding tool like Covered Bonds is the fact, that it has always been difficult to measure the creditworthiness of a bank, which is still true today. Therefore it is obvious to use a well defined funding channel for specific assets through a system, whose credit quality is delinked as much as possible from
the issuing entity. The very same idea of delinking assets and issuer also applies to the introduction of securitisation products, which is discussed in a later chapter.

The third aspect of the use of covered bonds is that investors tend to invest larger volumes into bonds, which on the back of a legally sound mechanism are perceived as safe, offering higher recoveries and more transparency compared to a senior unsecured bank bond. The regulation around Covered Bonds (e.g. UCITS regulation within the EU) does reflect exactly this safety of Covered Bonds and in turn encourages institutional investors to engage themselves on a larger scale in this highly regulated market.

Especially the current financial crisis has highlighted the fourth major advantage from an issuer’s perspective of using Covered Bonds: Market accessibility. Although Covered Bonds clearly have suffered especially in Q4 2008 and in early 2009, there has been a tremendous comeback in terms of spreads, issuance volume as well as investors confidence.

However, from an issuer’s perspective, Covered Bonds are only one wholesale funding instrument among others. Looking at the past competition between Covered Bonds and securitisation products, at least for the moment the on-balance instrument of Covered Bond seems to have the edge. On the other hand, pure reliance on senior unsecured funding and interbank markets as sole wholesale funding sources did prove to make a bank more susceptible to market turmoil. The financial crisis has brought Government Guaranteed Banks Bonds as an additional wholesale funding instrument, but which is by definition of temporary availability (see also article in this year’s key themes). Therefore, it can be expected that Covered Bonds will increasingly be used worldwide by bank treasuries for their funding optimisation processes.

As the crisis has intensified the competition for deposits as a stable funding source for banks, the need for a low-cost wholesale funding instrument persists. Accordingly, large universal banks have set up Covered Bond programmes in recent years and have overcome the past predominance of specialized banks characterised by narrow business models and heavy reliance on wholesale funding. Summing up the experience made with Covered Bonds especially in times of stress, they have proven to be a reliable and efficient funding source which makes them an indispensable part of a bank’s funding tool kit.

2.1.4 Mortgage - Public Sector - Ship

The major categories of cover assets are mortgage loans, public sector loans and ship loans. The range of eligible cover assets is defined by a country’s Covered Bond system. Covered Bonds backed by mortgage loans (residential and commercial) exist in all countries with Covered Bond systems. Covered Bonds to fund public sector lending (to national, regional and local authorities) play an important role only in a limited number of European countries (Germany, France, Ireland, Luxembourg, Austria, Italy and Spain). Covered Bonds backed by ship loans are rarer but can be found in Denmark and Germany.
2.1.5 LEGAL FRAMEWORK

UCITS and CRD

1) UCITS

The special character of Covered Bonds has been enshrined in the Directive 2001/108/EC of the European Parliament and of the Council of 21 January 2002, amending Council Directive 85/611/EEC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS), with regard to investments of UCITS. Article 22 (4) does not mention the name “Covered Bond”, but its criteria constitute the eldest and most important regulation in EU-law to set a minimum standard for bonds, which are secured by assets, without saying, which ones. The criteria of Article 22 (4) were taken over in other EU-directives so that they can be regarded as the core regulations of “Covered Bonds” (in UCITS called “certain bonds”) before the CRD.

Article 22(4) of this Directive defines the minimum requirements that provide the basis for privileged treatment of so-called “certain bonds” in different areas of European financial market regulation. Article 22(4) allow a special treatment, when these “certain” bonds are issued by a credit institution which has its registered office in a Member State and:

- is subject by law to special public supervision designed to protect bondholders;
- in particular, sums deriving from the issue of these bonds must be invested in conformity with the law in assets which, during the whole period of validity of the bonds, are capable of covering claims attaching to the bonds; and
- which, in the event of failure of the issuer, would be used on a priority basis for the reimbursement of the principal and payment of the accrued interest.

2 At the time of going to press, a revised version of the UCITS Directive is being worked on by the European Institutions. Note that Article 22(4) will be renumbered in the new Directive. The new Directive should be available from the European Commission website: http://ec.europa.eu/internal_market/investment/ucits_directive_en.htm.
Covered Bonds that comply with Article 22 (4) UCITS directive are considered to have an attractive risk profile, which justify the easing of prudential investment limits. Therefore, investment funds (UCITS) can invest up to 25% (instead of max. 5%) of their assets in Covered Bonds of a single issuer that meet the criteria of Article 22(4). Similar, the EU Directives on Life and Non-Life Insurance (Directives 92/96/EEC and 92/49/EEC) allow insurance companies to invest up to 40% (instead of max. 5%) in UCITS compliant Covered Bonds of the same issuer.

By July 2009, all 27 EU Member States had sent UCITS-notifications to the EU Commission. 19 states notified the EU Commission on bonds and authorised issuers fulfilling the criteria of Article 22(4) UCITS mentioned above. Further 4 states notified their legislation, but specified that so far, no Covered Bond issues had been issued on their domestic markets yet. Finally, 4 other states only sent negative notifications, not disposing of a Covered Bond legislation in their country. All notifications are published on the website of the EU Commission: http://ec.europa.eu/internal_market/investment/legal_texts/instruments_en.htm

2) CRD

Another cornerstone of Covered Bond regulation at EU level is the Capital Requirements Directive (CRD)3. The CRD is based on a proposal from the Basel Committee on Banking Supervision to revise the supervisory regulations governing the capital adequacy of internationally active banks. The CRD rules apply to all credit institutions and investment service providers in the EU.

The European Council formally adopted the CRD on 7 June 2006 and the Directive was published in the Official Journal (OJ) of the European Union on 30 June 2006 (L177). A special article on the CRD can be found in Section 2.3 of this Chapter.

Under Basel II, Covered Bonds are not explicitly addressed, and therefore they will be treated like unsecured bank bonds for credit risk weighting calculations. However, as Covered Bonds play an important role in EU financial markets, the EU Commission has decided to establish a privileged treatment for Covered Bonds under the CRD, Annex VI, paragraphs 68 to 71.

According to the CRD, Covered Bonds benefit from privileged credit risk weightings only if they fulfil the following requirements:

(i.) Compliance with the standards of Article 22(4) of Directive 85/611/EEC (UCITS).

(ii.) The asset pools that back the Covered Bonds must be constituted only of assets of specifically-defined types and credit quality.

(iii.) New quantitative restrictions on certain types of cover assets were established (e.g. max 15% exposure to credit institutions).

(iv.) The issuers of Covered Bonds backed by mortgage loans must meet certain minimum requirements regarding mortgage property valuation and monitoring.

These requirements will have to be transposed by each EU Member State in order to obtain or to keep privileged treatment of their national Covered Bonds. While Article 22(4) of the UCITS Directive provided a fairly general and abstract framework for Covered Bonds, the CRD framework is much more specific in its definition of Covered Bonds. However, the Covered Bond definition of the CRD was established

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for supervisory purposes, and therefore does not necessarily coincide with the market’s definition of Covered Bonds. The future will show whether the Covered Bond definition of the CRD will be a sufficient base to set long-term standards for the European Covered Bond market, or whether new instruments and markets will go beyond those limits in the future.

2.1.6 A COMPARATIVE FRAMEWORK OF VARIOUS COVERED BOND SYSTEMS IN EUROPE

To date, 29 countries have special Covered Bond legislation or arranged structured Covered Bonds on contractual basis in a general-law based framework. However, not all of these countries, where laws are in place, have significant issuance activity.

The ECBC Technical Issues Working Group conducted recently a comparative analysis, based on a questionnaire, which 22 countries have answered so far4. The questionnaire and the comparative overview are divided into 9 sections covering the essential features of Covered Bond systems. Here, we highlight some of the results of that comparative overview. The results are available from www.ecbc.eu.

Structure of the issuer

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

- Universal credit institutions
- Universal credit institutions with a special license
- Specialised credit institutions
- Special purpose entities

Framework

In most European countries, the issuance of Covered Bonds is regulated by specific Covered Bond legislation. In some countries contractual arrangements are applied. Both types of framework set the rules for important features like eligible assets, specific asset valuation rules, assets-liability-management guidelines and transparency requirements, etc.

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

Cover assets

The range of eligible cover assets in existing European Covered Bond systems is listed in the new EU CRD regulation on Covered Bonds: exposures to public sector entities, mortgage loans, exposures to credit institutions, senior MBS issued by securitisation entities and ship loans. Some Covered Bond systems distinguish between regular cover assets (usually mortgage, public sector, ship loans and senior MBS) and substitution assets, where the latter is often subject to quantitative restrictions.

The geographical scope for cover assets ranges from the domestic area only, over EEA countries up to OECD countries. A feature that recently gained importance is the existence of regular Covered Bond specific disclosure requirements to the public. Existing Covered Bond systems offer a broad range of

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4 Detailed information is available on the website of the ECBC at: http://ecbc.hypo.org/content/default.asp?PageID=333. The TIWG has started to revise the questionnaire and to improve and clarify the comparative tables accordingly. Please note that some countries did not yet update their contributions to the country reports and the overview.
different solutions. One can find disclosure requirements regulated by law, by contract, on a voluntary basis, or no regulation at all.

Valuation of mortgage cover pool & LTV criteria
European Covered Bond systems are similar in this area. Most countries have legal provisions or at least generally accepted principles for property valuation. In most cases the property valuation is based on a mortgage lending or prudent market value. LTV limits for single assets are similar as well, e.g. ranging for residential mortgage loans from 60% to 80%. In some countries, there are additional LTV limits on a portfolio basis.

Asset-liability guidelines
Asset-liability guidelines exist in most of the Covered Bond systems, but large differences in technical details and the degree of explicit regulation (e.g. by law, by supervisor, issuer’s by-laws, contractual provisions or business policy) make a detailed comparison rather difficult. One often applied rule is the ‘cover-principle’, which requires that the outstanding Covered Bonds must at all times be secured by cover assets of at least equal nominal amount and yielding at least equal interest. Some Covered Bond systems have implicitly or even explicitly introduced additional net-present value asset/liability matching rules. Similar, mandatory over-collateralisation (on a nominal or net-present value basis) plays an important role as a risk mitigation tool in some Covered Bond systems. Derivatives constitute an increasingly important class of risk mitigating instruments in Covered Bond asset-liability management. In numerous Covered Bond systems, derivatives are explicitly allowed in the cover pool for hedging purposes.

Cover pool monitor & banking supervision
Compliance with Article 22(4) UCITS Directive has already led to some standardisation in cover pool monitoring and banking supervision. Most Covered Bond systems have established an external, independent cover pool monitor who must have appropriate qualifications. Moreover, in most countries national banking supervisors (and in some cases, financial market regulators) exercise special supervision of Covered Bonds in order to fulfil Article 22(4) UCITS.

Segregation of assets & bankruptcy remoteness
European Covered Bond systems use different techniques to protect Covered Bondholders against claims from other creditors in case of insolvency of the issuer. Most systems establish by law or by contract the segregation of Covered Bonds and cover pools from the general insolvency estate. In other Covered Bond systems, the protection of Covered Bondholders is achieved through a preferential claim within the general insolvency estate.

One important common characteristic is that Covered Bonds in Europe do not automatically accelerate, if the issuer becomes insolvent. This is the case in 16 of the participating countries, Romania being the exception. Numerous Covered Bond systems have provisions that permit derivatives to continue in case of insolvency of the issuer. Derivative counterparties can rank pari passu or subordinated to Covered Bondholders. In some Covered Bond systems, Covered Bondholders have recourse to the issuer’s insolvency estate upon a cover pool default (pari passu with unsecured creditors or even superior to them).
Risk weighting & compliance with European legislation

From our sample, most fulfil the criteria of Article 22(4) UCITS. In many countries, the Covered Bond legislation completely falls within the criteria of Annex VI, Part 1, Para. 68 (a) to (f) of the CRD (2006/48/EC). There are proposals to amend the legislation on the way in several countries. In the other countries, the CRD criteria are not fulfilled or not applicable. Moreover, in most of the participating countries in our survey, Covered Bonds are eligible in repo transactions with the national central bank and special investment regulations for Covered Bonds are in place.

2.1.7 ECBC essential features of Covered Bonds

On the basis of extensive comparative analysis, the ECBC Technical Issues Working Group prepared the common essential features of Covered Bonds and corresponding explanatory notes, reproduced in the Annex to this article5. The whole set of essential features and explanatory notes received approval by the ECBC Steering Committee and Plenary in March 2008.

2.1.8 SUCCESS OF THE INSTRUMENT

The Covered Bond is one of the key components of European capital markets. The amount of outstanding mortgage covered bonds is equivalent to around 20% of outstanding residential mortgage loans in the EU. The volume outstanding at the end of 2008 amounted to 2.38 trillion EUR (Covered Bonds covered by mortgage loans, public-sector loans and ship loans), which represents an increase of 12% year on year. The four largest issuing countries in 2008 were Germany, Denmark, United Kingdom, France and Spain respectively.

Covered Bonds play an important role in the financial system and thereby contributes to the efficient allocation of capital and ultimately economic development and prosperity.

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<th>Mortgage</th>
<th>Mixed Assets</th>
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<th>Total</th>
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<tr>
<td>United States</td>
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<td>12.937</td>
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</tr>
</tbody>
</table>

5 They are also available at: http://ecbc.hypo.org/content/default.asp?PageID=367
<table>
<thead>
<tr>
<th>Public Sector</th>
<th>Mortgage</th>
<th>Mixed Assets</th>
<th>Ships</th>
<th>Total</th>
</tr>
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<tr>
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<td>0</td>
<td>8.098</td>
</tr>
<tr>
<td>Hungary</td>
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<tr>
<td>Canada</td>
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<td>0</td>
<td>6.574</td>
</tr>
<tr>
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<tr>
<td>Greece</td>
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<td>5.000</td>
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<tr>
<td>Slovakia</td>
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<td>3.614</td>
<td>0</td>
<td>3.614</td>
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<tr>
<td>Poland</td>
<td>137</td>
<td>561</td>
<td>0</td>
<td>698</td>
</tr>
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<td>Iceland (e)</td>
<td>0</td>
<td>300</td>
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<td>300</td>
</tr>
<tr>
<td>Latvia</td>
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<td>95</td>
<td>0</td>
<td>95</td>
</tr>
<tr>
<td>Ukraine</td>
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<td>772.999</td>
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<td>80.631</td>
<td>2.384.921</td>
</tr>
<tr>
<td>%</td>
<td>32%</td>
<td>64%</td>
<td>3%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: EMF/ECBC

Note: In Denmark, due to the refinancing activity of interest reset loans based on bullet bonds at the end of the year, both the new bonds issued for refinancing and the bonds they are replacing are in _ultimo_ figures. If one takes the figures as of 31.01 2009, the total outstanding for the Danish market would be EUR 48 bn less.

In Spain, the data on the table only includes the volume of issuances/outstanding listed in the national market through AIAF. Covered Bonds listed outside AIAF (e.g. USA, London, Luxemburg, etc.) are not included in the Statistics.

In France, the column "mixed assets" refers to the Covered Bonds of Compagnie de Financement Foncier, where the mortgage and public sector assets are put in the same pool and as such, no specific asset is linked to a specific bond issue.

In Austria and Iceland, the figures are estimates.

### 2.1.9 BENCHMARK COVERED BONDS

The Benchmark Covered Bond market constitutes the most liquid segment of the Covered Bond market. A Benchmark-format Covered Bond is a Euro-denominated, bullet maturity, fixed annual coupon bond with a defined minimum outstanding volume (in most cases EUR 1 bn). In order to enhance secondary market liquidity, the investment banks involved in bringing benchmark covered bonds to the market are committed to act as market-makers and quote two-way prices to investors and other market-makers. As a result of the financial crises, the price-quotting among market-makers came to an almost complete stop. However, price-quotting for investors was more robust, albeit at bid-offer spreads which were in line what investors experienced in other segments of the distressed fixed income market (e.g. non-core government bonds, agency bonds, etc...). The ECBC is actively contributing to an industry-driven solution to restore secondary market liquidity. In that context, an encouraging signal was the ECB decision to launch a covered bond purchase program, which has among others the aim to improve market liquidity (see article in Chapter 1).

Benchmark Covered Bonds are primarily issued with maturities between 5 and 10 years, but shorter maturities of minimum 2 years and long maturities of 15, 20 years and longer play a role as well. The current total outstanding volume of the benchmark Covered Bond market is approximately EUR 840 bn (approx. 13% of liquid Euro-denominated bonds). Thus, the benchmark Covered Bond market is the second largest bond market in Europe after Government bond markets.

To increase the possibilities for trading, benchmark Covered Bonds were first introduced on the German market in 1995 under the name of Jumbo Pfandbriefe. Since then, the Jumbo market has grown very
fast, and has strongly advanced international trade in Covered Bonds. So far, benchmark Covered Bonds have been also introduced in, Denmark, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland, Sweden, the UK, Norway, Canada and the USA.

> Chart 4 – Benchmark Covered Bond Supply

<table>
<thead>
<tr>
<th>Outstanding Benchmark Covered Bonds (EUR 840 bn - July 2009)</th>
<th>New Issuance Benchmark Covered Bonds by market segment</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="chart" alt="Pie chart showing distribution of outstanding benchmark covered bonds" /></td>
<td><img src="chart" alt="Bar chart showing new issuance by market segment" /></td>
</tr>
</tbody>
</table>

Source: Market data, SG CIB; Other comprise Austria, Italy, Portugal, USA, Canada

2.1.10 WHO INVESTS IN COVERED BONDS?

Covered Bonds are attractive financial investments because they offer excellent credit quality, secondary market liquidity, international diversification and a large choice of maturities. Moreover, Covered Bonds enjoy privileged treatment in different areas of EU financial market regulation.

From a credit risks perspective, Covered Bonds are placed between government bond markets and unsecured financial resp. corporate bond markets. Due to the strong bondholder protection and the nature of the cover assets, Covered Bonds are not completely correlated with government bonds or with financial/corporate bonds. As a result, they offer interesting diversification opportunities to investors.

The investors of Covered Bonds range from small private investors to large institutional investors, the latter dominating the Benchmark Covered Bond market. The main groups of institutional Covered Bond investors are credit institutions, investment funds, pension funds, insurance companies and central banks. In terms of geographical distribution, demand for Benchmark Covered Bonds becomes increasingly international with Germany, Scandinavia, France, Spain, Ireland, The Netherlands and the UK being the major investor areas.

The trend towards longer maturities, which dominated the primary Benchmark Covered Bond market in the past years, has reversed during the financial crisis, but returned in 2009. While in 2007 new issuance
in maturities under 5Y accounted for 32% of total new Benchmark Covered Bond issuance, this share reached 65% in 2008, but fell to 16% in 2009 year-to-date.

> Chart 5 – Benchmark Covered Bond Primary Market Placement by country / geographical area (averages 2009)

Source: SG CIB

> Chart 6 – Benchmark Covered Bond Primary Market Placement by type of investor (averages 2009)

Source: SG CIB
ANNEX: ECBC ESSENTIAL FEATURES OF COVERED BONDS

The ECBC sets out below what it considers to be the essential features of covered bonds, together with explanatory notes\(^6\). It is intended that they to be read independently from any other definition or interpretation of covered bonds, such as those set out in the undertakings for collective investment in transferable securities (UCITS) and paragraph 68, Annex VI of the Banking Consolidation Directive (BCD).\(^7\) These common essential features should be understood as the ECBC’s minimum standards for covered bonds.

**Essential Features**

Covered bonds are characterised by the following common essential features that are achieved under special-law based frameworks or general-law based frameworks:

1. The bond is issued by—or bondholders otherwise have full recourse to—a credit institution which is subject to public supervision and regulation;
2. Bondholders have a claim against a cover pool of financial assets in priority to the unsecured creditors of the credit institution;
3. The credit institution has the ongoing obligation to maintain sufficient assets in the cover pool to satisfy the claims of covered bondholders at all times;
4. The obligations of the credit institution in respect of the cover pool are supervised by public or other independent bodies.

**Explanatory Notes**

*Covered bonds are characterised by the following common essential features that are achieved under special-law based frameworks or general-law based frameworks*

**Special-law based frameworks**

A special-law based framework is a legal framework based on a law and/or binding regulations of a public supervisory authority, specifically dedicated to regulate a covered bond system of a country. As of December 2007, special-law based frameworks exist in 26 countries in Europe. Bonds issued in accordance with a special covered bond law may benefit from preferential risk weightings in the hands of certain regulated investors, depending on the jurisdiction of the investor and whether the bond otherwise meets the requirements of Article 22(4) of UCITS and paragraph 68, Annex VI of the BCD.

**General-law based frameworks**

A general-law based framework is a legal framework based on general law (such as contract law) or on law and/or regulations of a country not specifically dedicated to regulate a covered bonds system. As of December 2007, covered bonds based on general law-based frameworks exist in five countries worldwide.

1. **THE BOND IS ISSUED BY—OR BONDHOLDERS OTHERWISE HAVE FULL RECOURSE TO—A CREDIT INSTITUTION WHICH IS SUBJECT TO PUBLIC SUPERVISION AND REGULATION;**

**Full recourse**

A full recourse right creates an unrestricted unconditional obligation on the credit institution to repay a debt. Generally, default on a full recourse obligation leads to the insolvency of the obligor, and the

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\(^6\) The Essential Features of Covered bonds can be downloaded from the ECBC website: [http://ecbc.hypo.org/content/default.asp?pageID=367](http://ecbc.hypo.org/content/default.asp?pageID=367)

\(^7\) Also known as the Capital Requirements Directive (CRD). See 2006/49/EC and 2006/48/EC.
creditor will have a claim on the general insolvency estate of the obligor on an equal basis with the other
general creditors of the obligor.

In most covered bond structures, the bond is issued by a credit institution, giving investors direct full
recourse to the credit institution’s full resources. In some structures, however, the covered bond is issued
by a special purpose entity (SPE), which on-lends the proceeds to a credit institution (whether by making
a loan or buying a bond). This provides bondholders with full recourse to the underlying credit institution,
albeit indirectly, through the SPE. For investors subject to the BCD, only covered bonds issued directly
by a credit institution qualify for preferential risk weightings.

Full recourse to a credit institution is a key difference between securitisation and covered bonds. In
securitisations, bondholders’ only recourse is to the cashflows from a securitised portfolio of assets.
The credit institution which originated the assets typically does not guarantee the performance of the
securitisation. Therefore, if the cashflows from the securitised portfolio are insufficient to make payments
on the securitisation units when expected, holders of the units would generally have no claim against
the credit institution which originated the securitised assets.

A credit institution which is subject to public supervision and regulation
A credit institution is an entity licensed to carry on one or more banking activities, such as receiving
deposits from the public, granting loans or providing payment services. Credit institutions are distinct
from corporates in that—owing to their importance to the financial system—they are subject to public
supervision and regulation which prescribes standards for the management of credit, liquidity, interest
rate and operational risks.

2. BONDHOLDERS HAVE A CLAIM AGAINST A COVER POOL OF FINANCIAL ASSETS IN
PRIORITY TO THE UNSECURED CREDITORS OF THE CREDIT INSTITUTION;

Financial assets
Financial assets include loans, bonds and similar instruments, as well as derivatives designed to hedge
interest and currency risks. Financial assets do not include equity securities, real property, commodities
or tangible property. The most common cover assets are mortgage loans secured on residential or
commercial property (or securitisation units backed by residential or commercial mortgage loans),
mortgage loans secured on ships and loans to public sector entities. Most cover pools also include cash
deposits and loans against credit institutions.

All covered bonds contain minimum cover pool asset quality standards. For covered bonds issued under
a special law, these quality standards are set out in the law itself and/or binding regulations; however
these may also be supplemented by contract. Where the covered bond is issued under general law, these
quality standards are set out in the contracts which govern the covered bond issuance.

The BCD also imposes certain minimum standards for cover pool assets. For investors subject to the
BCD, only covered bonds with BCD-compliant and national legislation compliant cover pools are eligible
for preferential risk weightings.

Cover pool; priority to unsecured creditors
A cover pool is a clearly identified, “ring-fenced” pool of assets dedicated to secure the covered bonds.
That is to say, in the event of the insolvency of the credit institution, the assets in the cover pool will
be used to repay the covered bondholders before they are made available for the benefit of the credit institution’s unsecured creditors.

The method used to “ring-fence” the cover pool varies. In most jurisdictions, the special law either excludes the cover pool from the insolvency estate of the credit institution, or provides covered bondholders with a preferred claim within the insolvency estate itself. In some jurisdictions, the cover pool is preserved from the insolvency estate of the credit institution by being transferred to an SPE, which guarantees the credit institution’s obligations under the covered bond. Finally, some structures use the implementation of European Collateral Directive in their jurisdiction to pledge the cover pool assets.

3. THE CREDIT INSTITUTION HAS THE ONGOING OBLIGATION TO MAINTAIN SUFFICIENT ASSETS IN THE COVER POOL TO SATISFY THE CLAIMS OF COVERED BONDHOLDERS AT ALL TIMES;

Sufficient assets
The value of the cover pool assets meeting the minimum quality criteria described above must be at least equal to the value of the covered bonds.

In most jurisdictions, the value of the cover pool is required to exceed the value of the covered bonds by a prescribed amount, known as overcollateralisation. The minimum level of overcollateralisation is set by the special law or within the contracts governing the covered bond issuance. In some cases, the minimum level of overcollateralisation may be set by a combination of the two—the covered bond law prescribing a minimum level of overcollateralisation, but the credit institution committing to a higher level through either voluntary, non-binding commitments or contract.

Ongoing obligation
The credit institution has the obligation to ensure that the value of cover pool assets meeting the minimum quality criteria described above is equal to or higher than the value of the covered bonds at all times. The credit institution may therefore be required to add further assets to the cover pool to compensate for matured or defaulted assets. In addition, the credit institution may be required to comply with specific provisions for mitigating different kinds of risks related to the management of cover pool and covered bonds, such as interest rate risk, FX risk or maturity mismatch.

In securitisations, by contrast, the sponsoring credit institution is generally not compelled to replace assets which enter into default after they have been transferred into the securitisation portfolio. Therefore, if defaults in the securitised portfolio are higher than anticipated when the securitisation was issued, the resulting losses will be borne by the investors in the securitisation, rather than by the sponsoring credit institution.

4. THE OBLIGATIONS OF THE CREDIT INSTITUTION IN RESPECT OF THE COVER POOL ARE SUPERVISED BY PUBLIC OR OTHER INDEPENDENT BODIES.

Supervision of the credit institution’s obligations in respect of the cover pool (“special” supervision) is supervision specifically for the benefit of covered bondholders, as opposed to supervision relating to the general stability of financial or other markets, general customer interest, deposit protection, and the like.

Special supervision is therefore distinct from the general supervision of the credit institution referred to in paragraph 1 above. Each form of supervision is an “essential feature” common to Covered Bonds, as listed above.
The content and the level of the “special” supervision in respect of the cover pool varies from one system to another.

Typical features of “special” supervision include:

• a special cover pool monitor
• periodic audits of the cover pool by the cover pool monitor
• ongoing management and maintenance of the cover pool upon the credit institution’s insolvency to ensure the timely payment of covered bondholders.

In special-law based frameworks, the task of special supervision is usually assigned to public authorities and the issuer is required to obtain a licence to issue covered bonds. In many countries, this public authority is the banking supervision authority; in others, the capital market supervision authority; in some, both. These public authorities will also appoint or approve the cover pool monitor, and these authorities may also conduct their own audits of the cover pool from time to time.

Special public supervision is a condition of Art. 22 (4) of the UCITS directive and of several other EC directives (including those regarding insurance companies and deposit insurance), making bonds which are subject to special public supervision eligible for favourable investment limits for certain investors. In addition, for investors subject to the BCD, only covered bonds subject to special public supervision are eligible for preferential risk weightings.

In covered bonds issued under general law frameworks, the key features of special supervision are replicated by contract, to the extent possible. Therefore, for example, the issuing or sponsoring credit institution will appoint an external auditor to audit the cover pool, and an external trustee will be appointed to safeguard bondholders’ interests: changes to the contractual documents which set the terms of the programme may not be changed without the consent of the trustee, for example.
2.2 RMBS VS. COVERED BONDS

SPREADS OF COVERED BONDS HELD-UP WELL COMPARED WITH ABS

Given that holders of Covered Bonds have a claim against an issuing bank and a pool of mortgage (or public sector) collateral, spreads of Covered Bonds are typically tight compared to senior bank bonds and mortgage backed securities (MBS). Whereas spreads of Covered Bonds widened significantly versus swaps in 2008 they held up extremely well compared with MBS and tightened significantly in H1 2009, in line with other liquid credits like agencies, supras, sub-sovereigns and state guaranteed bonds.

> COVERED BOND SPREADS DIFFER SIGNIFICANTLY BETWEEN DIFFERENT COUNTRIES

Source: iBoxx, Deutsche Bank

> SPREADS OF SENIOR BANK BONDS TIGHTENED SIGNIFICANTLY IN H1 2009

Source: iBoxx, Deutsche Bank
Despite significant rally in H1 2009, European ABS continue to trade wide

Source: iBoxx, Deutsche Bank

**RECOVERY OF NEW ISSUANCE OF EUR JUMBO COVERED BONDS IN Q2 2009**

While new issuance of EUR Jumbo Covered Bonds declined by 45% in Q1 2008 versus Q1 2007 (and most of the new issuance was done in short dated covered bonds), the market for MBS was almost completely closed. Since start of the financial market crisis, EUR Jumbo covered bond issuance increasingly fell victim to state guaranteed benchmark bonds. However, Q2 2009 showed a significant recovery of new issuance of EUR Jumbo covered bonds (also driven by the ECB announcement to buy covered bonds) while the primary market for publicly issued RMBS was still almost completely shut (given the loss of key investors such as SIVs, conduits, money market funds and some bank treasuries).

> *June 2009 supply of EUR Jumbo covered bonds surpassed June 2008 supply*

Source: Deutsche Bank

Issued RMBS volumes were still overwhelmingly dominated by banks’ securitize-and-repo exercises.
Since pre-crisis, most European securitisation issues have been retained.

Source: Deutsche Bank

Increasing issuance of EUR Jumbo Covered Bonds and decreasing issuance of GG Bonds in Q2 2009.

Source: Deutsche Bank
Pre-crisis the boundaries between Covered Bonds and MBS became blurred. In some jurisdictions, MBS are eligible as collateral for Covered Bonds in France, Italy, Ireland and Luxembourg. Covered Bonds were used as collateral within synthetic securitisation transactions (e.g. senior notes of several Geldilux deals). Covered Bonds are often contracted beyond the structure stipulated by the legal framework. So called structured (or general law based) Covered Bonds are structured with the help of securitisation techniques to replicate the dual claim characteristic for covered bonds (e.g. French and Canadian structured covered bonds). Given the change in the market environment and the extremely wide spreads for MBS, the market perception of convergence of covered bonds and MBS seems over for the foreseeable future. Regulators and central banks seem to have the same view. E.g. whereas regulators increasingly support covered bonds, MBS face more restrictions. Moreover, the ECB claims a lack of transparency of ABS in general, but did not criticize covered bonds in this respect (even though cover pool transparency is typically lower than in case of ABS).

Covered Bonds are an on balance sheet funding tool

In contrast to securitisations, in case of Covered Bonds, the assets are usually on the balance sheet of the issuer. Structures like French structured Covered Bonds, despite being issued by a credit institution, a specialized Covered Bond bank, could be seen as a SPV specifically dedicated to the issuance of Covered Bonds. The specialized issuer uses the issuing proceeds to grant loans to operating bank, the originator of the mortgage loans. The operating bank keeps the mortgage loans on its balance sheet and pledges them to guarantee the loans received from the Covered Bond bank.

Covered Bond holders have recourse against a bank

The crucial difference between Covered Bonds and MBS is that Covered Bond holders have recourse against a bank, not only the underlying assets transferred to a SPV like MBS. Hence, investors have a dual claim. Some MBS issuers highlight that there is a high correlation between the credit quality of the cover pool assets of Covered Bonds and the credit quality of the issuer. In case the cover pool credit quality worsens, the issuer credit quality will also worsen. However, in such a scenario, the real security of Covered Bonds is that the issuing bank (or the parent company) might be ‘too big to fail’ and hence receive external support. In our view, this is one of the main reasons for Covered Bonds outperforming MBS at the beginning of the financial market crisis. At the end of the day, Covered Bonds are bank bonds. The preferential claim on the cover pool is only an add-on, something which may be valued more or less by investors. This was also confirmed by the financial market crisis. Whereas there was no support for MBS, i.e. investors were fully exposed to the risk of the underlying assets and the structure they bought, there was strong support for covered bonds via support for the issuing banks in numerous cases (e.g. WAMU, Northern Rock, Bradford and Bingley, Hypo Real Estate, Depfa, Duesseldorfer Hypothelenbank, Kaupthing covered bonds).

Covered Bonds have a dynamic cover pool

Covered Bonds are typically backed by all loans in the cover pool. (Besides some Eastern European covered bonds) There is no connection between a specific cover pool or single loans and outstanding Covered Bonds like typically in case of MBS. In case of issuer insolvency no further assets will typically
be added to the cover pool and no further Covered Bonds will be issued. As long as the issuer is solvent, the issuer or the originator actively manages the cover pool.

**MBS HAVE TYPICALLY A STATIC POOL AND CREDIT ENHANCEMENT BY TRANCING**

Generally, Covered Bond holders bear the risk resulting from the system of a dynamic pool i.e. the cover pool administrator loses the capability to bring in sufficient new assets in order comply with the coverage regulations. As Covered Bonds typically have a fixed rate bullet structure, the cover pool has to be constantly ‘refilled’, i.e. mortgage loans becoming due have to be reinvested. This can lead to higher credit and market risk in the cover pool compared to AAA-rated tranches of MBS transactions. Generally, a dynamic cover pool creates the need of an accurate asset liability management including stress test scenarios. Apart from the credit risk of the cover pool assets, the main risks are the potential lower yield of newly added assets (negative carry risk as a result of differing amortization profiles of Covered Bonds and cover assets) and the management of the interest rates risks between the fixed rate Covered Bonds and variable rates mortgage loans. As a result of the dynamic pool, Covered Bonds typically have a longer maturity than MBS. On the other hand, one of the main risks of AAA-MBS are strongly extended maturities. As MBS typically do not have bullet maturities, significantly lower pre-payments (like during the financial market crisis) makes maturity extensions of AAA-MBS very likely. This could easily happen with any credit risk related losses on AAA- tranches and is not the case in covered bonds.

In MBS, the highest credit risk is concentrated in the subordinated tranches following the ‘tranching’ of the mortgage portfolio where losses hit first. Investors have no recourse against the originator of the assets, and the risk is limited to the pool of assets which has been securitized. MBS cover pools are, in most cases, static in the sense that even if assets can be substituted after a deal’s launch (for instance in UK MBS Master Trusts), these additional assets do not benefit the investors as such in an ‘old’ issue. The underlying pool of mortgage loans decreases over time due to borrowers paying back their obligations. MBS Master Trusts also have revolving cover pools where principal repayments are being re-invested in new assets, subject to a set of eligibility criteria/concentration limits that the underlying assets have to adhere to on a single asset and on a portfolio level. Nevertheless, investors are exposed to the performance of the pool. Bad performance of the portfolio erodes investor protection. Investors in MBS only bear the risk arising from these mortgage loans and are independent from the credit risk of the respective (former) owner of such assets (the originator/seller e.g. a bank).

**CONCLUSION**

MBS investors are exposed to the risk of underperformance of the cover pool and maturity extension due to lower pre-payments. Covered Bonds are banks bonds and holders of Covered Bonds benefit from the support of the issuing bank and every external support provided to the issuing bank.

Hence, Covered Bond holders are not limited to cover pool assets and hence are not necessarily directly impacted by lower pre-payments or a worsening asset quality. While state guaranteed benchmark bonds issuance almost completely substituted EUR Jumbo covered bond issuance during the financial market crisis, new issuance of EUR Jumbo covered bond recovered substantially in Q2 2009. Also driven by increasing regulatory and central bank support, covered bonds are likely to continue to be an important funding tool for banks in the post-crisis financial market architecture.
This chapter gives an overview on the treatment of covered bonds under the European Commission’s capital requirements framework for banks, Directive 2006/48/EC, the Capital Requirements Directive (CRD). It also informs about proposals provided by the Committee of European Banking Supervisors (CEBS) with regards to the use of options and national discretions in the CRD.

CRD refers to UCITS 22(4) and additionally stipulates a series of eligibility criteria for cover assets

In June 2006, the European Commission published the CRD in its Official Journal. It basically became effective on 1 January 2008. The special treatment of covered bonds is an important feature of the CRD as it goes beyond the Basel II framework. With regards to covered bonds, the CRD text (Annex VI, PART 1, paragraph 68-70) refers to the criteria of Article 22 (4) of the EU Directive 85/611 (Directive on Undertakings of Collective Investment in Transferable Securities or UCITS). UCITS 22(4) gives a legal definition of a covered bond along the following lines:

- The covered bond must be issued by an EU credit institution.
- The credit institution must be subject to special public supervision by virtue of legal provisions protecting the holders of the bonds.
- The investment of issuing proceeds may be effected in eligible assets only; the eligibility criteria are set by law.
- Bondholders’ claims on the issuer must be fully secured by eligible assets until maturity.
- Bondholders must have a preferential claim on a subset of the issuer’s assets in case of issuer default.

Beyond these more formal rules, a series of eligibility criteria for cover assets were stipulated. According to these criteria, the asset pool of a covered bond may include:

1) Exposures to or guaranteed by central governments, central banks, public sector entities, regional governments and local authorities in the EU.

2) Exposures to or guaranteed by non-EU central governments, non-EU central banks, multilateral development banks, international organisations with a minimum rating of AA- and exposures to or guaranteed by non-EU public sector entities, non-EU regional governments and non-EU local authorities with a minimum rating of AA- and up to 20% of the nominal amount of outstanding covered bonds with a minimum rating of A-.

3) Substitute assets from institutions with a minimum rating of AA-; the total exposure of this kind shall not exceed 15% of the nominal amount of outstanding covered bonds; exposures caused by transmission and management of payments of the obligors of, or liquidation proceeds in respect of, loans secured by real estate to the holders of covered bonds shall not be comprised by the 15% limit; exposures to institutions in the EU with a maturity not exceeding 100 days shall not be comprised by the AA- rating requirement, but those institutions must as a minimum qualify for an A- rating.

4) Loans secured by residential real estate or shares in Finnish residential housing companies up to an LTV of 80% or by senior RMBS notes issued by securitisation entities governed by the laws of a Member State, provided that at least 90% of the assets of such securitisation entities are composed
of mortgages up to an LTV of 80% and the notes are rated at least AA- and do not exceed 20% of the nominal amount of the outstanding issue.

5) Loans secured by commercial real estate or shares in Finnish housing companies up to an LTV of 60% or by senior CMBS notes issued by securitisation entities governed by the laws of a Member State provided that at least 90% of the assets of such securitisation entities are composed of mortgages up to an LTV of 60% and the notes are at least rated AA- and do not exceed 20% of the nominal amount of the outstanding issue; national regulators may allow also for the inclusion of loans with an LTV of up to 70% in case a minimum 10% over-collateralisation is established and such over-collateralisation is protected in case the respective issuer is subject to insolvency procedures; in addition, ship mortgage loans with an LTV of up to 60% are allowed.

Until 31 December 2010, the 20% limit for RMBS/CMBS notes as specified in (d) and (e) does not apply, provided that those securitisation notes are rated AAA. Before the end of this period, the derogation shall be reviewed and consequent to such review the EC may, as appropriate, extend this period.

Standardised and internal ratings-based options

As with other categories of risk exposures, the assessment of risk weightings is conducted within the context of either a revised standardised approach (RSA) or an internal ratings-based approach (IRBA). The latter comes in both foundation and advanced forms. Application to individual banks depends on the level of sophistication of their risk management systems.

The RSA links covered bond risk weights to those of the issuers’ senior debt

Under the revised standardised approach (RSA), covered bonds are assigned a risk weight on the basis of the one attributed to senior unsecured exposures to the credit institution which issues them. For banks with a senior weighting of 50%, the covered bond weighting has been reduced to 20%. In contrast, banks with a senior, unsecured risk weight of 150% will have a covered bond weight of 100%. The correspondence between senior and covered bond risk weights is as follows:

<table>
<thead>
<tr>
<th>Senior Unsecured risk weight</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covered bond risk weight</td>
<td>10</td>
<td>20</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: European Commission.

The Basel Committee has set up two ways of linking bank credit ratings to bank risk weightings, which link the bank risk weighting to the credit rating of the home country sovereign or to that of the bank itself. This approach has also been followed in the EC directive. On this basis, the correspondence of covered bond risk weightings to issuing bank credit ratings under the two calculation methods is shown in Figure 2 and Figure 3.
So, for example, under Option 1, if a bank is based in a country with a sovereign rating of AA- or better, its senior debt will be assigned a risk weighting of 20% and its covered bonds a weighting of 10%. For investing banks whose regulator applies Option 1, all banks within the EU, except for Greece and Malta, would attract a 20% risk weighting on senior unsecured debt because their sovereign ratings are all at least AA-/Aa3 (except for Greece and Malta, which are single-A). Hence, under this option, most EU covered bond issues would be assigned a risk weighting of 10%.

In contrast, Option 2 introduces more differentiation in risk weightings as the determining factor is the credit rating of the individual issuing bank. For banks that have a credit rating of less than AA-, this leads to a senior unsecured risk weighting of 50% and a covered bond weighting of 20%. The choice between Options 1 and 2 is at the discretion of national regulators. Figure 4 below gives an overview on how EU countries decided on the respective options.

The IRBA specifies functions for deriving risk weights from inputs on risk components

Under the IRBA, banks that have been so authorised by their regulators can determine their capital requirements on the basis of internally generated estimates of the risk of loss on their assets. These estimates require inputs relating to the one-year probability of default (PD), the loss given default (LGD), the exposure at default (EAD) and the effective maturity (M), which are combined to give capital requirements and risk weightings using functions specified by the Basel Committee and the EC (which in most cases are broadly comparable). Variations on the standard functions are provided to apply to different groups of assets, such as retail exposures and securitisations.

Two levels of IRBA have been established, namely the foundation and advanced levels. Those banks qualifying only for the foundation IRBA are allowed to provide their own estimates only of PD; the other risk components are provided by the regulator. Banks qualifying for the advanced approach are allowed to provide their own estimates of all the risk components, subject to any constraints that may be specified by the regulator.
EC specifies constraints on key risk components for covered bonds

The Basel framework for IRBA calculations makes no separate reference to covered bonds. However, the CRD provides a specific framework for calculating internal ratings-based risk weights for covered bonds. (non-EC based banks applying the Basel framework to covered bonds would have to treat them as senior bank debt.) The EC legislation specifies constraints on risk components as follows:

- PD (which relates to issuer rather than issue default risk) must be at least 0.03%.
- LGD should be assigned a value of 12.5% and 11.25% in case all exposure to public sector entities and all substitute assets have a minimum rating of double-A minus, securitisation notes make up only up to 10% of the total nominal amount of outstanding covered bonds, no ship mortgages are included in the cover pool OR the respective covered bonds are rated triple-A. For banks applying the advanced version, a lower LGD is possible. Historical data for residential mortgage assets underline that LGD levels are basically below 10%.
- M, the effective maturity of the bond, is limited to a range of one to five years. For the foundation approach, regulators may specify an effective maturity of 2.5 years for all bonds. All banks using the advanced approach would have to apply this maturity range.

**Figure 4: National discretions regarding Options 1/2 in the RSA and the calculation of M in the IRBA across EU countries**

<table>
<thead>
<tr>
<th>Country</th>
<th>Within the RSA, exposures to institutions are assigned according to Option 1 (central government risk weight based method) ?*</th>
<th>Explicit maturity adjustment required under IRBA?**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Belgium</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Bulgaria</td>
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<td>No</td>
</tr>
<tr>
<td>Cyprus</td>
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<td>Yes</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Germany</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Denmark</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Estonia</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Greece</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Spain</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Finland</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>France</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Hungary</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Ireland</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Italy</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Lithuania</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Latvia</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Malta</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Netherlands</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Within the RSA, exposures to institutions are assigned according to Option 1 (central government risk weight based method)?*

Explicit maturity adjustment required under IRBA?**

<table>
<thead>
<tr>
<th>Country</th>
<th>Within the RSA, exposures to institutions are assigned according to Option 1 (central government risk weight based method)?*</th>
<th>Explicit maturity adjustment required under IRBA?**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Portugal</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Romania</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Sweden</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Slovenia</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Slovakia</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note: * within the scope of CRD Article 80 paragraph 3 and Annex VI Part 1 Paragraph 6.3; ** according to CRD Annex VII Part 2 Paragraph 12; Source: Committee of European Banking Supervisors (CEBS), Barclays Capital.

As the majority of covered bonds are rated AAA or comply with the criteria for the application of an 11.25% LGD level, our illustrations of risk weightings are based on an 11.25% LGD. Also, we illustrate figures for the range of possible effective maturities, as well as the central 2.5 yr case.

The room for discretion on the part of individual banks is limited, given the constraints on the specification of LGD and M. For PD, the default probability input, one-year default probabilities published by the rating agencies provide at least a starting point.

Figure 5: Rating agency cumulative one-year default rates (%)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA/Aaa</td>
<td>0.00</td>
<td>0.00</td>
<td>0.01</td>
</tr>
<tr>
<td>AA/Aa</td>
<td>0.03</td>
<td>0.02</td>
<td>0.08</td>
</tr>
<tr>
<td>A/A</td>
<td>0.08</td>
<td>0.03</td>
<td>0.13</td>
</tr>
<tr>
<td>BBB/Baa</td>
<td>0.24</td>
<td>0.18</td>
<td>0.58</td>
</tr>
<tr>
<td>BB/Ba</td>
<td>0.99</td>
<td>1.15</td>
<td>1.49</td>
</tr>
</tbody>
</table>

Source: S&P, Moody’s, Fitch.

These figures reflect default history for corporates globally, so there may be reservations about their applicability to European banks. The different periods used in the agencies’ surveys complicate comparisons, but the divergences in their figures highlight that this is not a precise science. Standard risk management caution would counsel using the highest figure in each of these comparisons.

Default probabilities produced by risk models used by individual banks may also show some variation from these figures. Our impression is that bank risk models generally operate on the basis of higher default probabilities than the rating agencies’ historical studies suggest and that banks apply more differentiation than is provided by the rating agencies’ broad alphabetic bands.

Figure 6 provides an illustrative matrix of risk weightings based on plugging a range of different default probabilities and the average life figures in the EC functions.
The 0.03% floor for PD is likely to be applied by most risk models, at least down to banks rated at the bottom of the AA range. For covered bonds issued by banks in this top category, the risk weighting will range from 2.0% to 6.9% depending on maturity. This represents a significant capital saving relative to the risk weightings under the RSA. It also highlights that in the IRBA, the risk weighting is significantly affected by the remaining life of the bond, which is not the case in the RSA. Banks applying the IRBA will have a significant incentive in terms of capital utilisation to invest in shorter maturities.

The general point here is that different banks may use differing assumptions about default probabilities, and Figure 6 provides a matrix from which readers can derive or interpolate risk weightings based on their own assumptions. The matrix also highlights the importance of the assumption regarding the effective maturity requirement specified by individual regulators. In the event that all bonds are given a value of 2.5 for M, all covered bonds from issuers with senior ratings of A- or better would have a risk weighting of less than 10%. If regulators apply the range of one to five years for M, the 10% threshold moves up to A flat to A+ issuers for longer-dated covered bonds.

**Implementation of CRD and consultation on national discretions**

The final agreement on CRD was the starting signal for regulators and lawmakers in EU countries to implement the new capital adequacy regime in national regulations. The Committee of European Banking Supervisors (CEBS) provides an overview on the use of options and national discretions used by individual countries when introducing the CRD. Following CRD implementation within the EU, the focus has been on consistency across EU countries. This is important in order to optimise regulatory efficiency and maximise clarity for the financial services industry, which frequently operates in several jurisdictions. On this background, the EU Commission asked CEBS for technical advice on options and national discretions in the CRD on 27 April 2007. Following discussions with industry experts, on 22 May 2008, CEBS published a consultation paper which was setting out its preliminary views. CEBS suggests to keep as a national discretion approximately one fifth of the 152 provisions covered in its analysis. On 17 October 2008, CEBS

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8 http://www.c-ebs.org/sd/Options.htm
published its response and final advice\textsuperscript{11} in which CEBS suggested to keep as a national discretion 28% of the 152 provisions covered in its analysis.

With respect to covered bond, the final paper did not contain any specific proposals. Thus the discretion provided in CRD Annex VI Part 1 point 68 (e) regarding the recognition of commercial mortgage cover pools with a higher LTV level of 70% was kept in place. Similarly, the discretion regarding Annex VII Part 2 point 8 (2nd subparagraph) with regards to the transitional provision regarding the assignment of an 11.25% LGD to covered bonds in case certain conditions are met were maintained.

**Refinements and Amendments to the CRD**

In the course of 2008, the European Commission ran a number of public consultations for a refinement of the CRD. This has been mainly in three areas: (1) large exposures, hybrid capital instruments supervisory arrangements, the waivers for cooperative banks organized in networks and adjustments to certain technical provisions, (2) an adjusted proposal for securitisations and other risk transfer products and (3) trading book requirements for “incremental risk”. Surprisingly. The European Parliament, in its draft report on the spring 2009 CRD review discussed a reduction of the 100% exemption for covered bonds for large exposures to 75% and a restriction for the issuance of covered bonds to 50% of a credit institutions assets. In the meantime, however, these proposals were withdrawn.

CHAPTER 3 - THE ISSUER’S PERSPECTIVE
3.1 AUSTRIA

I. FRAMEWORK

Austria has three different frameworks under which Covered Bonds can be issued. These are:

1. Hypothekenbankgesetz: Mortgage Banking Act (Law of 7/13/1899)
3. Pfandbriefgesetz: Mortgage Bond Act (Law of 12/21/1927, last amended June 1, 2005)

Under these laws banks can issue two kinds of Covered Bonds, Pfandbriefe which are issued under the Mortgage Banking Act and Mortgage Bond Act, and Fundierte Bankschuldverschreibungen (FBS) issued under the Law on Secured Bank Bonds.

II. STRUCTURE OF THE ISSUER

The Mortgage Banking Act does stipulate a specialist banking provision and this would apply for any new mortgage banks. In practice, due to grandfathering of bonds issued before the law was implemented, exceptions are allowed and, in practice, all types of commercial banking activity are allowed. The Mortgage Bond Act applies to public-sector banks. And the Law on Secured Bank Debenture is applicable for all other issuers.

Under all frameworks, the issuer holds the assets on the balance sheet and the assets are not transferred to a separate legal entity. This means that the Covered Bonds are an unconditional obligation of the issuer, rather than a direct claim on the cover assets. In the case of insolvency of the issuer, the cover assets will be separated from the rest of the assets and a special cover pool administrator will be appointed. The Covered Bond holders have a preferential claim on the cover assets.

III. COVER ASSETS

The cover pools have either mortgage-backed or public-sector assets. So Pfandbrief and Fundierte Bankschuldverschreibungen (FBS) will either be backed by mortgages or public-sector assets, but not a mixture of the two.

For mortgage cover pools, there are no restrictions on assets from Austria; assets from the EEA and Switzerland are allowable but must be from countries where the preferential claim of Pfandbrief holders is recognised. EEA countries that do not recognise a preferential claim are limited to 10% of domestic assets. For public-sector cover pools, the geographic scope extends to the EEA and Switzerland and can have a maximum risk-weighting of 20%.

The limits for FBS are similar, for public bonds loans to central governments and sub-sovereigns in EEA countries and Switzerland with a limit of 20% on the risk weighting. Other eligible bonds are those which have "Mündelgelder" status, this is a legal term which means safe bonds. Claims or loans which have a lien registered in a public book are also considered eligible assets.

Asset-backed securities are not eligible for the cover pool.
Derivative contracts are allowed in the cover pool and the Austrian legislation allows for interest rate currency and credit derivatives. The Austrian legislation is in fact the only one that permits credit derivatives. Derivatives are only allowed for hedging and there is no limit in place on the volume of derivatives in the cover pool.

Substitution assets are allowable for Austrian Covered Bonds but there is a limit of 15% to the total volume of Covered Bonds outstanding. The substitute assets must be liquid and can comprise of cash, bank deposits and bonds from public issuers from EEA countries and Switzerland.

The June 2005 amendment to the Covered Bond legislation introduced the exclusion of set-off rights of credit users for mortgage bonds. Banks now need to inform customers that loans will be introduced into the cover pool and state that loans in the cover pool are not subject to compensation. Set-off statements for derivative counterparties are admissible when they refer to claims and liabilities from the same Master Agreement.

IV. VALUATION AND LTV CRITERIA

The valuation of property is treated differently, depending on which legislation you look at. The Mortgage Bank Act stipulates conditions for property valuation and the value of mortgage lending and the valuation method must be approved by the regulator. One condition is a 60% LTV (loan to value) for residential and commercial mortgages.

There is no provision for property valuation for Pfandbrief under the Mortgage Bank Act or for FBS. In practice, issuers have incorporated an LTV provision into their articles of association.

A similar set-up applies to monitoring of property valuation where a regular audit is necessary under the Mortgage Bank Act but not provided for in the Mortgage Bond Act or for FBS.

In practice, monitoring of the property value is done by the issuer and a regular audit of the cover register is undertaken. The valuation of the property used in the calculations cannot exceed the resale value of the property, and valuation guidelines may need to be approved by the regulator.

V. ASSET - LIABILITY MANAGEMENT

All Austrian Covered Bond laws enshrine the matching principle whereby the total volume of assets in the cover pool must at least cover the total nominal amount of Covered Bonds in issuance. The cover pool assets must also cover the outstanding bonds in terms of interest income. In addition, the recent changes to the Covered Bond law have introduced mandatory overcollateralisation of 2%, which must be held in highly liquid substitute cover. FBS issuers may also include additional overcollateralisation limits in their articles of association.

As well as these rules, banks can make additional voluntary provision in their articles of association which can strengthen the legal framework. An example of this would be to extend the matching principle to a net present value instead of nominal value. The legislation also contains some maturity matching requirements to the extent that bonds cannot be issued if their maturity is considerably greater than the maturity of assets in the cover pool.

VI. COVER POOL MONITOR AND BANKING SUPERVISION

The cover pool is monitored by a trustee, who is appointed by the Minister of Finance, on suggestion of the issuer. The trustee is liable according to the Austrian civil code and has formal functions only.
are no specific qualifications required but the trustee principle has been amended to market standard in the June 2005 update to the Covered Bond legislation. For FBS the pool is monitored monthly by the government commissioner (Regierungskommissar), who works for the ministry of finance on behalf of the Finance Market Authority (FMA).

Any disputes between the issuer and the trustee would be settled by the regulator. For FBS if the government commissioner is concerned that the rights of the Covered Bond holders are being infringed then he can apply to the courts to appoint a joint special representative of the creditors.

The FMA is responsible for banking supervision in Austria.

VII. HOW ARE SEGREGATION OF COVER ASSETS AND BANKRUPTCY-REMOTENESS OF COVERED BONDS REGULATED?

In order to identify the assets that belong to the cover pool, there is a provision for a cover pool register in both the Mortgage Banking and the Pfandbrief Act. Following the June 2005 amendments a cover register is also necessary for FBS. All mortgages, public-sector loans, substitute cover assets and derivative contracts need to be registered in the cover register. The cover register allows the liquidator to segregate the assets that will belong to the cover pool in the case of issuer insolvency. Any asset that is not on the cover register will become part of the insolvency estate. The cover register is managed by the credit institution and supervised by the trustee.

Asset segregation
If the issuer becomes insolvent then the cover assets will be segregated from the remainder of the assets as a direct consequence of the insolvency proceedings. These assets shall form what is known as a ‘Sondermasse’ and are earmarked for the claims of the Covered Bond holders. Any voluntary overcollateralisation is also bankruptcy-remote but cover assets that are not needed to satisfy the claims of the Covered Bond holders are passed back to the insolvent issuer.

The cover assets will be managed by a special administrator, who is appointed by the bankruptcy court, after consultation of the FMA.

Impact of insolvency proceedings on Covered Bonds and derivatives
The Covered Bonds are not accelerated in the case of insolvency of the issuer. The cover assets are administered in favour of the bond holders and any claims of the Covered Bond holders in respect of interest or principal repayments are to be paid from the assets. In respect of derivatives there is no legal consequence of insolvency and the counterparty claims under derivative transactions rank pari passu with the claims of the Covered Bond holders.

There is a provision for the bonds to be accelerated if the net present value of the cover pool means that the bonds can be repaid in full. This option does need to be incorporated in the issuer’s by-laws.

Preferential treatment of Covered Bond holders
Covered Bond holders enjoy special treatment to the extent that they have a claim on the cover assets in the event of issuer insolvency. If the claims of the Covered Bond holders are not satisfied by the Sondermasse, the Covered Bond holders would then have recourse to the issuer for the remainder of their claim. They would rank pari passu with other senior unsecured creditors.
A moratorium on the insolvency estate is unlikely to affect the Covered Bond holders. Once the assets are segregated, the cover pool administrator is supposed to use the cash flow from the assets in the cover pool to satisfy the claims of the Covered Bond holders. In the case where the cash flow does not satisfy the Covered Bond claims, then the Covered Bonds could be accelerated.

**Access to liquidity in case of insolvency**

Once appointed, the cover pool administrator has the right to manage the cover pool in order to satisfy the claims of the Covered Bond holders. The cover pool administrator can, for example, sell assets in the cover pool or enter into a bridging loan in order to create liquidity to service the bonds in issue.

The cover pool administrator also has access to any voluntary over collateralisation, which is also considered bankruptcy-remote. Any voluntary overcollateralisation that is not necessary to cover the claims of the Covered Bond holders can be transferred back to the insolvency estate.

**Sale and transfer of mortgage assets to other issuers**

The Covered Bond administrator can also sell the assets collectively to a separate credit institution. This institution must then take over all liabilities with regard to the Covered Bonds. In fact, one of the tasks of the special administrator is to find a suitable credit institution that will buy the assets collectively.

**VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION**

Austrian Covered Bonds fulfil the criteria of the UCITS 22(4) directive, as well as those of the CRD Directive, Annex VI, Part I, Paragraph 68 a) to f). This results in a 10% risk weighting in Austria and other European jurisdictions where a 10% risk weighting is allowed.

Austrian Covered Bonds are eligible in repo transactions with the national central bank.

Finally, Covered Bonds in Austrian have special treatment from asset management companies. They are allowed a higher exposure to UCITS 22(4) eligible Covered Bonds compared to senior Covered Bonds.
Figure 1: Covered Bonds Outstanding 2003-2008, €m

Source: EMF/ECBC
Note: Data is an estimate.

Figure 2: Covered Bonds Issuance, 2003-2008, €m

Source: EMF/ECBC
Note: Data is an estimate. Issuance data for 2004 not available

Issuers: Austrian issuers at the end of 2008 were Bank für Arbeit und Wirtschaft, EB Hypo Burgenland, Erste Bank, Hypo Alpe Adria, Hypo Investment AG (NÖ LB), Hypo Tirol, Kommunalkredit AG, Landeshypothekenbank Steiermark, Oberbank AG, Oberösterreichische Landesbank, Österreichische Volksbanken AG, Raiffeisenlandesbank Hoch OÖ, Raiffeisenlandesbank NÖ, Raiffeisenzentralbank, Salzburger LandesHypo, Sparkasse Kitzbühel, Sparkasse Kufstein, Sparkasse Niederösterreich, Sparkasse Schwaz, Unicredit Bank Austria, Vorarlberger Landeshypo and Waldviertler Sparkasse.
3.2 BULGARIA

Yolanda Hristova, Unicredit BulBank and
Franz Rudolf, UniCredit

I. FRAMEWORK
In Bulgaria, the legal basis for Covered Bond issuance is the Mortgage-backed Bonds Law issued by 38th National Assembly on 27th September 2000 with subsequent amendments.

II. STRUCTURE OF THE ISSUER
Pursuant to the Mortgage-backed Bonds Law, the Mortgage-backed bonds shall be securities issued by banks on the basis of their loan portfolio and secured by one or more first mortgages on real estate in favour of banks (mortgage loans). Only banks may issue bonds called mortgage-backed bonds.

The real estate under the previous paragraph shall be insured against destruction and shall be of the following type:

1. housing units, including leased out;
2. villas, seasonal and holiday housing;
3. commercial and administrative office spaces, hotels, restaurants and other similar real estate; and
4. industrial and warehousing premises.

The issuing bank shall adopt internal rules on conducting and documenting mortgage appraisals of real estate which shall comply with the requirements of Article 73, paragraph 3 of the Bulgarian Law on Credit Institutions.

Securities issued under procedures other than the one laid down by the Mortgage-backed Bonds Law may not refer to with, or include in their appellation, the extension "mortgage-backed bond", or any combination of these words.

III. COVER ASSETS

The outstanding mortgage–backed bonds shall be covered by mortgage loans of the issuing bank (principal cover). To substitute loans from the principle cover that have been repaid in full or in part, the issuing bank may include the following of its assets in the cover of mortgage-backed bonds (substitution cover):

- cash or funds on account with the Bulgarian National Bank (BNB) and/or commercial banks;
- claims on the Government of the Republic of Bulgaria or the Bulgarian National Bank, and claims fully secured by them;
- claims on governments or central banks of states as determined by the Bulgarian National Bank;
- claims on international institutions as determined by the Bulgarian National Bank;
- claims fully backed by government securities issued by the Government of the Republic of Bulgaria, the Bulgarian National Bank, the Governments, Central Banks or international institutions;
- claims secured by gold; and
- claims fully backed by bank deposits denominated in Bulgarian levs or in a foreign currency for which the BNB quotes daily a central exchange rate.
The substitution cover of mortgage-backed securities shall not exceed 30% of the total amount of liabilities of the issuing bank under that issue.

The claims of the bondholders under mortgage-backed bonds from each issue shall be secured by a first pledge on the assets of the issuing bank included in the cover of that issue. The pledge is a subject of entrance in the Central Registers of Special Pledges, with the respective issue of mortgage-backed bonds being indicated as a pledge creditor.

IV. VALUATION – MORTGAGE APPRAISER OF A PROPERTY

Mortgage appraisals of property shall be performed by officers of the issuing bank or by physical persons designated by it having the relevant qualifications and experience.

For the purposes of the mortgage appraiser of a property under the law, the comparative method, the revenue method and the cost-to-make method shall be used.

Subsequent mortgage appraisals of property used as collateral on the loans recorded in the register of mortgage-backed bonds cover shall be made at least once every twelve months for loans which:

- have outstanding liabilities exceeding 1% of the issuing bank's own funds; or
- have not been consistently classified as standard risk exposures throughout that period.

V. ASSET-LIABILITY MANAGEMENT

Art.6 of the Law on Mortgage-backed Bonds stipulates that mortgage loans shall be included into the calculation of the principal cover at the value of their outstanding principal but at no more than 80% of the mortgage appraisal value of the real estate as housing units, including leased ones, and at no more than 60% of the mortgage appraisal value of the real estate as villas, seasonal and holiday housing units used as collateral on mortgage loans.

Substitution cover of mortgage-backed bonds from any issue may not exceed 30% of the total amount of liabilities of the issuing bank under that issue.

Mortgage-backed bonds cover from any issue (the sum total of the principal cover and the substitution cover) may not be less than the total amount of liabilities towards the principals of mortgage-backed bonds from that issue which are outstanding and in circulation outside the issuing bank.

VI. SEGREGATION OF COVER ASSETS

After the record of the assets in the register as a cover of mortgage-backed bonds of a particular issue may be used as collateral solely for the liabilities of the issuing bank on that issue. The issuing bank may not allow any encumbrances on its assets constituting the cover of outstanding mortgage-backed bonds. The issuing bank accounts assets recorded in the register of mortgage-backed bonds cover separately from the rest of its assets.

The issuing bank shall keep a public register of the cover of mortgage-backed bonds issued by it as the register is kept separately by mortgage-backed bonds issue.

VII. MINIMUM INFORMATION REQUIREMENTS FOR ISSUANCE PROSPECTUSES

The offering or the draft prospectus for an issue of mortgage-backed bonds consists of data valid at the time of their preparation, such as:
1. the Rules of the issuing bank concerning the contents, the entry and deletion procedures as well as the terms and procedures authorizing access to the register and its internal rules of conducting and documenting mortgage appraisals;

2. data on mortgage loans held in the issuing bank’s portfolio on the basis of which an issue is being made, including for each loan:
   • the size of the outstanding principal at the time of extending the loan and by the end of the most recent full quarter;
   • loan life at the time of extending the loan and the remaining term to maturity;
   • interest rates, fees and commissions on the loan;
   • risk classification of the loan by the end of each calendar year from the time it was extended and by the end of the most recent full quarter;
   • type of real estate mortgaged as collateral, their mortgage appraisal value and the ratio between the outstanding principal and the mortgage appraisal value at the time of extending the loan and by the end of the most recent full quarter;

3. characteristics of the mortgage loan portfolio on the basis of which the issue is made, including a distribution of loans by:
   • the size of the outstanding principal;
   • the residual term to the final repayment of the loan;
   • interest rate level;
   • their risk classification by the end of the most recent full quarter;
   • the ratio between the outstanding principal and the most recent mortgage appraisal value of the real estate pledged as collateral.

For public offering of Mortgage-backed Bonds the provisions of the Public Offering of Securities Act (POSA) and the Ordinances on its enhancement shall apply. For non-public offerings of Mortgage-backed bonds the provisions of Commerce Law shall apply.

VIII. REDEMPTION OF MORTGAGE-BACKED BONDS IN THE EVENT OF BANKRUPTCY OF THE ISSUING BANK

In case of declaring the issuing bank bankrupt, the assets recorded as of the date of declaring the bank bankrupt in the register of the mortgage-backed bonds cover shall not be included in the bankruptcy estate. Proceeds from the liquidation of assets recorded in the register as a cover on a particular issue of mortgage-backed bonds are distributed among the bondholders from that issue in proportion to the rights under their bond holdings. Any funds remaining after settling the claims under mortgage-backed bonds from a particular issue is included in the bankruptcy estate.

The asset pool under the above mentioned paragraphs are managed by a holders’ trustee of mortgage-backed bonds which is appointed by the bankruptcy court when it has been established that the bank has outstanding liabilities under mortgage-backed bonds. The trustee is managing the assets by individual mortgage-backed bonds issue.

The Trustee shall be a person who meets the requirements of Article 217, para.1 and para2, items 1-3 of the Public Offering of Securities Act and is not engaged in any relationship with the issuing bank or any
of the holders of mortgage-backed bonds which give reasonable doubt as to the former’s impartiality. The Trustee shall have the powers of an assignee in bankruptcy in respect of the asset pool described above, as well as in respect of any outstanding liabilities of the issuing bank under mortgage backed bonds. The Trustee shall manage the above mentioned assets separately for any mortgage-backed bond issue. The Trustee shall sell the above described assets under the procedure set forth in Articles 486-501 of the Civil Procedure Code and shall account any proceeds to an escrow account opened for each issue with commercial banks as determined by the Bulgarian National Bank.

The bondholders of any issue of mortgage-backed bonds of a bank which has been declared bankrupt shall have the right to obligate the Trustee to sell loans included in the issue cover to a buyer specified by them and the Trustee shall follow precisely the decision of the Bondholders’ General Meeting under the previous sentence.

**IX. COMPLIANCE WITH EUROPEAN LEGISLATION**

Mortgage-backed Bonds Law complies with the requirements of Art.22 par.4 UCITS Directive as well as with those of the CRD Directive, Annex VI, Part 1, Paragraph 68.
III. STRUCTURE OF THE ISSUER

Canadian financial institutions are regulated by the Office of the Superintendent of Financial Institutions ("OSFI"). In June 2007, OSFI issued a statement permitting Canadian financial institutions to issue Covered Bonds up to a maximum of 4% of their total assets. To date, four Covered Bond programs have been established by large Canadian financial institutions, namely Royal Bank of Canada (RBC), Bank of Montreal (BMO), Bank of Nova Scotia (BNS) and Canadian Imperial Bank of Commerce (CIBC). Covered Bonds have been issued under three of the four programs (RBC, BMO and CIBC).

The Canadian Covered Bond programs are all based on a similar structure and are in line with the UK structures, given the similarity of the legal systems (Canadian common law is derived from English common law). Canadian Covered Bonds are direct, unconditional obligations of the Issuer. In the event of the insolvency or default by the Issuer, investors have a claim over the pool of cover assets. The cover assets are held in a bankruptcy remote special purpose entity, the Guarantor, which provides an unconditional and irrevocable guarantee on the Issuer’s obligations under the Covered Bonds. In Canadian Covered Bond programs, the Guarantor is either structured as a limited liability partnership or a trust, subject to accounting and tax considerations of the Issuer. A bond / security trustee holds security over the cover assets on behalf of the investors. Following an Issuer event of default, the Guarantor is required to meet the Covered Bonds’ obligations using the cash flows generated from the cover assets. The Guarantor is permitted to sell the mortgages to meet these obligations, as required. The entire pool of cover assets is available as security for all the outstanding Covered Bonds issued under the program so there is no direct link between particular assets and a specific series of Covered Bonds.

The cover assets are segregated from the Issuer through a legal true sale between the Issuer and the Guarantor. Whether structured as a limited liability partnership or a trust, the Guarantor is bankruptcy remote from the Issuer. The Issuer grants the Guarantor a loan (the inter-company loan), the proceeds of which are used by the Guarantor to purchase the cover assets. Legal title to the mortgages remains with the Issuer and is only transferred to the Guarantor following breach of certain trigger events, for example, downgrade of the Issuer below BBB- (S&P), Baa3/P-1 (Moody’s) BBB- (Fitch), A(low) (DBRS) and subsequent replacement of the Issuer as servicer. Borrowers are notified of the sale of the mortgages to the Guarantor upon breach of the trigger and the security interest in the mortgages is perfected.

Typically, additional cover assets are sold to the guarantor to either meet the asset coverage requirements on an ongoing basis or to issue additional Covered Bonds under the program. The structure of the Canadian Covered Bond programs incorporates a unique feature related to the inter-company loan, which accommodates the sale of surplus assets to the Guarantor at launch. The loan is split into a Demand Loan and a Guarantee (or Term) Loan. The Guarantee (or Term) Loan represents the portion of the cover assets required as collateral for the outstanding Covered Bonds, as determined by the Asset Coverage

1 For the BNS program only the Moody’s and Fitch ratings are applicable as these two rating agencies rated the program
Test ("ACT"). The balance of the inter-company loan constitutes the Demand Loan, which represents the excess cover assets held by the Guarantor. The Issuer can call the Demand Loan at any time, which would result in the excess cover assets being sold back to the Issuer or a third party to repay the outstanding Demand Loan. To meet regulatory requirements, the Demand Loan ensures that Covered Bonds investors only have access to the assets that are required as collateral for the Covered Bonds. Transferring surplus assets to the Guarantor at closing provides Canadian Issuers the flexibility to access the market quickly as the cover assets have already been analyzed and monitored by the rating agencies.

III. COVER ASSETS

In all the Canadian Covered Bond programs to date the cover assets comprise residential mortgages. The cover assets within the RBC and BNS programs currently comprise uninsured mortgages (otherwise known as prime or conventional mortgages with a maximum loan to value ("LTV") of 80% and full documentation). The BMO program includes both uninsured and insured mortgages. In addition, commercial mortgages may be included in the BMO program. The CIBC program is backed entirely by insured mortgages. Under the Canadian Bank Act, mortgage insurance is required for any mortgage with an LTV in excess of 80% originated by a regulated financial institution. Mortgage insurance is provided by the Canada Mortgage and Housing Corporation ("CMHC"), a Canadian Government entity, and other approved third party insurers, including Genworth Financial.

The structure of Canadian mortgages differs from those in the US and the UK. The term of Canadian mortgages is typically one to five years (based on an amortization term of up to thirty-five years), after which the borrower is required to renew or refinance the mortgage. In most cases, the mortgage is renewed with the same lender if the borrower is current and has met the required payments under the mortgage. The lender does have the option not to refinance the mortgage.

Certain Canadian mortgage products are often structured to provide the borrower with flexibility. This enables the borrower to split their mortgage into various terms as well as gain access to a line of credit or a secured credit card, backed by the same property. These various facilities are subject to a maximum LTV for each borrower determined during the underwriting process. At this stage, only the mortgage tranches have been included as collateral within the Canadian programs.

The cover assets in all the Canadian Programs are geographically diversified across Canada, with larger concentrations in the urban centres.

Substitute assets can be included in the cover pool provided their aggregate value at any time does not exceed 10% of the Canadian dollar equivalent of the outstanding principal balance of Covered Bonds. In all cases, substitute assets are limited to Canadian dollar denominated RMBS and exposures to institutions that qualify for a ten to twenty percent risk weighting under the Basel II Standardised Approach. These investments are subject to stipulated ratings, rating agency limits and consent of the interest rate swap counterparty in certain cases.

IV. VALUATION AND LTV CRITERIA

In Canada, every property is typically valued during the underwriting process. The valuation is either performed by an accredited, third party property appraiser or through an automated valuation tool, which is based on the value of similar properties recently sold in the same area. There is no official property price index in Canada and as such, indexation has not been incorporated into the asset coverage test,
unlike UK programs. Properties are not typically reappraised when the mortgage is renewed, unless the borrower requests an increase to the approved LTV and additional debt or there is reason to believe the property value may have decreased.

Similar to the other structured programs, the dynamic ACT is performed on a monthly basis. This test ensures that there are always sufficient assets available within the cover pool as collateral for the outstanding Covered Bonds. Under the test, the value of the asset pool is determined, factoring in the required level of over collateralisation through the asset percentage and adjusting for potential negative carry. The asset percentage is confirmed by the rating agencies, based on numerous factors including the credit quality and historic performance of the pool and the ability of the Guarantor to dispose of the assets in a stressed environment. The asset percentage for the RBC, BMO and BNS Covered Bond programs is currently 94.5%, which is higher than the UK programs. The asset percentage for the CIBC program is 97.0%. In addition, all the Issuers have voluntarily incorporated a minimum level of over collateralisation within their programs, by capping the asset percentage at 97.0%.

An LTV cap of 80% for uninsured mortgages and 90% for insured mortgages (BMO and CIBC) is applied to the latest valuation when determining the asset balance for the ACT. In addition, the maximum mortgage size is limited to CAD$3 million. Uninsured mortgages that are greater than ninety days delinquent are considered non-performing and are not given any credit for purposes of the asset coverage test. Insured mortgages under the BMO and CIBC programs are multiplied by a factor of 0.9 if they are non-performing, provided, in the case of CIBC, the rating of CMHC is maintained above a stipulated level.

**V. ASSET - LIABILITY MANAGEMENT**

In the existing Canadian Covered Bond programs, interest rate risk and exchange rate risk have been hedged. The Guarantor enters into an interest rate swap at closing to swap mortgage cash flows into a Canadian floating rate basis, which is used by the Guarantor to meet the interest payments on the intercompany loan. The Guarantor also enters into a forward starting exchange rate swap at closing to swap the Canadian floating rate into fixed rate Euro (majority of the Canadian Covered Bonds issued to date have been fixed rate Euro denominated). Cash flows under this swap are only exchanged following an Issuer event of default, as following this event the Guarantor requires the Euro fixed rate amounts to make payments to the Covered Bondholders. Based on their current ratings, all the Canadian Issuers act as the swap counterparty with the Guarantor for both swaps. Triggers are in place to ensure that the Issuer (as swap counterparty) posts collateral against its obligations under the swap following downgrade. The Issuer will be replaced as the swap counterparty following further downgrade.

- If the ACT (see above) is not met on a calculation date, an ACT Breach Notice is served to the Issuer. If the Issuer fails to cure the ACT breach by transferring additional cover assets or cash to the Guarantor by the following calculation date, an Issuer Event of Default occurs. Other events that result in an Issuer Event of Default include Default by the Issuer on Covered Bond interest or principal or any other obligations under the Covered Bonds
- Liquidation, insolvency, winding up, etc. of the Issuer
- Failure to rectify any breach of the pre-maturity test in the case of the BNS and CIBC programs

Following an Issuer Event of Default the Covered Bonds are not automatically accelerated. The trustee will serve a notice to pay on the Guarantor, following which the unconditional and irrevocable guarantee becomes effective and the Guarantor is responsible for the amounts due under the Covered Bonds.
Similar to the UK programs, an Amortisation Test ("AT") is run on a monthly basis to ensure that the Guarantor has sufficient assets to meet these obligations. Under the test, the aggregate asset amount is calculated, factoring in the mortgage balance and LTV and adjusting for potential negative carry. If the aggregate asset amount is less than the outstanding balance of the Covered Bonds, the AT is failed resulting in a Guarantor Event of Default. Other events that result in a Guarantor Event of Default include:

> Default by the Guarantor on any guaranteed amounts
> Default by the Guarantor on any other Covered Bond Obligations
> Liquidation, insolvency, winding up, etc. of the Guarantor
> The Covered Bond guarantee is not or is claimed not to be in full force and effect by the Guarantor

Following a Guarantor Event of Default, the Security Trustee serves a Guarantor Acceleration Notice on the Guarantor. At this point, the Covered Bonds are accelerated and the Guarantor disposes of the cover assets as quickly as practical to meet the Covered Bond payments.

In addition to the downgrade triggers for the swap counterparties, the ACT, the maturity extension rules and the AT all aim to ensure the Guarantor has sufficient collateral to meet the Covered Bond liabilities, when and if required. If the proceeds derived from the collateral are insufficient to meet the Covered Bond obligations in full, investors have an unsecured claim against the Issuer for the shortfall.

The existing Canadian Covered Bonds programs permit the issuance of soft-bullet bonds, with an extension period of up to twelve months. Under the BNS and CIBC programs, the Issuer is also able to issue hard-bullet Covered Bonds. With the soft-bullet bonds, if the Issuer is unable to repay all the amounts due under the Covered Bonds at maturity (after any applicable grace periods), a Notice to Pay will be served on the Guarantor. If the Guarantor has insufficient funds to pay the outstanding Covered Bonds in full, the legal final maturity date will be extended to the extended maturity date for a period up to twelve months. During the extension period, interest will continue to be payable on the Covered Bonds on a monthly basis. In addition, principal amounts outstanding can be repaid on the monthly payment dates to the extent funds are available. This minimises the risk of the Covered Bonds defaulting following an Issuer Event of Default. With the hard bullet structure, a pre-maturity test feature is incorporated into the structure, in line with some of the UK programs.

Similar to the UK programs, several other safeguards have been incorporated into the Canadian Covered Bond programs. These include minimum ratings requirements for the various third parties that support the program, including the servicer, the swap counterparties, the GIC providers, the account bank and the cash manager. In addition, independent audits will be performed by the asset monitor on a regular basis to verify the accuracy of the calculation of the ACT.

A reserve fund is required to be funded by the Guarantor following a downgrade of the Issuer below A-1+(S&P), P-1(Moody’s), F1(Fitch) or R-1(middle)/A(high) (DBRS). The balance of the reserve fund will be an amount equal to one month’s interest on the outstanding Covered Bonds under the program, plus one twelfth of the anticipated annual senior expenses, interest due on the Demand Loan, servicing fees and swap payments, if applicable. This amount is retained in a GIC account and following an Issuer Event of Default, the balance of the Reserve Fund will form part of available revenue receipts to be used by the Guarantor to meet its obligations under the Covered Bond guarantee.
VI. COVER POOL MONITOR AND BANKING SUPERVISION

The Issuer prepares investor reports on a monthly basis. In addition, quarterly reports are prepared for the rating agencies, including an updated cover pool, which is used to confirm / recalculate the asset percentage used in the ACT. In addition, the ratings of the program are reaffirmed by the rating agencies prior to each issuance under the program.

An independent audit firm (the Asset Monitor) will test the calculation of the ACT performed by the Issuer (as Cash Manager) on an annual basis. However, if the rating of the Cash Manager has been downgraded below the trigger level stipulated by the rating agencies or if an ACT Breach Notice has been served on the Issuer and not yet revoked, the Asset Monitor will test the calculation on a monthly basis, until the situation is resolved. In addition, if the test reveals an error in the ACT calculation, the Asset Monitor will test the calculation monthly for a period of six months.

VII. HOW ARE SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS REGULATED?

Under the Canadian Covered Bond programs, the Issuer sells the cover assets to the Guarantor pursuant to a mortgage sale agreement. The sale of the assets constitutes a legal true sale. As there is no dedicated legal framework for the issuance of Covered Bonds in Canada, all contractual agreements are structured within the general legislation.

Although there is no specific asset register, the assets are flagged on the Issuer’s computer/IT systems and the cash flows are segregated in favour of the Guarantor. The Guarantor also owns other assets, including substitute assets, the GIC and benefits under the swap agreements. The Guarantor is structured as a bankruptcy remote, special purpose entity and as such, following insolvency of the Issuer, all the assets of the Guarantor are segregated from those of the bankruptcy estate of the Issuer. True sale and bankruptcy remoteness opinions provided by counsel form part of the transaction documents. The Issuer is responsible for ensuring the collateral restrictions are met.

Title to the cover assets is retained by the Issuer until a Notification or Title Transfer Event which comprise the following:

- An Issuer Event of Default and service of a notice to pay on the Guarantor
- Notification is necessary under law or following an order from a court or regulatory authority
- Downgrade of the Issuer below BBB- (S&P), BBB- (Fitch), Baa3 (Moody’s), A(low)(DBRS)
- Insolvency of the Issuer
- The Issuer requests a transfer of title (BNS, BMO, RBC)
- Termination of the Seller as servicer under the servicing agreement unless the substitute servicer, if any, is a member of the Seller’s Group (BNS, BMO, RBC)
- Requested by the Security Trustee, as in its opinion, the security is in jeopardy (BNS)
- Request from the Guarantor following the sale of a loan (BNS and CIBC)
- Request from the Security Trustee (BNS)

Following any of the above events, the Issuer will notify the borrowers of the mortgage sale thereby perfecting the legal assignment of the mortgage loans and their related security to the Guarantor.
VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Canadian Covered Bonds are currently 20% risk weighted under the CRD Standard Approach, as if they were unsecured securities issued by a regulated financial institution.

IX. THE CANADIAN ECONOMY AND MORTGAGE MARKET

Despite the global economic crisis, the Canadian economy continues to remain strong relative to its peers, with the lowest net debt to GDP ratio amongst the G7. Over the last decade, Canada has been highly ranked for economic strength and employment growth and has achieved the highest real GDP growth within the G7. Prior to the crisis, Canada enjoyed consecutive fiscal surpluses for eleven consecutive years. Canada’s banking infrastructure, which was ranked #1 for soundness by the World Economic Forum in October 2008, continues to be stable as Canada’s banks are vigilantly regulated and conservative by nature.

Unemployment in Canada remains below the long term average, with job reductions focused on the automotive and manufacturing sectors. The economic environment is expected to be difficult through 2009, with possible recovery forecast in 2010. Canada has a diversified, export oriented economy and is rich in natural resources. This provides a sound foundation for future economic recovery.

The mortgage and consumer fundamentals in Canada continue to remain solid. The mortgage products available in Canada are quite conservative (typically a one to five year term with up to thirty five year amortization period, with very limited teaser rate or hybrid products). In addition, prepayment penalties discourage refinancing booms. Sub-prime mortgage make up a very small component of the Canadian mortgage originations (approximately 5% compared to over 20% in the US in 2007). The market is dominated by the big five Canadian Chartered banks (over 60% of the market), which retain the majority of mortgages on their balance sheets. This encourages strong underwriting discipline based on high credit and documentation standards. A key difference between the Canadian and US mortgage market is that mortgage interest in Canada is not deductible for tax purposes. As such, Canadian borrowers have little incentive to carry mortgage balances and in general are less leveraged than their American counterparts.

House prices in Canada have remained steady and according to the IMF in March 2009 the Canadian housing market was the least over-valued leading up to the crisis. The conservative lending practices in Canada and the strong economic and consumer fundamentals have resulted in stable mortgage delinquency rates (90+ days) compared to the US. In addition, equity investment in Canadian homes is significant and has remained stable.
## Figure 1: Overview – Canadian Covered Bond Programmes

<table>
<thead>
<tr>
<th>xxx</th>
<th>RBC</th>
<th>BMO</th>
<th>CIBC</th>
<th>BNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme Volume in (€ bn)</td>
<td>€15bn</td>
<td>€7bn</td>
<td>€8bn</td>
<td>US$15bn</td>
</tr>
<tr>
<td>Outstanding Covered Bonds</td>
<td>€2.00bn due November 2012 €1.25bn due January 2018</td>
<td>€1bn due November, 2012</td>
<td>€2.32bn due September, 2010</td>
<td>N/A</td>
</tr>
<tr>
<td>LTV cap</td>
<td>80%</td>
<td>80% for uninsured mortgages 90% for insured mortgages</td>
<td>90%</td>
<td>80%</td>
</tr>
<tr>
<td>Asset percentage applied in ACT</td>
<td>94.5%</td>
<td>94.5%</td>
<td>97%</td>
<td>94.5%</td>
</tr>
<tr>
<td>Overcollateralisation</td>
<td>105.8%</td>
<td>105.8%</td>
<td>103.1%</td>
<td>105.8%</td>
</tr>
<tr>
<td>Non performing mortgages</td>
<td>No recognition for the ACT</td>
<td>No recognition for the ACT if uninsured. If insured, multiplied by a factor of 0.9</td>
<td>Multiplied by a factor of 0.9, subject to a CMHC rating test</td>
<td>No recognition for the ACT</td>
</tr>
<tr>
<td>Soft Bullet</td>
<td>Yes (12 month extension)</td>
<td>Yes (12 month extension)</td>
<td>No (hard bullet)</td>
<td>Yes (12 month extension); Ability to issue hard-bullet bonds with a pre-maturity test run twelve months prior to maturity</td>
</tr>
<tr>
<td>Asset monitor</td>
<td>Deloitte</td>
<td>KPMG</td>
<td>Ernst &amp; Young LLP</td>
<td>KPMG</td>
</tr>
</tbody>
</table>

Source: Transaction documents
Issuers: Canadian issuers as of the end of 2008 were Bank of Montreal, Canadian Imperial Bank of Commerce and Royal Bank of Canada.
3.4 CZECH REPUBLIC

By Pavel Kuhn, Ceska Sporitelna a.s.

LEGAL REGULATIONS

It has been possible to issue the mortgage Covered Bonds (“Hypotecni zastavni list” - hereinafter referred to as “MCB”) in the Czech Republic from January 1, 1992 on the basis of the general regulation contained in the Commercial Code.

At present, the MCBs, the mortgage credits (hereinafter referred to as “MC”) and the other terms and conditions of mortgage financing are regulated in detail in the Covered Bond Act (hereinafter referred to as “DBA”) which entered into force on 1 July 1995. Since, the DBA was amended on 1 April 2004.

Mortgage Covered Bonds may be issued by any bank complying with the terms and conditions of the Act on Banks. However, the right to issue MCBs is subject to a specific license granted by the Czech National Bank.

COVERAGE OF MCBs

Pursuant to the DBA, the MCBs are such covered notes the nominal value of and revenue from which are fully covered with (i) receivables from mortgage credits or parts of these receivables (the so-called “regular coverage”) and (ii) possibly also in an alternative manner specified in the Act (the so-called “substitutive coverage”). The text “mortgage Covered Bond” has to make a part of the name of this Covered Bond. No other securities and/or Covered Bonds are allowed to use this name. The Czech legal framework does not provide the possibility to create public sector cover assets.

MORTGAGE RIGHT

The repayment of the MC including accessories has to be secured with the mortgage to a real estate, even to a real estate under construction. The real estate under the mortgage right has to be located on the territory of the Czech Republic, a member state of the European Union or another country making a part of the European Economic Area. The credit is considered to be the mortgage credit on the day of origin of legal effects of the mortgage right registration.

The mortgage right ensuring the MC used to cover the MCBs has to be in the first position in the Real Estate Register. There are two exceptions to this rule: the real estate under mortgage may have a priority mortgage right securing a credit which

1) is extended by a construction savings bank or a credit extended for a cooperative housing construction supported by the State. The precondition for this is that the construction savings bank or the creditor of the cooperative housing construction credit that have the priority sequence of the mortgage right have given a written consent to the issuer of MCBs to establish the mortgage right in the following sequence. The receivable from the MC secured with a mortgage right not in the first position may not be used to cover the MCBs without such consent.

2) will be repaid so that the mortgage right related to the MC will move from the second position to the first position of registration in the Real Estate Register.
The sum of all the liabilities from all the MCBs in circulation issued by one issuer has to be fully covered with the receivables or their parts from the MC (regular coverage) or possibly in a substitutive manner (substitutive coverage).

**REGULAR COVERAGE OF MCB**

Only such receivables from the MC or their parts may be used for regular coverage of the liabilities from all the MCBs in circulation that do not exceed 70% of the mortgage value of the real estates under mortgage.

If any mortgage rights in priority sequence are attached at the same time to any real estate that serve to secure the construction savings credit and the housing construction credit, only the receivable from the mortgage credit or its part in the maximum amount of the difference between 70% of the mortgage value of the real estate under mortgage and the sum of the receivables from the credit extended by the construction savings company and the cooperative housing construction credit may be used for the purposes of coverage of the MCBs.

**SUBSTITUTIVE COVERAGE**

Substitution cover assets are restricted to 10% of the nominal amount of MCBs outstanding. The following substitution assets are eligible:

- cash;
- deposits of the issuer at the Czech National Bank (hereinafter referred to as "CNB");
- deposits at the Central Bank (National Bank) of a member state of the European Union or another country making a part of the European Economic Area or at the European Central Bank;
- government bonds and/or securities issued by the Czech National Bank;
- government bonds and/or securities issued by the member states of the European Union or by other countries making a part of the European Economic Area, their Central (National) Banks and the European Central Bank; and
- government bonds issued by the financial institutions established with an international agreement the contracting party of which is the Czech Republic, or the financial institutions with which the Czech Republic entered into an international agreement.

**MORTGAGE VALUE**

The issuer of the MCBs determines the mortgage value of the real estate under mortgage, and namely as the customary price, taking into consideration

- the permanent and long-term sustainable characteristics of the real estate under mortgage,
- the revenues attainable by a third party at regular management of the real estate,
- the rights and defects associated with the real estate, and
- the local real estate market conditions and impacts and presumed development of this market.

The customary price is considered to be such price that could be achieved in the event of the sale of the same or similar real estate as at the valuation date and in dependence on its condition and quality. The customary price should not reflect the extraordinary market circumstances, the personal relations between the participants and the subjective assessment of the interest of one of the parties. The mortgage value shall not exceed the customary price of the real estates.
The conditions allowing the use of the receivable from the MC to cover the MCBs have to be complied with throughout the period for which the receivable from the MC is included in the MCB coverage.

**RECORDS**

The issuer of the MCBs is obligated to keep separate and conclusive records on the summary of all of its liabilities from the MCBs in circulation issued by it and on its coverage. The content of the records is defined in an obligatory regulation by the CNB. Pursuant to this regulation, the issuer of the MCBs shall keep the Coverage Register and the Coverage Ledger.

The Coverage Register contains a summary of how the liabilities of the issuer of MCBs are covered – with both the regular coverage (i.e. the list of the receivables from the MCs used to cover the MCBs) and with the substitutive coverage, if applicable. The records in the Coverage Register shall be updated by the issuer continuously as the changes occur.

The Coverage Ledger contains the full summary of the liabilities of the issuer from its MCBs in circulation and the valuation of the assets of the Coverage Register.

The records shall be kept in CZK in paper form or in electronic form. The recordkeeping including the insertion of the MCs for coverage and elimination of the MCs from the coverage shall be made by the departments independent of the departments responsible both for the extension of MCs and for issuance of the MCBs and namely up to the managing Board member.

**POSITION OF THE HOLDER OF THE MORTGAGE COVERED BOND IN THE BANKRUPTCY PROCEEDING OF THE ISSUER**

In the event of bankruptcy or bankruptcy proceedings of the issuer of the MCBs, the receivables from the MCBs in circulation issued by it have a priority rank for satisfaction. The assets (the receivables from the MC) serving to cover the MCBs of the bankrupt issuer constitute the mortgage substance. A special administrator may be appointed to administer the mortgage substance and to satisfy the claims resulting from the MCBs in circulation. The yield from the encashment of the mortgage substance shall be first used to satisfy the costs of administration and encashment of the mortgage substance and then immediately to satisfy the receivables of the MCBs without limitation of their amount. Only the rest shall be used to satisfy the other receivables from the bankrupt.

**ISSUER AS MORTGAGE CREDITOR**

In the event of default of the MC, the issuer may enforce its mortgage right by selling the real estate in a judicial sale pursuant to the rules of civic court proceedings, in a voluntary or non-voluntary public auction pursuant to a special law or by selling the real estate in an execution proceeding via an executor and pursuant to the rules of execution.

The receivables from the mortgage credits or their parts that serve to cover the nominal value of the mortgage Covered Bonds enjoy an elevated protection in the enforcement of the mortgage right by the issuer. After the sale of the real estate under mortgage, the receivables from the mortgage credits that serve to cover the nominal value of the mortgage Covered Bonds are satisfied from the auction yield immediately after the costs of the auction and before the other receivables secured with the mortgage right.
Upon the bankruptcy order against the debtor from the MC, the issuer gets the position of a separate creditor that has the right that its receivable is satisfied from the encashment of the subject of mortgage (real estate) after deduction of the costs related to the maintenance, administration and sale of the real estate (encashment yield) at any time during the bankruptcy proceeding. The separate creditors are satisfied up to 70 per cent of the encashment yield falling on them. The non-satisfied portion may be satisfied within a distribution and in the class the receivable belongs to as per its nature.

**STATE SUBSIDIES**

The debtor from the MC may reduce his income tax base with the interests he has paid to the issuer from the MC used to finance his housing needs.

The interest revenues from such MCBs are so far exempt from the income tax that are covered by the issuer with the receivables from the MC for housing investments.

**SUPERVISION OF THE ISSUER (BANK)**

The activities of the issuer of MCBs are regulated by the law and are subject to the supervision by CNB. The issuer of MCBs is obligated to require prior approval from the CNB for a number of important decisions, for example the sale of the enterprise or its part, cancellation or merger of the issuer, decrease in the issuer’s registered capital, etc.

The issuer has a number of information obligations towards the CNB. For example, it is obligated to inform the CNB on presumed modifications of any of the provisions of its Articles of Association, on the proposals for personal changes in its statutory body and in the managing staff, on the intention to open a branch office or an agency abroad, or on the intention to establish a legal entity abroad or to participate in such entity with its assets. Besides, the issuer in the capacity of the bank is obligated to prepare and to submit information on its business activities in the extent and within the dates determined by the CNB.

The CNB has integrated and continuously integrates to the domestic regulations binding on the issuers any and all regulations, directives, rules, normative, principles and recommendations by the EU and the European Commission that regulate the activities of the issuers – banks, in particular in relation to their cautious business (including, for example, the BASEL II rules). Such regulation applies for example to (a) the standards of liquidity management and creation of minimum obligatory reserves, (b) capital adequacy and credit involvement, or (c) classification of receivables from credits and creation of reserves and adjustments to such receivables.

The CNB also supervises the issuer activities from the position of a Government supervisory body over the capital market. Each issuer having its MCBs in circulation is obligated to send to the CNB the reports showing its economic results and its financial situations in the determined intervals and to immediately notify of the changes in its financial situation and of other matters.

A breach by the issuer of the obligations supervised by the CNB is considered to be the so-called deficiency in bank activities. If a deficiency in bank activities is identified, the CNB may assume any of the measures pursuant to the Act on Banks. For example, it may require the issuer to make good, it may change the license of the issuer, impose a fine upon the issuer, suspend (for a maximum of one year) the right of the issuer to issue Covered Bonds, prohibit the issuer to issue the Covered Bonds or order the issuer to repay prematurely the nominal value of the MCBs issued by it, including the aliquot revenue.
COMPLIANCE WITH EUROPEAN LEGISLATION

The Czech MCB legislation complies with the requirements of Art. 22 par. IV UCITS Directive.

> FIGURE 1: COVERED BONDS OUTSTANDING 2003-2008, €M

![Chart showing covered bonds outstanding 2003-2008, €M](chart1)

Source: EMF/ECBC

> FIGURE 2: COVERED BONDS ISSUANCE, 2003-2008, €M

![Chart showing covered bonds issuance 2003-2008, €M](chart2)

Source: EMF/ECBC

**Issuers:** Czech issuers at the end of 2008 were Česká Sporitelna, Československá Obchodní Banka, Hypotecni Banka, Komercni Banka AS, Raiffeisen Bank AS, UniCredit Bank Czech Republic, Volksbank CZ AS and Wüstenrot Hypotecni Banka.
I. FRAMEWORK

The Danish rules regarding the financing of real property were amended in 2007. The Danish Act on covered bonds (SDOs) came into force on 1 July 2007. It was passed to implement the SDO rules of the new EU capital adequacy rules (CRD). At the same time, it met the political objective of giving both mortgage banks and commercial banks the opportunity to issue SDOs.

Danish mortgage banks and commercial banks are regulated in detail by the Danish Financial Business Act (Lov om finansiel virksomhed). Danish mortgage banks are also governed by the Danish Mortgage-Credit Loans and Mortgage-Credit Bonds etc. Act (the “Mortgage Act”) (Lov om realkreditlån og realkreditobligationer mv.). The mortgage banks are specialised banks.


II. STRUCTURE OF THE ISSUER

The Danish Financial Supervisory Authority (FSA) may license mortgage banks, commercial banks and ship financing institutions¹ to issue covered bonds.

In the past, only mortgage banks were allowed to issue mortgage bonds/covered bonds. Now commercial banks are also able to issue covered bonds to fund mortgage loans. However, mortgage banks still have the exclusive right to issue covered mortgage bonds.

This leads to the existence of three types of Danish mortgage bonds:

1. the (traditional) mortgage bonds (Realkreditobligationer, ROs) issued by mortgage banks. ROs are UCITS compliant (article 22(4)).
2. the (new) covered mortgage bonds (Særligt Dækkede Realkreditobligationer, SDROs) issued by mortgage banks, fulfilling the former as well as the new legal requirements. SDROs are both UCITS (article 22(4) and CRD compliant (Annex VI, 68).
3. the (new) covered bonds issued by commercial or mortgage banks (Særligt Dækkede Obligationer, SDOs). SDOs are both UCITS (article 22(4) and CRD compliant (Annex VI, 68).

In addition, all ROs issued before 1 January 2008 maintain their covered bond status in accordance with the grandfathering option under the CRD.

The new legislation in Denmark allows for joint funding, i.e. two or more institutions joining forces to issue covered bonds in order to achieve larger issues.

Danish mortgage banks operate subject to a specialist banking principle in accordance with Danish legislation, which confines the activities of issuers to the granting of mortgage loans funded by the issuance of mortgage bonds. The cover pool may include unsecured loans to public authorities and

¹ Ship financing institutions are regulated by the Act on a Ship Financial Institute (Act no 1376 - 10 December 2007).
guarantees issued by public authorities. Mortgage banks may also carry on other business related to mortgage banking.

The specialist banking principle implies that mortgage banks are confined to granting loans that meet the requirements for cover assets imposed by legislation. Similarly, the funding sources are limited to ROs, SDOs and SDOs. This is due to the fact that Danish mortgage banks are not allowed to accept deposits etc as a source of funding, cf section 8 of the Financial Business Act.

The issuer (mortgage bank or commercial bank) holds the cover assets on its balance sheet as well as all rights under the cover assets. Bonds and cover assets are assigned to individual capital centres in mortgage banks and to registers in commercial banks. The individual bonds, however, are not linked to individual mortgage loans. In case of suspension of payments or bankruptcy proceedings, the assets of the capital centres and registers will be frozen, and no excess funds may be transferred from them. In a bankruptcy scenario, the assets of a/each capital centre/register constitute a separate cover pool, cf section 27 of the Mortgage Act and section 247d of the Financial Business Act.

Issuers have their own employees. Outsourcing of activities is allowed if control measures are deemed satisfactory by the FSA, and consumer protection regulations are observed. The valuation of property may be outsourced provided that the issuer conducts sample valuations on a regular basis. The loan origination process may be outsourced, whereas the final approval process related to loan applicants is not subject to outsourcing. Loan administration activities may be outsourced.

III. COVER ASSETS

Assets eligible as the basis for bond issuance:

<table>
<thead>
<tr>
<th>Covered bonds - SDO</th>
<th>Covered mortgage bonds – SDRO</th>
<th>Mortgage bonds - RO</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;Loans secured by real property</td>
<td>&gt;Loans secured by real property</td>
<td>&gt;Loans secured by real property</td>
</tr>
<tr>
<td>&gt;Exposures to public authorities</td>
<td>&gt;Exposures to public authorities</td>
<td>&gt;Exposures to public authorities</td>
</tr>
<tr>
<td>&gt;Exposures to credit institutions (up to a maximum of 15 %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;Collateral in ships (not an option for mortgage banks)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To serve as cover assets, mortgages must be entered in the Danish land register, which is kept by the Danish district courts. Digital land and loan registration is planned to be in place in September 2009 and will crown several years of cooperation in the Danish financial sector aimed at handling customers’ loans faster and more efficiently.

With respect to SDO the cover pool may include exposures to credit institutions up to a statutory maximum limit of 15% of the nominal value of the outstanding amount of SDOs. Owing to various technical aspects regarding the lending activities of mortgage banks or commercial banks, a number of investments are not subject to this limit.

The difference between funding and lending may be hedged through derivatives, which are included in the cover pool assets.

In a capital centre in a mortgage bank the cover pool is dynamic as a result of the current addition and disposal of loans in connection with the granting and repayment of loans. In most capital centres assets may exclusively be transferred to or from the cover pool upon new lending and (p)repayment. On (p)
repayment, the corresponding amount of issued bonds will be transferred from the capital centre. Each mortgage loan (cover asset) refers to specific ISIN codes and both cover assets and ISIN codes are assigned to specific capital centres. It is therefore not possible for the issuer to (i) change the cover pool unless in connection with new lending and (p)repayment nor (ii) transfer cover assets between different cover pools. Such cover pools are thus less dynamic than cover pools where existing mortgages can be transferred into and out of the cover pools. Cover assets must be identifiable, and the FSA supervises cover asset identification.

IV. VALUATION AND LTV CRITERIA

The Financial Business Act and the Mortgage Act contain provisions on property valuation.

Where loans are funded by the issuance of SDOs and SDROs, valuations are based on the open market value of a property. Where loans are funded by ROs, valuations are based on the mortgageable value.

In Denmark, the mortgageable value will correspond to the open market value in the vast majority of cases, cf sections 10-15 of the Mortgage Act.

LTV limits - an overview

<table>
<thead>
<tr>
<th>Property category</th>
<th>Covered bond - SDO</th>
<th>Covered mortgage bond - SDRO</th>
<th>Mortgage bond - RO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential property</td>
<td>80% or 75%1)</td>
<td>80% or 75%1)</td>
<td>80%</td>
</tr>
<tr>
<td>Holiday property</td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>Agricultural property</td>
<td>60%2)</td>
<td>60%2)</td>
<td>70%</td>
</tr>
<tr>
<td>Commercial property</td>
<td>60%2)</td>
<td>60%2)</td>
<td>60%</td>
</tr>
</tbody>
</table>

Note: 1) 80% for loans issued with up to 30 years maturity and 10 years interest-only period and 75% for loans with an unlimited maturity and interest-only period.

2) The LTV can be raised to 70% if the bank adds additional collateral.

In connection with the issuance of SDOs and SDROs, mortgage banks and commercial banks must ensure continuous LTV compliance - ie not just at disbursement of the loan as is the case for ROs. Where an LTV ratio exceeds the statutory limits, the bank must add supplementary security to the capital centre/register. Otherwise, the issues will lose their status as SDOs or SDROs. Where the LTV limit of 75% for owner-occupied dwellings etc is exceeded, supplementary security will be required when the LTV exceeds 80%.

Mortgaged property is valued (on-site inspection) as part of the processing of loan applications. If the customer applies for a supplementary loan, a new valuation will be performed. When a loan is granted, the LTV thereof is assessed on a case-by-case basis. A basic principle of the valuation regulations is that valuations must be performed by a valuation officer of an issuer. Provided that a number of conditions are met, valuations may be outsourced. The detailed conditions are set out in the Financial Business Act and the Mortgage Act.

All valuations of mortgaged property by the Danish mortgage banks are reported to the FSA. The FSA performs random checks of mortgage banks’ valuations by way of on-site inspections. In 2005 the FSA approved the use of an automated valuation model (AVM) for the valuation of mortgaged property. The AVM was approved for specific property categories only. AVM valuations are also supervised by the FSA.
V. ASSET - LIABILITY MANAGEMENT

The Financial Business Act, the Mortgage Act and the Executive Order on bond issuance, balance principle and risk management require mortgage banks and commercial banks to observe a balance principle and a set of rules on risk management in connection with the issuance of RO, SDRO and SDO.

The Executive Order provides limits to the scope of differences allowed between on the one hand the payments from borrowers and on the other hand the payments to the holders of the issued ROs, SDROs and SDOs. The limits are adjusted by loss limits to the interest rate, foreign exchange, option and liquidity risks that follow from cash flow differences in the balance sheet. The Executive Order also contains a number of other provisions limiting financial risk.

For commercial banks, the balance principle is applicable at register level. For mortgage banks, the balance principle is applicable at the level of the individual capital centres and the institutions in general.

For each register/capital centre, mortgage banks and commercial banks must choose whether to comply with either the specific balance principle or the general balance principle. The choice of balance principle does not depend on the choice of bond type (RO, SDRO or SDO) issued out of the register/capital centre. The differences between the two balance principles are as follows:

<table>
<thead>
<tr>
<th>Types of risk</th>
<th>Specific balance principle</th>
<th>General balance principle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate risk</td>
<td>Stress test on level and structure + Loss limit of 1 per cent of capital base + Risks in different currencies cannot be set off</td>
<td>Stress test on level and structure Loss limit for mortgage banks dependent of stress test: 1 per cent/ 5 per cent of capital adequacy requirement + 2 per cent/10 per cent of the additional excess cover Loss limit for commercial banks dependent of stress test: 10 percent/100 percent of excess cover</td>
</tr>
<tr>
<td>Currency risk</td>
<td>Exchange rate indicator 2 (few currencies) + Loss limit of 0.1 per cent of capital base</td>
<td>Simple stress test Loss limit for mortgage banks: 10 pct. of capital adequacy requirement + 10 per cent of the additional excess cover for EUR and 1 per cent of capital adequacy requirement + 1 per cent of additional excess cover of other currencies Loss limit for commercial banks: 10 percent of excess cover</td>
</tr>
<tr>
<td>Option risk</td>
<td>Maximum term of 4 year + Structural limits on call options and index-linking</td>
<td>Stress test on volatility Loss limit for mortgage banks: 0,5 per cent of capital adequacy requirement + 1 per cent of the additional excess cover No maturity or structural limits Loss limit for commercial banks: 5 percent of excess cover No maturity or structural limits</td>
</tr>
<tr>
<td>Types of risk</td>
<td>Specific balance principle</td>
<td>General balance principle</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>Limitations on temporarily liquidity deficits:</td>
<td>Limitations on interest payments:</td>
</tr>
<tr>
<td></td>
<td>25 per cent (years 1-3)</td>
<td>Interest (in) &gt; Interest (out) (over a current period of 12 months) +</td>
</tr>
<tr>
<td></td>
<td>50 per cent (years 4-10)</td>
<td>Present value</td>
</tr>
<tr>
<td></td>
<td>100 per cent (from year 11)</td>
<td>PV (in) &gt; PV (out) (always)</td>
</tr>
<tr>
<td>Repayment of loans by bonds other than the underlying bonds</td>
<td>Max. 15 pct. Both own issued bonds and bonds from other credit institutions +</td>
<td>Max. 15% from other credit institutions - Own issued bonds unlimited</td>
</tr>
<tr>
<td></td>
<td>Approximately same cash flow</td>
<td></td>
</tr>
</tbody>
</table>

Despite the risk limits of the balance principle, Danish mortgage banks have in practice structured their mortgage lending business in such a way that they do not assume significant financial risks with respect to lending and the underlying funding activities. Thus, the mortgage banks have nearly eliminated interest rate risk, foreign exchange risk and prepayment risk.

Loans granted by the Danish mortgage banks are funded exclusively through mortgage bond issuance. Proceeds from issuance according to the loan amount must therefore be available on the date of loan disbursement. The mortgage bank commonly achieves this through tap issuance. Each loan disbursed is linked to certain amounts of bonds (not certain bonds) in one or several specific ISIN codes currently open for issuance. Knowing which loans to disburse, e.g. the following day, the mortgage bank pools the bond amounts necessary for these loans. Having done this, the total tap amount for each open ISIN code is issued and – subsequently – sold to investors. The tap issuance thus ensures that the following key criteria are maintained day by day:

- Provision of liquidity for actual disbursement;
- Balance of mortgages and bonds outstanding on capital centre level;
- Balance of future payments on capital centre level.

The individual ISIN code can be open for issuance for an extended period of time. With tap issuance taking place virtually every day over a period of several years there is no strict distinction between primary and secondary markets in the Danish system. In other words: a liquid secondary market has a direct positive impact as a catalyst for smooth operation and tight pricing in the primary market.

The Danish commercial banks are also subject to the strict ALM rules. In practice the commercial banks operate under a general asset and liability management and do not offer pass-through products.

The FSA must be informed of any balance principle breaches without delay. Breaches are punishable by a fine imposed by the FSA. In case of severe or multiple breaches, the FSA may revoke the operating license and dismiss the management of the issuer.

According to the Financial Business Act, the capital base must represent at least 8% of risk-weighted assets and at least EUR 5m. Mortgage banks must observe the capital adequacy requirement both at individual capital centre level and at the level of the institution. Overcollateralisation forms part of the cover pool. If this requirement is not observed, the FSA must be informed without delay. In this case,
the FSA will issue an order effecting suspension of payments and, if applicable, initiate bankruptcy proceedings against the issuer. The FSA may also grant the issuer time to secure an adequate capital base. In addition, issuers are required to prepare comprehensive reports on asset-liability management for the FSA on a quarterly basis.

VI. COVER POOL MONITOR AND BANKING SUPERVISION

The issuer monitors the cover pool continuously. Data from every single loan offer from the Danish mortgage banks and thus all property valuations for new lending purposes are reported to the FSA on a quarterly basis.

There is no cover pool monitor officer. Instead, in the mortgage banks the internal auditors are required to monitor the existence of the mortgages in the capital centre on a current basis. The commercial banks report on a quarterly basis to the FSA on the assets in the register. The statement of the registered assets must be verified by the external auditor of the bank.

Banking supervision is carried out by the FSA. The FSA has the authority to issue an order with which the issuer must comply. In case of severe or multiple breaches of Danish law or of such orders, the FSA may revoke the operating licence and dismiss the management of the issuer, cf sections 373-374 of the Financial Business Act.

VII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Capital centres of mortgage banks (regardless of whether the issuer has issued ROs, SDROs or SDOs):

Cover assets, mortgages and eligible securities are assigned to specific capital centres which constitute the cover pools of the bonds issued in accordance with Danish legislation. A capital centre consists of a group of series with joint liability and a joint series reserve fund. To become eligible as collateral, mortgages must be entered in the Danish land register or filed for registration in the register (under certain conditions). Mortgages are registered at a specific level employing a property identification code. Eligible securities are registered on an accounting basis. The registration is legally binding and will form the basis of any bankruptcy proceedings.

The issuer - which is subject to the supervision of the FSA - keeps the cover register. The land register is kept by the Danish district courts.

Cover assets are assigned to cover pools on an ongoing basis in accordance with Danish legislation, and no further steps to secure a segregation of assets are therefore required.

If bankruptcy proceedings have been initiated, a trustee appointed by the bankruptcy court will administer the cover assets. As mortgage bank creditors are essentially bondholders, no separate administrator is appointed. Bond investors have a primary secured claim against all assets in the cover pool. Derivative counterparties have a corresponding primary preferential right provided that the derivatives contract stipulates that the suspension of payments or bankruptcy of the institution does not constitute an event of default. Bonds issued to secure assets as compensation for LTV excess (also referred to as junior covered bonds) have a secondary preferential right to all assets of the capital centre. The trustee may re-establish the issuer, if possible, and is not necessarily required to dissolve the enterprise.
When a mortgage bank becomes subject to bankruptcy proceedings, the assets of a capital centre will be segregated to satisfy bondholders, etc, in accordance with their legal position as secured creditors. Any excess funds will form part of the assets available for distribution immediately or subsequently.

Any outstanding claims against the capital centres - also referred to as residual claims – are payable out of the assets available for distribution. In this case, bondholders and derivative counterparties are secured creditors ranking before ordinary creditors, including holders of junior covered bonds. Junior covered bond holders are thus secondary secured creditors in relation to the capital centre but ordinary creditors as regards the assets available for distribution.

The bankruptcy proceedings against a mortgage bank cannot be closed until the last creditors have been paid or all funds have been distributed. Note that no Danish mortgage bank has ever been subject to bankruptcy proceedings.

The preferential position ensures that a bankruptcy scenario will only in exceptional cases affect bond investors and derivative counterparties, thereby rendering bonds bankruptcy remote.

Bankruptcy regulations applicable to Danish mortgage banks contain detailed guidelines which must be observed in a bankruptcy scenario. Key points of the guidelines are:

> A trustee will be appointed by the bankruptcy court to administer all financial transactions of the issuer;
> The trustee will be instructed to meet all payment obligations under bonds issued in due time despite any suspension of payments of the issuer;
> All new lending activities of the issuer will be suspended;
> The trustee may issue bonds to refinance maturing bonds and raise secured loans to obtain liquidity (cf below);
> Payments on loans will not be accelerated, and therefore payments from borrowers will fall due according to the original payment schedule;
> The trustee will not meet the claims of other creditors until all payment obligations under the senior bonds have been met in full;
> Derivative counterparties enjoy the same legal position as senior bonds.

Bonds do not accelerate automatically. Payments fall due according to the original payment schedule. The trustee is ordered by law to meet all payment obligations under senior bonds and the derivative contracts as they fall due.

If payments from cover assets (mortgages and overcollateralisation of minimum 8%) are insufficient to meet the payment obligations, the trustee has the authority to raise additional loans. If this fails, the issuer will ultimately default on its payments. The trustee may raise loans to meet the payments for bondholders and derivative counterparties and provide security for such loans in the form of assets other than the cover pool mortgages, ie the reserve fund assets. The lender will have a first priority secured claim against the assets provided as security but not against the mortgages.

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3 The same segregation of assets takes place in the «mortgage bank in general» as regards bonds issued outside capital centres at the level of the institution. However, the value of such assets may not exceed the value of the mortgages under the bonds plus an amount equal to 8% of the risk-weighted value of the mortgages.

4 Including any claims by bondholders against the «mortgage bank in general».
Cover assets are assets on the issuer’s balance sheet, the issuer being the mortgagee of the mortgages. Cash flows from the cover assets must be used to meet the payment obligations under the bonds and the derivative contracts. Only the issuer as mortgagee, not investors, is entitled to foreclose on cover assets. Cash flows from cover assets must be used to meet firstly the payment obligations under senior bonds and the derivative contracts, secondly the obligations under junior covered bonds.

**Commercial bank registers**
A commercial bank may now set up a register segregating assets, which exclusively serve as SDO cover assets.

As is the case with mortgage banks, derivative counterparties have a primary preferential right in line with the SDOs provided that the derivatives contract stipulates that the suspension of payments or bankruptcy of a commercial bank does not constitute an event of default. Bonds issued to secure assets as compensation for LTV excess (also referred to as junior covered bonds) have a secondary preferential right to all assets of the register.

The register is kept by the commercial bank and must at all times contain all assets, guarantees received and derivatives contracts, clearly individualised. The commercial bank must submit statements of the assets to the FSA. The external auditor must perform continuous regular control of the register and at least twice a year make unannounced of register audits.

Where the FSA suspends the licence of a commercial bank to carry on banking business, the FSA or the bank files a bankruptcy petition, or the bank is adjudicated bankrupt following the petition of a third party, the FSA will decide whether the register is to become subject to administration by an administrator as an estate in administration. The administrator (and not the ordinary trustee) will be in charge of the assets of the register.

Any unsatisfied residual claims by SDO holders and derivative counterparties against the register may be proved against the assets available for distribution of the commercial bank, but – contrary to the proceedings related to mortgage banks – exclusively as ordinary claims. Residual claims from junior covered bonds may also be proved as ordinary claims against the assets available for distribution.

The register is – contrary to the capital centres of mortgage banks – not subject to any specific statutory minimum requirement as to capital adequacy. The 8% capital adequacy requirement must only be fulfilled at the level of the commercial bank.

**VIII. RISK WEIGHTING AND COMPLIANCE WITH EUROPEAN LEGISLATION**

SDOs and SDROs qualify as covered bonds under the CRD. ROs issued before 1 January 2008 will maintain the low risk weighting of 10% throughout the maturity of the bonds in accordance with the grandfathering option under the CRD. ROs issued after 1 January 2008 carry a risk weight of 20%. ROs, SDOs and SDROs are eligible for repo transactions and may be used as collateral for loans with the Danish central bank (Danmarks Nationalbank).

When investing in ROs, SDOs and SDROs, the Danish investment legislation allows pension funds etc to exceed the usual limits on exposures to a single issuer. thus acknowledging the reduced risk associated with covered bond assets (cf the Financial Business Act (for insurers) and the Act on Investment Associations and Special-Purpose Associations as well as other Collective Investment Schemes etc.).
Issuers: Covered Bonds backed by real estate collateral are primarily issued by the specialised mortgage banks: BRFkredit a/s, DLR Kredit A/S, LR Realkredit A/S, Nordea Kredit Realkreditaktieselskab, Nykredit Realkredit A/S (incl. Totalkredit A/S) and Realkredit Danmark A/S. FIH Realkredit A/S ceased new lending and issuance in 2004. At the end of 2008 the mortgage banks’ outstanding volume of covered bonds was EUR 366 bn. Since the new Danish regulation on Covered Bonds entered into force on 1 July 2007 only one commercial bank, Danske Bank A/S, has utilised the possibility to issue covered bonds. Danske Bank has issued non-pass-through (euro-style) covered bonds of a value of around EUR 8.5 bn. Danish Ship Finance is the only Danish issuer of Covered Bonds backed by ship loans.
3.6 FINLAND

By Martti Porkka, Aktia Real Estate Mortgage Bank and Ralf Burmeister, LBBW

I. FRAMEWORK
In Finland, the legal basis for covered bond issuance is the mortgage bank act MBA) 1240/1999. It was passed by Finnish Parliament in 1999 and has been amended in October 2000. Another rather technical amendment in connection with changes in the national banking legislation has been passed in February 2007.

II. STRUCTURE OF THE ISSUER
The issuer of Finnish Covered Bonds has to be a specialized bank, e.g. a bank, which has been licensed under the MBA. Such a Mortgage Bank is by law only allowed to pursue the business of lending to the public sector as well as mortgage lending and business and other activities which are closely related to both sectors mentioned before. For refinancing these businesses, in Finland only such a mortgage bank is allowed to issue Finnish Covered Bonds.

The issuer holds the cover assets on the balance sheet. A subsequent transfer of the cover assets to another legal entity is not taking place. A direct legal link between single cover assets and the Covered Bonds issued does not exist. All obligations from Finnish Covered Bonds are direct and unconditional obligations of the issuing bank as a whole. In the case of insolvency, the cover pool is segregated by law from the general insolvency estate and is reserved for the claims of the holders of Finnish Covered Bonds.

So far, the three issuers of Covered Bonds from Finland are using structural features in order to enhance the safety of their issues. Only two of these Finnish issuers have been active in 2007. Currently only Bonds covered by mortgages were issued by Finnish mortgage banks. A separate cover pool would be required if these banks were to start the issuance of public-sector backed Finnish Covered Bonds.

III. COVER ASSETS
Cover assets are so far produced from mortgage lending. ABS or MBS tranches are not eligible for the cover pool.

Up to 20% of the mortgage cover pool is allowed to consist of substitute cover assets. These assets must comply with the Tier-1 definition as used by the European Central Bank.

The geographical scope of eligible mortgage assets is restricted to the European Economic Area (EEA). So far, the Finnish issuers restrict themselves to domestic mortgages on a voluntary basis.

Derivatives are eligible for the cover pools, if they are used for hedging purposes.

The nature of the cover pool is dynamic. There are no explicit transparency requirements regarding the cover assets.

IV. VALUATION AND LTV CRITERIA
The property valuation within the legal framework for Covered Bonds in Finland is based on market values.

The LTV limit is 60% of the market value. This LTV is a relative limit, i.e. when a loan exceeds the 60% limit, the part of the loan up to 60% LTV remains eligible to the cover pool Asset-liability Management.
There are legal standards for Asset-Liability Matching in the Finnish Covered Bond System. For instance, the aggregate interest received on the cover assets in any 12-month period must exceed the interest paid on the outstanding Covered Bonds. This regulation takes derivatives for hedging purposes into account. Additionally, the national Financial Supervision Authority (FSA) requires stress tests for cash flows from variable interest rate payment. The stress test comprises a 1% i.e. 100 basis points parallel shift of the yield curve.

The Finnish law also sets out rules with regard to duration of cover assets and bonds. The average term to maturity of the outstanding notes must be shorter than the average term to maturity of the collateral assets.

Also the net present value of outstanding Covered Bonds must be lower than the net present value of the cover assets.

With regard to foreign exchange risk, the Finnish MBA requires complete matching of cover assets and outstanding Covered Bonds after taking into account possible hedging transactions.

So far, the MBA requires no formal over-collateralisation. In practice, the Finnish issuers so far established a minimum level of over-collateralisation within their programmes.

In case of a breach of one of these rules mentioned, the issuer might face sanctions from the FSA. Ultimately, the issuer might face the loss of its licence.

**V. COVER POOL MONITOR AND BANKING SUPERVISION**

The issuer carries out the monitoring of the cover pool. Therefore, the issuer reports to the FSA on a monthly basis. With regard to UCITS 22(4), this supervision of a specialized bank as issuer of the Covered Bond is compliant to the “special supervision”. The FSA has the legal power to take appropriate measures. It is allowed to conduct inspections at the bank in question or to require documents. Also, the FSA could issue a public warning or admonition. Ultimately, it is up to the FSA to revoke the banking licence of the mortgage bank in question.

So far, rating agencies have no explicit role in the legal framework of Finnish Covered Bonds. Nevertheless, all current issuers by using structural enhancements have assigned a certain role to the rating agencies.

**VI. HOW ARE SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS REGULATED?**

A cover register allows identifying the cover assets. The legal effect of a registration of assets into this register is to create the priority claim of Covered Bond holders to these cover assets in case of an insolvency of the issuer. The cover register is managed by the corresponding mortgage bank, which in turn is supervised by the FSA.

The cover register contains information about the principle amount of Covered Bonds issued, the loans covering these bonds as well as derivative transactions hedging these bonds.
**Asset segregation**
The cover pool is a part of the general estate of the bank as long as the issuer is solvent. If the insolvency proceedings are opened, by operation of law, the assets recorded in the cover registers are excluded from the insolvency’s estate. When the insolvency proceedings are opened, the FSA appoints a special cover pool administrator. Within the insolvency procedure, the derivative counterparties rank junior to Covered Bond holders but pari passu with unsecured creditors of the issuer. The cover assets do form a separate legal estate, which is ring-fenced by law from other assets of the issuer.

**Impact of insolvency proceedings on covered bonds and derivatives**
Covered Bonds do not automatically accelerate when the issuing institution becomes insolvent. The legal consequences for the derivatives in case of an insolvency of the issuing mortgage bank depend on the relevant contracts. In any case, the claims of the derivative counterparties rank junior to Covered Bond holders but pari passu with unsecured creditors of the issuer.

** Preferential treatment of Covered Bond holders**
Covered Bond holders enjoy a preferential treatment as the law stipulates the separation of the cover assets on the one hand and the insolvency’s estate on the other.

The satisfaction of the Covered Bond holders is not limited to the cover assets in the Finnish system. On the contrary, those creditors also participate in the insolvency proceedings in respect of the remaining bank’s assets.

A moratorium on the insolvency’s estate cannot delay the cash flows from the cover assets and, therefore, endanger the timely payment of Covered Bond holders.

**Access to liquidity in case of insolvency**
With the appointment of the cover pool administrator, this person acts on behalf of the Covered Bond holders. The pool administrator has access to the cover assets. Cover assets may only be disposed with the consent of the FSA. Additionally, the pool administrator has also the first access on cash flows generated by the cover assets. The MBA foresees no possibility for the pool administrator to take up a loan on behalf of the cover pool to create more liquidity.

Up to 20% of the mortgage cover pool may consist of liquid substitute cover assets. With the consent of the FSA, this limit may even be higher. As all cover assets entered into the cover register are ring-fenced in case of an insolvency of the issuer, this results also in the insolvency remoteness of voluntary over-collateralisation.

**VII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION**
Finnish Covered Bonds comply with the requirements of Art. 22 par. 4 UCITS Directive as well as with those of the CRD Directive, Annex VI, Part 1, Paragraph 65 a) to f). Therefore, these bonds are 10% risk weighted in Finland. Following the common practice in Europe, they accordingly enjoy a 10% risk weighting in most European countries.

Finnish Covered Bonds are also eligible in repo transaction with national central bank, i.e. within the Euro-zone.

As far as the domestic issuers are aware, there are no further specific investment regulations regarding Finnish Covered Bonds.
Issuers: Finnish issuers at the end of 2008 were Aktia Real Estate Mortgage Bank, OP Group Mortgage Bank and Sampo Housing Loan Bank.
3.7 FRANCE


Sociétés de crédit foncier and Caisse de Refinancement de l’Habitat are governed by a special legal framework. French structured covered bonds issuers are governed by a legal framework based on French general law and especially those resulting from the implementation of the European Collateral Directive N° 2002/47.

A - OBLIGATIONS FONCIERES

By Francis Gleyze
Caisse Centrale du Crédit Immobilier de France

Unlike countries which allow ordinary credit institutions to issue covered bonds provided that the cover pool is segregated in their balance sheet, France requires the setting up of an ad hoc company, the société de crédit foncier totally independent from the other companies of the group to which it belongs and specifically dedicated to the issuance of obligations foncières - the French special law based covered bonds.

Sociétés de crédit foncier ("SCFs"), are credit institutions governed by a stringent legal framework in order to protect the holders of the bonds they issue. They operate under the close scrutiny of France’s Banking Commission (Commission Bancaire), the banking industry supervisor, which requires compliance with management rules designed to ensure control over risks.

I. LEGAL FRAMEWORK

Sociétés de crédit foncier are governed by articles L.515-13 and seq. of the French Monetary and Financial Code (the "Code"). Licensed by the Comité des Etablissements de crédit et des entreprises d’investissement (CECEI), they have a single purpose: to grant or acquire eligible assets, as defined by law, and to finance them by issuing obligations foncières, which benefit from a special legal Privilege. They may also issue or contract other debts benefiting or not from the Privilege.

The legal framework of the société de crédit foncier was updated in 2007 according to the implementation of the European Capital Requirements Directive N° 2006/49 (the “CRD”), and, for the last time, on January 2009.

II. COVER ASSETS

Only eligible assets, restrictively defined by law, are authorized on the balance sheet of the sociétés de crédit foncier. All assets on the balance sheet are part of the cover pool.

Assets eligible to the cover pool are:

- loans guaranteed by a first-ranking mortgage or by an equivalent guarantee;
- loans granted to finance real estate and guaranteed by a credit institution or an insurance company with shareholders’ equity of at least € 12 million and that isn’t a member of the group to which belongs the société de crédit foncier. The amount of these loans cannot exceed 35% of the assets of the société de crédit foncier;
- exposures that are totally guaranteed by:
• central administrations, central banks, public local entities and their grouping, belonging to a member State of the European Community or party to the European Economic Area, or - under ratings conditions - central administrations and central banks belonging to a non member State of the European Community or to an non adherent to the European Economic Area;
• European Community, International Monetary Fund, Bank for international Settlements and multilateral developments banks registered by the French Ministry of Finances;
• others public sector entities and multilateral developments banks as more described in Article L.515-15 of the Code;
• senior units of securitisation funds or equivalent entities subject to the law of a Member State of the European Community or party to the European Economic Area whose assets are composed, at a level of at least 90%, of loans and exposures directly eligible to the cover pool. The assets of the securitisation funds or equivalent entities may only consist of mortgage loans or public sector loans, and under no circumstances, may be backed by assets created by consolidating or repackaging multiple securitisations. To be eligible to the cover pool, the senior units or securities issued by the securitisation vehicle or similar entity must qualify as a minimum for the credit quality assessment step 1 by a rating agency recognised by the French banking supervisor. AAA rated senior units of securitisation funds may represent 100% of the outstanding covered bonds;
• mortgage notes representing loans that would be otherwise directly eligible to the cover pool and issued in accordance with Articles L.513-42 et seq. of the Code. The mortgage notes may not represent more than 10% of the assets of the société de crédit foncier;
• replacement assets up to 15 % of the amount of the outstanding covered bonds issued by the société de crédit foncier. Replacement assets are defined as sufficiently secure and liquid assets (i.e. securities, assets and deposits for which the debtor is a credit institution or an investment company qualifying for the step 1 credit quality assessment).

Loans guaranteed by a first-ranking mortgage or by an equivalent guarantee and loans guaranteed by a credit institution or an insurance company are eligible for privileged debt financing up to a part of the financed or pledged real estate’s value. Senior units of securitisation funds are subject to similar rules.

III. PRIVILEGE

Pursuant to article L.515-19 of the Code, holders of obligations foncières and other privileged debts have preferred creditor status and the right to be paid prior to other creditors who have no rights whatsoever to the assets of the société de crédit foncier until the claims of preferred creditors have been satisfied in full.

This legal Privilege (the “Privilege”), which supersedes the ordinary French bankruptcy law, has the following characteristics.

• The sums deriving from the loans, exposures, similar debts, securities, financial instruments, after settlement if applicable, and debts resulting from deposits made with credit institutions by sociétés de crédit foncier are allocated in priority to servicing payment of the covered bonds and other privileged debt;
• the judicial reorganisation or liquidation or amicable settlement of a société de crédit foncier does not accelerate the reimbursement of obligations foncières and other debt benefiting from the Privilege which continue to be paid at their contractual due dates and with priority over all other
debts. Until the holders of privileged debts are fully paid off, no other creditor of the société de crédit foncier may avail itself of any right over that company’s property and rights;

- the common provisions of French bankruptcy law affecting certain transactions entered into during the months prior the insolvency proceedings (the période suspecte) are not applicable to sociétés de crédit foncier.

**IV. BANKRUPTCY REMOTENESS**

As an exception to the general French bankruptcy law, bankruptcy proceedings or liquidation of a company holding share capital in a société de crédit foncier cannot be extended to the société de crédit foncier. As a result, sociétés de crédit foncier are, under a special law in accordance with a deliberate decision of the legislator, the only French companies being totally bankruptcy remote and enjoying full protection from the risks of default by their parent company or the group to which they belong.

**V. COVERAGE RATIO**

Under Article L.515-20 of the Code, the total value of the assets of a société de crédit foncier must at all times be greater than the total amount of liabilities benefiting from the Privilege, a condition that makes for a coverage ratio always greater than 1.

From a regulatory standpoint, the coverage ratio is calculated by applying different weights to classes of assets:

- loans secured by a first-ranking mortgage or by an equivalent guarantee are weighted 100% up to their part eligible for privileged debt financing;
- loans guaranteed by a credit institution or an insurance company are weighted 100% if the guarantor is rated at minimum AA- (Fitch and S&P) or Aa3 (Moody’s), weighted 50% if it is rated A- (Fitch and S&P) or A3 (Moody’s), and weighted 0% if it is rated below these ratings;
- senior units of securitisation funds are weighted 100% if they are rated at minimum AA- (Fitch and S&P) or Aa3 (Moody’s), weighted 50% if they are rated A- (Fitch and S&P) or A3 (Moody’s), and weighted 0% below these ratings;
- public exposures and replacement assets are weighted 100%.

**VI. COVER POOL MONITOR**

Sociétés de crédit foncier must appoint a registered auditor, with the agreement of the French banking regulator, to act as a “Specific Controller”. To ensure independence, the specific controller may not be an employee of either of the SCF’s independent auditors, of the company that controls the SCF, or of any company directly or indirectly controlled by a company that controls the SCF.

The mission of the Specific Controller involves the following verifications:

- that all assets granted or acquired by the société de crédit foncier are eligible to the cover pool, and in the case of mortgage assets, that they are properly valued;
- that the coverage ratio is above 100% at any moment;
- that the société de crédit foncier comply with all the limits required by the regulation (i.e. the limit of the loans guaranteed by a credit institution or an insurance company, the limit of the mortgage promissory notes and the limit of the replacement assets);
• that the “congruence”, i.e. the adequacy of maturities and interest rates of assets and liabilities, is at a satisfactory level;
• and, more generally, that the société de crédit foncier complies with the law and regulations.

The Specific Controller certifies that the société de crédit foncier complies with coverage ratio rules on the basis of a quarterly issuance program, and for any issue of an amount equal or above 500 million euros. These coverage ratio affidavits are required to stipulate in issuance contracts that the debt benefits from the legal Privilege.

The Specific Controller reports to the French banking regulator. He attends shareholders’ meetings, and may attend Board meetings.

Pursuant to article L.515-30, the Specific Controller is liable towards both the société de crédit foncier and third parties for the prejudicial consequences of any breach or negligence he may have committed in the course of his duties.

VII. BANKING SUPERVISION

SCFs operate under the constant supervision of the Banking Commission.

Like listed companies, SCFs must issue periodic financial information. Moreover, SCFs are also required to publish an annual report on the quality of their assets and the compliance with the limits, describing the characteristics and breakdown of loans and guaranties, the amount of defaults, the breakdown of receivables by amount and by class of debtors, the proportion of early redemptions, the list and characteristics of FCC securities and RMBSs that it holds, the volume and breakdown of replacement securities that it holds, the compliance with the limits and the extent and sensitivity of its interest-rate exposure. This report is filed with the Banking Commission and published in the Bulletin des Annonces Légales Obligatoires.

The coverage ratio must be published and reported to the Banking Commission every six months.

As credit institutions, SCFs are subject to Comité de la Réglementation Bancaire et Financière (CRBF) regulation 97-02 on internal control. Accordingly, they must set up a system for monitoring transactions and internal procedures, a system for handling accounting processes and data processing, as well as risk management and monitoring systems.

VIII. ASSET - LIABILITY MANAGEMENT

Under French regulations, sociétés de crédit foncier must manage and hedge market risks on their assets, liabilities and off-balance sheet items: interest rate risks, currency risks, maturity mismatch between liabilities and assets. The surveillance of these points is part of the duties of the Specific Controller.

In application of French Regulation 97.02, a report on risk management must be sent to the French banking regulator, which is also transmitted to the auditors, the Specific Controller and the Board of Directors.

In order to give protection to the hedging system in place, article L.515-18 of the Code provides that financial instruments hedging the assets, obligations foncières and other debt benefiting from the Privilege, and financial instruments hedging the overall risk on assets, liabilities and off-balance sheet items, benefit from the Privilege. As a consequence, they are not to be terminated in the event of bankruptcy proceedings or liquidation.
IX. TRANSPARENCY, ASSET VALUATION

Once a year, after the shareholders’ General Meeting, the société de crédit foncier must publish in the Bulletin des Annonces Légales Obligatoires, a report describing (i) the nature and the quality of its assets and (ii) its interest rate exposure. The report is also sent to the French banking regulator. In addition, société de crédit foncier informs twice a year the French banking regulator of the amount of its coverage ratio and of the respect of the limits at 30 June and 31 December.

Among his duties, the Specific Controller controls the eligibility, composition, and valuation of the assets. Real estate valuations must be based on their long-term characteristics. Under banking regulation n° 97-02, property values are considered part of the risks of sociétés de crédit foncier. The valuations are made by independent experts in compliance with banking regulation.

X. COVERED BONDS LIQUIDITY

The French sociétés de crédit foncier which issue jumbo obligations foncières have together signed with 23 banks a specific standardised market-making agreement, which has become a national agreement.

XI. RISK-WEIGHTING AND COMPLIANCE WITH EUROPEAN LEGISLATION

Obligations foncières comply with the requirements of article 22 par. 4 UCITS directive, and with the CRD directive, Appendix VI, Pact 1, Paragraph 65 a) to f).

Consequently, and subject to local regulations, the banking risk - weighting is 10% according to European solvency criteria.

B - BONDS ISSUED BY CAISSE DE REFINANCEMENT DE L’HABITAT (CRH)

I. LEGAL FRAMEWORK

CRH was created in 1985 by French Government with State explicit guarantee as a central agency in order to refinance French banks in the specific legal framework of art 13 of law 85-685 of July 1985. Since its creation, no other agency of that type was created up to SFEF creation in October 2008. Today, instead of State guarantee, the French law gives to CRH’s bondholders a very strong privilege on CRH’s secured loans to banks.

The Caisse de Refinancement de l’Habitat (previously Caisse de Refinancement Hypothécaire) is a specialized credit institution of which the sole function is to fund French banks housing loans to individuals.

CRH issues bonds and lends the borrowed amount to banks in the same conditions of rate and duration.

CRH loans take the form of promissory notes issued by the borrowing banks and held by CRH.

CRH’s bonds are strictly regulated in order to offer bondholders a very high credit quality and benefit from a legal privilege.

They are governed by the article 13 of act 1985-695 of July 11, 1985 as complemented by article 36 of act 2006-872 of July 13, 2006.
CRH received approval to issue bonds under article 13 of act 1985-695 by letter of September 17, 1985 from the Minister for the Economy, Finance and Budget.

CRH’s operations are governed by the provisions of art L. 313-42 to L. 313-49 of Monetary and Financial Code. CRH’s loans to banks, i.e. notes held by CRH, are covered by the pledge of housing loans to individuals. In the case of a borrowing bank default, CRH becomes owner of the portfolio of housing loans without any formality notwithstanding any provision to the contrary.

II. COVER ASSETS
Eligible loans are only home loans to individuals defined by law: first-ranking mortgages or guaranteed loans.

Guaranteed loans are loans granted to finance real estate with the guarantee of a credit institution or an insurance company (the total amount of these loans cannot exceed 35% of the covering portfolio).

The geographical area for eligible loans is the European Economic Area in the law but “de facto” only France and Overseas territories.

No replacement assets are allowed. RMBS and other loans are not eligible.

III. PRIVILEGE
Pursuant to article 13 of act 1985-695 (complemented), when the guarantee of the French government is not accorded (this guarantee is no longer granted), the sums or amounts generated by the promissory notes are allocated, as a matter of priority and under all circumstances, to the payment of the interest and principal on CRH bonds.

The provisions of Book VI of the French commercial code, or those governing all legal or equivalent amicable proceedings engaged on the basis of foreign laws, do not constitute an obstacle to the application of these provisions.

These provisions give to CRH’s bondholders a preferred creditor status and the right to be paid prior to other creditors.

IV. BANKRUPTCY REMOTENESS
CRH is a company independent from borrowing banks. Bankruptcy proceedings or liquidation of a borrowing bank, holding CRH’s equity, cannot be extended to CRH.

V. COVERAGE RATIO
In compliance with article 13 of act 1985-695, the only aim of CRH is to issue bonds to fund banks mortgage loans. Then, CRH’s debt amount and CRH’s loans to Banks (represented by notes) must be equal.

According to the provisions of the law and of article R. 313-21 of Monetary and Financial code, CRH’s statutes dictate that the covering portfolio amount (compound of home loans to individuals pledged to cover CRH’s loans to banks) must exceed 125% of the amount of notes held by CRH, and then must exceed 125% of CRH’s bonds.

VI. COVER POOL MONITOR
CRH is an independent credit institution that doesn’t borrow for its own account but for the account of banks and doesn’t charge any fee or interest margin on its refinancing transactions.
CRH regularly achieves, based on sampling, audits on the cover pool, carried out at the borrowing banks. If necessary, CRH asks borrowing banks to increase the cover pool to compensate for the shortfall identified or to pay back CRH by delivering CRH’s bonds.

**VII. BANKING SUPERVISION**

As a credit institution, CRH is under the general supervision of the French banking authority *Commission Bancaire*. Furthermore, its operations are under a specific supervision of *Commission Bancaire* because of the provisions of the article L. 313-49 of Monetary and Financial Code.

CRH is also subject to audit by its shareholder banks.

**VIII. ASSET - LIABILITY MANAGEMENT**

As explained above, CRH’s debts and loans (represented by notes) have exactly the same characteristics. CRH is not submitted to an interest rate risk. CRH is not affected by early repayment of loans included in the portfolio.

According to CRH internal regulation, the cover pool must be congruent with rate and duration of CRH’s debt to protect CRH in the case where it becomes owner of the cover pool.

**IX. TRANSPARENCY, ASSET VALUATIONS AND LOAN TO VALUE**

Every year, the annual report publishes the size of the cover pool. This report confirms the characteristics (nature and quality) of home loans pledged and that CRH is not exposed to interest rate risk.

The rules for real estate valuations are the same as those of *sociétés de crédit foncier*.

Loan to value must not exceed 80% (de facto 90% because of the over-sizing of the covering portfolio by 25%).

**X. CRH BONDS LIQUIDITY**

The size of CRH’s bonds outstanding is very important. They are very liquid, listed on MTS and several banks are market makers for them. The average full CRH debt turnover ratio is very high. Two of CRH issues have a size of 5 euro billion.

**XI. RISK - WEIGHTING AND COMPLIANCE WITH EUROPEAN LEGISLATION**

CRH’s debt has been rated AAA and Aaa (senior unsecured) by Fitch and Moody’s since 1999.

CRH’s bonds are compliant with criteria of article 22 par. 4 UCITS directive and with the Capital Requirements Directive (CRD) requirements. They are 10% weighted in standard approach.

They are included in securities accepted for the European Central Bank (E.C.B.) open market operations.
BNP Paribas presented the first French structured covered bond programme in November 2006. This route was chosen to use the bank’s collateral more efficiently, than the established legal framework for Obligations Foncières. In particular, the 20% cap on guaranteed housing loans (which was recently increased to 35% in May 2007), had been a major obstacle, given that more than 50% of the bank’s housing loan business and circa two thirds of its current originations are secured by guarantees. Following on BNP Paribas’ footsteps, Credit Mutuel and Banque Populaire set up structured covered bond programmes in 2007. In 2008, Groupe Caisse d’Epargne set up its €25bn CB programme (GCE CB), although it has not yet issued its inaugural covered bond.

I. FRAMEWORK

In addition to applying structured finance techniques, structured or common-law based covered bonds (this term will be used interchangeably throughout this chapter) make use of the implementation of the EU Collateral Directive 2002/47/EC in the French financial regulations, which allows for a segregation of the assets without transfer of assets to the issuer of the structured covered bonds. This directive was implemented into the French Code Monétaire et Financier (Article L.431-7) by ordinance N° 2005-171 of 24 February 2005. Pursuant to the article L.431-7-3-1 of the Code, the pledges and the cash collateral shall be enforceable, when the relevant guarantor or cash collateral provider is the subject of any insolvency proceedings.

Issuers of French common law-based covered bonds use a two-step structure. A bank originating collateral transfers or assigns or pledges potential collateral to a subsidiary institution, which in most cases is an affiliate of the sponsor bank which has the legal status of a credit institution with limited purpose.
Since such CB programs are conducted outside the OF framework, the key aspects of the structure, management principles and eligible assets have been agreed on a contractual basis, notably with regard to minimum overcollateralisation, which is set at 8.11% for all the common-law based programmes currently outstanding (i.e. the Asset Coverage Test (ACT) must be no more than 92.5% at all times).

II. STRUCTURE OF THE ISSUER

All issuers to date are credit institutions regulated by the Commission Bancaire and the CECEI (Comité des Etablissements de Credit et des Entreprises d’Investissement). These specialised credit institutions are usually an affiliate of the sponsor bank, with limited purpose. In the case of BNP Paribas Covered Bonds, the issuer is “BNP Paribas Covered Bonds S.A.”, a specialised credit institution in which BNPP holds a 99.9% stake. For Credit Mutuel-CIC, the issuer is “CM-CIC Covered Bonds S.A.”, a subsidiary of Banque Fédérative du Crédit Mutuel and licensed as a credit institution with limited and exclusive purpose. Finally, in the case of Banque Populaire, the issuer is Banques Populaires Covered Bonds S.A. (BPCB), which was incorporated on 10 October 2007 as a French société anonyme à conseil de surveillance et directoire and is governed by the French Monetary and Financial Code. The issuer is a special affiliate of the Banque Populaire Group and has been licensed by the French banking regulator notably for the purpose of making Borrower Loans and issuing Covered Bonds. Finally, GCE CB is a subsidiary of Caisse Nationale des Caisses d’Epargne and licensed as a credit institution with limited and exclusive purpose by the French CECEI. In all structured CB programmes, the issuer is a ring fenced, bankruptcy-proof entity that will be unaffected by the insolvency of the group to which it belongs.

III. COVER ASSETS

The covered bonds are direct, limited recourse obligations of the issuer backed by related secured advances. Under the terms of a borrower facility agreement, the issuers grant advances to the sponsoring bank. The terms and conditions of these advances are designed to match those of the covered bonds. The covered bonds are either fungible with an existing series, or constitute a new series with different terms. All covered bonds issued under the respective programme rank pari passu with each other and share equally in the security.

In all existing French common-law based programmes, the collateral consists of French housing loans, which are being secured either by a mortgage or a guarantee by a third-party which is a financial institution. Being a structured program, geographical restrictions to date have been self imposed. Although the outstanding BNP and CM-CIC covered bonds consist exclusively of French housing loans, the respective covered bond programmes allow for the inclusion of loans from other countries. In contrast, the Banque Populaire CB program only allows the inclusion of French housing loans.

For all programs, the LTV limit is set at 80%. When calculating the appropriate loan balance within the asset coverage test, higher LTV loans are included in the pool, but loan amounts exceeding the respective cap are not. For all programmes, the LTV ratio of the mortgage loans cannot be more than 100% (however, the portion that is above 80% will be disregarded in the ACT). In addition, the ACT gives no value to the loans in arrears or defaults, which would be removed from the collateral portfolio.

Substitution assets can be included in the cover pool. Their aggregate value can make up to 20% of cover assets and may consist of exposures which are subject to rather high quality criteria. They consist of short-term (<1-year) investments, namely bank deposits, at least rated A-1+ AA-, F1+, RMBS notes or government debt, which all must be at least rated triple A.
IV. VALUATION AND LTV CRITERIA

The properties are valued using the French mortgage market accepted practice. The property values are indexed to the French INSEE (Institut National de la Statistique et des Etudes Economiques) or PERVAL (Notaries) house price index on a quarterly basis. Price decreases are fully reflected in the revaluation, while in the case of price increases, a 20% haircut is applied.

In order to reduce the risk of there being a shortfall, the programmes include a dynamic Asset Coverage Test (ACT) that requires the balance of the mortgages in the collateral pool to significantly exceed the balance of the outstanding Covered Bonds. Apart from the results of this calculation, a minimum overcollateralisation level has to be maintained (see Figure 1). This minimum level of OC may be increased from time to time if the credit quality of the mortgages in the collateral pool decreases.

V. ASSET-LIABILITY MANAGEMENT

Within all the French structured CB programmes there are contractual provisions that stipulate that exposure to interest rate and currency risk needs to be neutralised. In addition, downgrade rating triggers for swap counterparties, the pre-maturity test, maturity extension rules and the amortisation test all ensure cashflow adequacy.

All French structured covered bond programmes include a number of other safeguards. In particular, there are minimum rating requirements for the various third parties that support the transaction, including the swap counterparties and account banks, and independent audits of the calculations are undertaken on a regular basis.

An amortisation test has been created to ensure that the assets will be sufficient to enable the issuer to repay the covered bonds. It only applies after a borrower enforcement notice has been delivered and, therefore, covered bondholders will be relying on the proceeds from cover assets. The amortisation test will fail if the aggregate loan amount falls below the outstanding balance of all the covered bonds. In addition, if the borrower’s short term ratings are downgraded below a certain level, the borrower will be required to establish a reserve fund to retain an amount sufficient to meet interest and principal payments over a specific period (e.g. two months for BNP Paribas, nine months for Crédit Mutuel, Banque Populaire and Groupe Caisse d’Epargne) on each series of covered bonds.

VI. COVER POOL MONITOR & BANKING SUPERVISION

The issuer is a regulated French financial institution, which is subject to regulation, supervision and examination by the French banking regulator (Commission Bancaire) and CECEI (Comité des Etablissements de Credit et des Entreprises d’Investissement). In its role as sponsor bank, the issuing bank is responsible for the monthly pool monitoring, with the asset coverage test calculation being checked by an independent asset monitor. Under the terms of an asset monitor agreement, an asset monitor tests the calculation of the asset coverage test annually. In case of non-compliance with the asset coverage test or in case the senior unsecured rating of the sponsor bank drops below a predefined trigger rating level, the test has to be checked on a monthly basis. In addition, rating agencies are involved in the programme and re-affirm the ratings of the program upon a pre-defined issuance volume. They also monitor the amount of overcollateralisation required to maintain the triple-A ratings.
VII. SEGREGATION OF COVER ASSETS & BANKRUPTCY REMOTENESS

In all French structured covered bond programmes, the cover assets are owned by the covered bond funding entity. As creditors of the issuer, the covered bondholders benefit from the automatic segregation of assets upon a borrower enforcement notice or an insolvency of the sponsor bank.

There are a number of trigger events for default in the French structured covered bond structure, the first being a borrower event of default. This can occur in a number of situations including the following:

• Failure to pay any interest or principal amount when the borrower is due;
• Bankruptcy or legal proceedings being taken by the borrower;
• Failure to rectify any breach of the asset coverage test;
• Failure to rectify any breach in the pre-maturity test;
• Failure to rectify any breach of reserve funding requirement; or
• Failure to enter into hedging agreements following a downgrade of the sponsor below a predefined level.

A borrower event of default would not accelerate payments to covered bondholders, but would allow the issuer’s security agent to start proceedings against the borrower and enforce security over cover assets in an orderly fashion.

The second event of default is the issuer event of default. This would arise after a borrower event of default if the issuer failed to make any payments when due, legal proceedings were started against it, or the failure of an amortisation test. This would cause the acceleration of payments to covered bondholders and their redemption at the early amount relevant to that particular covered bond.

A third important trigger event would be a covered bond issuer event of default. This would arise after the covered bond issuer failed to make any payments when due, legal proceedings were started against the issuer, the failure of an amortisation test, or the failure to enter into hedging agreements following a downgrade of the sponsor below a predefined level. In this case, the issuer’s security agent shall be entitled to enforce its rights, payments to covered bondholders would be accelerated and the covered bonds would be redeemed at the early redemption amount including accrued and unpaid interest relevant to that particular covered bond.

VIII. RISK-WEIGHTING AND COMPLIANCE WITH EUROPEAN LEGISLATION

In France and abroad French common-law based covered bonds have a 20% risk-weighting under the CRD Standard Approach.
**Figure 1: Overview - French Common Law Based CB Programmes**

<table>
<thead>
<tr>
<th>BNPP CB</th>
<th>CM-CIC CB</th>
<th>Banques Populaires CB</th>
<th>GCE CB</th>
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<td>Residential mortgages</td>
<td>Residential mortgages</td>
</tr>
<tr>
<td>MBS tranche allowed as substitution assets</td>
<td>Up to 30%</td>
<td>Up to 30%</td>
<td>No</td>
</tr>
<tr>
<td>Underlying properties</td>
<td>Located in France but other countries possible (e.g., in Italy with SMI)</td>
<td>Located in France but other countries possible</td>
<td>Located in France only</td>
</tr>
<tr>
<td>Asset percentage applied in ACT</td>
<td>83.8%</td>
<td>83.8%</td>
<td>83.8%</td>
</tr>
<tr>
<td>Minimum overcollateralisation</td>
<td>8.11%</td>
<td>8.11%</td>
<td>8.11%</td>
</tr>
<tr>
<td>EURO Benchmark CB Outstanding (in €bn)</td>
<td>11.0</td>
<td>4.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Number of loans</td>
<td>179,728</td>
<td>134,154</td>
<td>36,977</td>
</tr>
<tr>
<td>Seasoning (in months)</td>
<td>37.3</td>
<td>46.0</td>
<td>21</td>
</tr>
<tr>
<td>Remaining term in months</td>
<td>168</td>
<td>167</td>
<td>176</td>
</tr>
<tr>
<td>WA Current LTV</td>
<td>77.42%</td>
<td>88.0%</td>
<td>71.5%</td>
</tr>
<tr>
<td>WA Adjusted LTV</td>
<td>99.22%</td>
<td>80.9%</td>
<td>61.0%</td>
</tr>
<tr>
<td>Ownership Status</td>
<td>82% Owner occupied 13% Buy-to-let 5% Vacation/Second Home</td>
<td>94% Owner occupied 8% Buy-to-let 2% Vacation/Second Home</td>
<td>85% Owner occupied 5% Buy-to-let 2% Vacation/Second Home</td>
</tr>
<tr>
<td>Interest Payment Type (as % of total amount)</td>
<td>89% Fixed 10% Variable</td>
<td>76% Fixed 24% Floating</td>
<td>86% Fixed 10% Variable 4% Floating</td>
</tr>
<tr>
<td>Geographical Distribution (as a % of Total Balance)</td>
<td>36% Paris region 16% PACA 14% Alpes</td>
<td>32% Paris region 10% Rhone Alpes 9% Alps</td>
<td>32% Paris region 8% Rhone Alpes 5% Alps</td>
</tr>
<tr>
<td>Home Loan Security Interests</td>
<td>Mortgage 56% Secured by mortgages 31% guaranteed by CMN 25% guaranteed by Credit Logement 41% in house mutual insurance co</td>
<td>Mortgage 2% Credit Logement 3% Credit Logement 2% Credit Logement 2% Credit Logement</td>
<td>Mortgage 2% Credit Logement 3% Credit Logement 2% Credit Logement 2% Credit Logement</td>
</tr>
</tbody>
</table>

Source: Investor reports, Rating agencies, NATIXIS

**Figure 2: BNP Paribas Covered Bond Structure**

Source: Rating Agencies, NATIXIS
**Figure 3: Credit Mutuel-CIC Covered Bond Structure**

Source: Rating Agencies, NATIXIS

**Figure 4: Banque Populaire Covered Bond Structure**

Source: Rating Agencies, NATIXIS
**Figure 5: Group Caisse d’Epargne Covered Bond Structure**

Source: Rating Agencies, NATIXIS

**Figure 6: Covered Bonds Outstanding 2003-2008, €m**

Source: EMF/ECBC
Figure 7: Covered Bonds Issuance, 2003-2008, €m

Source: EMF/ECBC

Note: For CFF, the mortgage and public sector assets are put in the same pool. As such, the cover pool acts as global coverage for privileged liabilities, i.e. no specific asset is linked to a specific bond issue. Therefore, CFF Covered Bonds are under the “mixed assets” category.

Issuers: There are currently 11 covered bond issuers in France: Banque Populaire, BNP Paribas, Caisse de Refinancement de l’Habitat (CRH), CIF Euromortgage, Compagnie de Financement Foncier (CFF), Credit Agricole, Credit Foncier et Communal d’Alsace et Lorraine (CFCAL), Credit Mutuel CIC, Dexia Municipal Agency, Groupe Caisse d’Epargne, and Société Générale.
I. FRAMEWORK

In Germany, the legal basis for Covered Bond issuance is the German Pfandbrief Act (PfandBG – Pfandbriefgesetz) dated 22nd of May 2005. It supersedes the general bankruptcy regulation (§§ 30-36 of the Pfandbrief Act).

In addition and for historic reasons, three further legal frameworks are existing in German law for the issue of Covered Bonds (DZ-Bank Covered Bonds, DSL Covered Bonds and Landwirtschaftliche Rentenbank Covered Bonds). The range of cover assets is slightly different compared to Pfandbriefe (they may include for instance a much higher portion of claims against credit institutions), but their insolvency regime is rather similar to the Pfandbrief rules. For more details, see 'Das Pfandbriefgesetz', Textsammlung und Materialien, edited by the Association of German Pfandbriefbanks, Frankfurt a.M. 2005, page 277-280.

On 26 March 2009 amendments of the PfandBG came in force introducing a new Pfandbrief category, the Aircraft Pfandbrief, and furthermore enhancing the attractiveness of Pfandbriefe for investors. Among many improvements, a further liquidity safeguard has been implemented by introducing a special liquidity buffer of 180 days.

II. STRUCTURE OF THE ISSUER

Since 2005, the issuer of Pfandbriefe is no longer required to be a specialised bank. Instead, Pfandbrief issuers are allowed to exercise all activities of a credit institution, although a special licence for Pfandbrief issuance is required. The minimum requirements to obtain and keep the special licence are as follows:

- core capital of at least 25 million euros
- general banking licence which allows the issuer to carry out lending activities
- suitable risk management procedures and instruments
- business plan showing regular and sustainable issues as well as necessary organisational structure

Since the German outsourcing guidelines of the BaFin do not allow for the outsourcing of important and decision-making sections of the credit institution, the issuer is required to have its own employees. In addition, the PfandBG requires Pfandbrief banks to manage their own risk and take their own credit decisions on their own.

The issuer holds the cover assets on his balance sheet. A subsequent transfer of the cover assets to another legal entity does not take place. Given that a direct legal link between single cover assets and Pfandbriefe does not exist, all obligations relating to Pfandbriefe are obligations of the issuing bank as a whole, to be paid from all the cover assets of the issuer, recorded in the cover register. In the case of insolvency, the cover pool is segregated by law from the general insolvency estate and is reserved for the claims of the Pfandbrief holders. Even then, Pfandbrief holders still have a claim against the general insolvency estate.

III. COVER ASSETS

Cover assets are produced by mortgage lending, public sector lending, ship and aircraft financing activities. ABS/MBS are not eligible. A specific class of Covered Bonds corresponds to each of these cover asset
classes: Hypothekenpfandbriefe, Öffentliche Pfandbriefe, Schiffspfandbriefe and Flugzeugpfandbriefe. The respective Pfandbrief must be fully secured by its specific cover asset class (§ 4 PfandBG). Detailed transparency requirements are regulated in § 28 PfandBG, enhanced by the amendments 2009.

Up to 10% of the nominal volume of Pfandbriefe outstanding may consist of money claims against the European Central Bank, central banks in the European Union or against suitable credit institutions, which fulfil the requirements of credit quality step 1 according to Table 1 of the Annex VI of Directive 2006/48/EC.

The geographical scope of eligible mortgage assets is restricted to EU/EEA countries, to Switzerland, USA, Canada and Japan. Public sector loans to these countries are eligible for the cover of Öffentliche Pfandbriefe (§ 20 PfandBG). The total volume of loans granted in non-EU countries where it is not certain that the preferential right of the Pfandbrief creditors extends to the cover assets, may not exceed 10% of the total volume of the cover loans (§§ 13 I 2, 20 I 2 PfandBG) and 20% for ship and aircraft mortgages (§§ 22 V 2, 26b IV PfandBG).

Derivatives are eligible for cover pools under certain conditions. They must not exceed 12% of the cover assets when calculated on a net present value basis (§ 19 I 4. PfandBG).

IV. VALUATION AND LTV CRITERIA

Property valuation is regulated in § 16 PfandBG. This provision refers to the mortgage lending value (Beleihungswert) which is, in contrast to the market value, based on sustainable aspects of the property. Details about the valuation process and the qualifications of valuers are regulated in a specific statutory order on the mortgage lending value (Beleihungswertermittlungsverordnung, BelWertV), § 16 IV PfandBG.

Monitoring requirements result from the Capital Requirements Directive (once a year for commercial real estate and once every three years for residential real estate). In addition, § 27 BelWertV requires a review of the underlying assumptions when the market has declined substantially; a review of property values is also necessary when the loan has defaulted.

The BelWertV requires personal and organisational independence of the valuer (internal or external valuer)

For both commercial and residential property, the LTV limit is 60% of the mortgage lending value of the property. This LTV is a relative limit, i.e. when the loan exceeds the 60% limit, the part of the loan up to 60% LTV remains eligible for the cover pool.

V. ASSET - LIABILITY MANAGEMENT

§ 4 PfandBG stipulates that the total volume of Pfandbriefe outstanding must be covered at all times by assets of at least the same amount. Thus, the nominal value of the cover assets must permanently be higher than the respective total value of the Pfandbriefe.

In addition, the Pfandbrief Act requires that Pfandbriefe are covered on a net present value basis even in the event of severe interest rate changes or currency fluctuations. The issuer has to provide an overcollateralisation of at least 2% after stress tests which have to be carried out weekly. Both the maturity of outstanding Pfandbriefe and the fixed-interest periods of the cover pool are disclosed on a quarterly basis. Details about the calculation are regulated in a special statutory order Net Present Value (Barwertverordnung).
Furthermore, each day Pfandbriefbanks have to calculate the maximum liquidity need within the next 180 days. This amount has to be covered by liquid assets (§ 4 Ia PfandBG).

Every quarter, the stress-tested NPV of outstanding Pfandbriefe, the cover pool and the overcollateralisation have to be published (§ 28 I PfandBG). The stress tests apply not only to interest rate risks but also to foreign exchange risks.

Cash flow mismatch between cover assets and covered bonds is furthermore reduced by the prepayment rules applicable to fixed interest rate mortgage loans. Prepayments of mortgages during fixed rate periods are only permitted in cases of ‘legitimate interest’ of the borrower or after a period of ten years. If the mortgage is prepaid, the borrower has to compensate the damage of the lender caused by the prepayment (§ 490 II German Civil Code).

**VI. COVER POOL MONITOR AND BANKING SUPERVISION**

A cover pool monitor (Treuhänder) supervises the cover pool. He is appointed by the BaFin and must possess the expertise and experience necessary to fulfil all duties. A qualification as a certified auditor suggests that the necessary expertise is provided.

The monitor has to ensure that the prescribed cover for the Pfandbriefe exists at all times and that the cover assets are recorded correctly in the cover register, §§ 7, 8 PfandBG. Without his approval, no assets may be removed from the cover pool. The BaFin has published a specific statutory order on details of the form and the contents of this cover register (Deckungsregisterverordnung – DeckRegV), § 5 III PfandBG.

In addition, BaFin carries out a special supervision on Pfandbrief banks. The former division on mortgage banks (Referat Hypothekenbanken) was transformed into the divison “Pfandbriefkompetenzcenter I - Grundsatzfragen”, which is responsible for all fundamental issues regarding the PfandBG. In January 2006, the BaFin set up a special division for cover pool audits (“Pfandbriefkompetenzcenter II – Deckungsprüfungen”).

Furthermore, the BaFin has to monitor the cover pool on average every two years (§ 3 PfandBG) and to this end it may appoint auditors with special knowledge in this area. Finally, BaFin carries out the general banking supervision on German Pfandbrief banks.

**VII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS**

A cover register (Deckungsregister) permits the identification of the cover assets, § 5 PfandBG. The register records the cover assets being used to cover the Pfandbriefe as well as claims under derivatives (§ 5 I 1 PfandBG).

The legal effect of registration is that in the case of insolvency of the issuer, the assets which form part of the separate legal estate (the so called “Sondervermögen”) can be identified: All values contained in the register would be qualified as part of the separate legal estate.

While the bank carries out the daily administration of the cover register, it is the cover pool monitor who supervises the required cover und registration in the cover register, § 8 I, II PfandBG. Copies of the cover register shall be transmitted to the supervisory authority on a regular basis.
**Asset segregation**
The cover pool is a part of the general estate of the bank as long as the issuer is solvent. If insolvency proceedings are launched, by operation of law, the assets recorded in the cover registers are excluded from the insolvency estate (§ 30 I 1 PfandBG). Those assets will not be affected by the launching of the insolvency proceedings (§ 30 I 2. HS PfandBG), but automatically form a separate legal estate (or separate property: "Sondervermögen").

After the launching of the insolvency proceedings, a special cover pool administrator (Sachwalter) carries out the administration of the cover assets (§ 30 II 1 PfandBG). Through the appointment of the cover pool administrator by the court, on proposal of the BaFin, the right to manage and dispose of the recorded assets will be transferred to him automatically by law (§ 30 II 2 PfandBG). Regarding cover assets and timely payment of Pfandbriefe, the cover pool administrator represents the Pfandbriefbank (§ 30 II 5, 6 PfandBG). He is allowed to use premises and staff of the Pfandbriefbank (§31 VIII PfandBG).

The cover pool administrator may even be appointed before the insolvency proceedings have been launched (§ 30 V PfandBG).

**Impact of insolvency proceedings on Covered Bonds and derivatives**
Covered Bonds do not automatically accelerate when the issuing institution is insolvent, but will be repaid at the time of their contractual maturity. The same applies to derivatives which are registered in the cover register and form part of the cover pool. Accordingly, the German master agreements for cover derivatives stipulate that the bankruptcy of the Pfandbrief issuer does not signify a termination event. Article 13 N° 6 DeckregV stipulates that the collateral provided by the derivative counterpart or the Pfandbrief bank has to be registered in the cover register. The consequence of such registration is that the collateral belongs to the separate legal estate.

**Preferential treatment of Covered Bond holders**
Covered Bond holders enjoy preferential treatment as the law stipulates the separation of the cover assets on the one hand and the insolvency estate on the other, § 30 I PfandBG.

The satisfaction of the Pfandbrief creditors is not limited to the cover assets. On the contrary, these creditors also participate in the insolvency proceedings with respect to the Pfandbrief bank’s remaining assets.

Only in the case of over-indebtedness or insolvency of the cover assets, the BaFin may apply for a special insolvency procedure relating to the cover pool and Covered Bonds (§ 30 VI PfandBG). Insolvency of the cover pool is the only reason, which might trigger acceleration of Pfandbriefe.

As long as the separate legal estate is solvent, a moratorium on the insolvency estate cannot delay the cash flows from the cover assets and, therefore, endanger the timely payment of Covered Bond holders.

**Access to liquidity in case of insolvency**
Through the appointment of the cover pool administrator, the right to manage and dispose of the recorded assets is transferred to him by law (§ 30 II 2 PfandBG). Thus, the cover pool administrator has first access to the cover assets and collects the cash flows according to their contractual maturity (§ 30 III 2 PfandBG).
No explicit regulation exists with respect to the insolvency remoteness of voluntary overcollateralisation (OC). However, the insolvency administrator may only demand that the overcollateralisation be surrendered to the insolvency estate if those amounts will obviously not be necessary as cover for the respective Pfandbrief category (§ 30 IV 1 PfandBG). The burden of proof that OC will never be necessary for the timely payment of the Pfandbriefe, lays with the insolvency administrator.

The cover pool administrator is entitled to contract loans in order to obtain liquidity. According to § 30 II, 5 PfandBG, the cover pool administrator may carry out legal transactions with regard to the cover pools in so far as this is necessary for an orderly settlement of the cover pools in the interest of the full and timely satisfaction of the Pfandbrief creditors.

Sale and transfer of mortgage assets to other issuers
According to § 32 I PfandBG, the cover pool administrator may transfer all or a part of the assets recorded in the cover register as well as liabilities from Pfandbriefe as a whole to another Pfandbrief bank. This transfer requires the written approval of the supervisory authority.

According to § 35 I PfandBG, the cover pool administrator may also agree with another Pfandbrief bank that the assets recorded in the insolvent Pfandbrief bank’s cover register may be managed in a fiduciary capacity by the insolvent Pfandbrief bank’s cover pool administrator for the other Pfandbrief bank.

Thus, particular provisions allow for an easy “transfer” of mortgages outside of the common provisions of civil law, e.g. the management in a fiduciary capacity of registered land charges (so called “Buchgrundschulden”) and foreign mortgages. Both forms require the written approval of the BaFin.

VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION
The risk weighting of Covered Bonds (German Pfandbriefe and foreign Covered Bonds) is regulated by Article 20a Kreditwesengesetz (KWG) and the Solvabilitätsverordnung (SolvV), transposing the Capital Requirements Directive into German law.

German Pfandbriefe comply with the requirements of Art. 22 par. 4 UCITS Directive as well as with those of the CRD Directive, Annex VI, Part 1, Paragraph 68 a) to f). Therefore, they enjoy a 10% risk weighting. Foreign Covered Bonds enjoy a 10% risk weighting in Germany, provided that they comply with the requirements of § 20a KWG.

Derivatives which are part of the cover pool are now 10% risk weighted, granting the derivative partners the same risk weighting as Pfandbriefe (§ 25 VIII SolvV).

Finally, German investment legislation allows investment funds to invest up to 25% of the fund’s assets in Pfandbriefe and furthermore in Covered Bonds issued by credit institutions complying with the requirements of Art. 22 par. 4 UCITS Directive (Article 60 par. 2 German Investment Act).
Issuers: There are currently about 70 Pfandbriefbanken in Germany, including circa 18 former mortgage banks, circa 30 Sparkassen (savings banks), 9 Landesbanken (regional public banks) and 5 specialised public sector banks. Also, an increasing number of private universal banks became Pfandbriefbanken within the last years. 6 Pfandbriefbanken currently issue ship Pfandbriefe.
I. FRAMEWORK

In Greece, the primary legal basis for Covered Bond issuance is article 91 of Law 3601/2007 “On the Undertaking and Exercise of Activities by Credit Institutions, Sufficiency of Own Funds of Credit Institutions and Investment Services Undertakings and Other Provisions”, which entered into force on 1 August 2007 (the “Primary Legislation”). The Primary Legislation supersedes general provisions of law contained in the Civil Code, the Code of Civil Procedure and the Bankruptcy Code. By way of implementation of the Primary Legislation and pursuant to an authorization provided by the latter, the Governor of the Bank of Greece has issued Act nr. 2598/2.11.2007 (the “Secondary Legislation”). Finally the legislative framework in Greece is supplemented by Law 3156/2003 “On Bond Loans, Securitization of Claims and of Claims from Real Estate” (the “Bond Loan and Securitization Law”), to the extent that the Primary Legislation cross-refers to it.

II. DIRECT AND INDIRECT ISSUANCE OF COVERED BONDS

The Greek legislative framework permits the issuance of Covered Bonds in two ways, either directly by a credit institution, or indirectly by a subsidiary of a credit institution. In the direct issuance structure the Covered Bonds are issued by a credit institution and the segregation of the cover pool is achieved through a statutory pledge over the cover pool assets. In the indirect issuance structure the Covered Bonds are issued by a special purpose entity being a subsidiary of a credit institution, which purchases the cover assets from the credit institution by virtue of the provisions of the Bond Loan and Securitization Law, and are guaranteed by the credit institution.

The reason for introducing the indirect issuance structure was that historically most Greek banks had issued a significant amount of notes under medium term note (MTN) programmes containing negative pledge covenants, which did not allow the creation of security over the cover pool, as is necessary for the direct issuance of Covered Bonds. While all Greek banks having MTN programmes have now amended the terms of such programmes to carve out the security provided to holders of Covered Bonds from the scope of the negative pledge covenants, there are still vast amounts of notes issued under the old programmes, rendering the direct issuance of Covered Bonds by most Greek banks impractical, until such notes have been repaid.

III. PREREQUISITES FOR THE ISSUANCE OF COVERED BONDS

According to the Primary Legislation, Covered Bonds may be issued by credit institutions having Greece as home member state. However, in case of issuance of Covered Bonds by a credit institution having as home state another member state of the European Economic Area (EEA) and provided that they are characterized as covered bonds in accordance with the law of such member state, the provisions of the Primary Legislation on the creation of a statutory pledge will apply in relation to claims governed by Greek law, as well as the tax exemptions which apply to Greek bonds. Therefore foreign banks established within the EEA having a significant loan portfolio in Greece may use the loans of such portfolio as part of the cover pool.

The Secondary Legislation sets additional prerequisites for the issuance of Covered Bonds. Specifically the credit institutions issuing Covered Bonds:
(a) must have certain minimum risk management and internal control requirements including suitable policies and procedures for the issuance of Covered Bonds, organizational requirements, IT infrastructure and a policy for the reduction and management of risks deriving from the issuance of Covered Bonds, such as interest rate risk, counterparty risk, operational risk, FX risk and liquidity risk; and

(b) must have aggregate regulatory capital of at least 500 million Euros and a capital adequacy ratio of at least 9%.

IV. COVER ASSETS

Cover assets are primarily residential mortgage loans, loans secured by a mortgage on commercial properties, loans secured by a mortgage on ships and loans to or guaranteed by state entities. Residential and commercial mortgage loans may only be included in the cover pool if the property subject to the mortgage is situated in Greece and hence is governed by Greek law. The loans may be secured by mortgage prenotations instead of full mortgages (as is the practice for cost reasons in Greece) provided the credit institution has adequate internal procedures to ensure the timely conversion of mortgage prenotations into mortgages. In addition openings to credit institutions and investment services undertakings may be included in the cover pool up to an aggregate limit of 15% of the nominal value of the outstanding covered bonds. Derivatives may also be included in the cover pool to the extent that they are used exclusively for the purpose of hedging the interest rate, FX or liquidity risk. To the extent that the counterparties to such derivatives are credit institutions and investment services undertakings (as opposed to state entities or central counterparties in organized markets), the net present value of derivatives included in the pool is included in the above 15% limit. Finally, the cover assets may be substituted by certain tradable assets but only up to the amount by which the aggregate nominal value of the cover assets including accrued interest exceeds the nominal value of the outstanding covered bonds including accrued interest.

V. VALUATION AND LTV CRITERIA

Loans secured by residential mortgages are required to have a loan to value (LTV) ratio of 80%, whereas loans secured by mortgages over commercial properties and ships are required to have an LTV ratio of 60%. Loans with a higher LTV ratio may be included in the cover pool, but they are taken into account for the calculation of the statutory tests described below only up to the amount indicated by the LTV ratio. Thus by way of example a loan of 900,000 Euros secured through a residential mortgage over a property valued at 1,000,000 Euros may be included in the cover pool but will be deemed for the purposes of the calculation of the statutory tests to be equal to 800,000 Euros.

The valuation of properties must be performed by an independent valuer at or below the market value and must be repeated every year in relation to commercial properties and every three years in relation to residential properties.

VI. STATUTORY TESTS

The Secondary Legislation provides for the following statutory tests:

(a) The nominal value of the Covered Bonds including accrued interest may not exceed at any point in time 95% of the nominal value of the cover assets including accrued interest.

(b) The net present value of obligations to holders of Covered Bonds and other creditors secured by the cover pool may not exceed the net present value of the cover assets including the derivatives
used for hedging. This test must be met even under the hypothesis of a parallel movement of the yield curves by 200 basis points.

(c) The amount of interest payable to holders of Covered Bonds for the next 12 months must not exceed the amount of interest expected to be received from the cover assets over the same period. For the assessment of the fulfilment of this test derivatives entered into for hedging purposes are taken into account.

Tests (b) and (c) are performed on a quarterly basis. In case any of the tests is not met, the credit institution is obliged to immediately take the necessary measures to remedy the situation.

The results of the tests (a) to (c) above and the procedures used to monitor the compliance with such tests are audited on a yearly basis by an auditor independent of the statutory auditors of the credit institution.

VII. PROTECTION OF DEPOSITORS

In order to not jeopardize the interests of depositors in case of insolvency of a credit institution due to the segregation (discussed below) of high quality assets in favour for the holders of Covered Bonds, the Secondary Legislation provides that, in case the cover assets exceed significantly the amount of 20% of the available assets of the credit institution on an unconsolidated basis, the Bank of Greece may impose additional capital adequacy requirements. For the purposes of this calculation available assets are considered to be all assets of the credit institution excluding (i) assets subject to securitization, (ii) assets subject to reverse repo agreements and (iii) assets encumbered in favour of third parties. In exercising its discretion to impose additional capital adequacy requirements the Bank of Greece will take into account qualitative considerations such as (i) any deterioration of the average quality of the remaining available assets after the issuance of covered bonds, (ii) the increase of the liquidity of the credit institution combined and any positive effects it may have on its credit rating and prospects and (iii) the results of additional stress tests.

IX. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

In case of a direct issuance the cover assets are segregated from the remaining estate of the credit institution through a pledge constituted by operation of law (statutory pledge). In case of assets governed by a foreign law (which will typically include *inter alia* claims from derivative contracts) a security interest must be created in accordance with such foreign law. The statutory pledge and the foreign law security interest secure claims of the holders of Covered Bonds and may also secure (in accordance with the terms of the Covered Bonds) other claims connected with the issuance of the Covered Bonds, such as derivative contracts used for hedging purposes. The statutory pledge and any foreign law security interest is held by a trustee for the account of the secured parties.

The claims constituting cover assets are identified by being listed in a document signed by the issuer and the trustee. A summary of such document is registered in the land registry of the seat of the issuer. Claims may be substituted and additional ones may be added to the cover pool through the same procedure.

The Primary Legislation creates an absolute priority of holders of Covered Bonds and other secured parties over the cover pool. The statutory pledge supersedes the general privileges in favor of certain preferred claims (such as claims of employees, the Greek state and social security organization) provided for by the Code of Civil Procedure. Furthermore upon registration of the summary of the document listing the claims included in the cover pool, the issuance of the Covered Bonds, the establishment of the statutory
pledge and the foreign law security interest and the entering into of all contracts connected with the issuance of the covered bonds are not affected by the commencement of any insolvency proceedings against the issuer.

In case of an indirect issuance the cover pool assets are segregated from the estate of the credit institution by virtue of their sale to the special purpose entity. For such transfer the provisions of the Bond Loan and Securitization Law apply, which provide equivalent protection from third party creditors and insolvency to the one the Primary Legislation provides in case of direct issuance.

It is worth noting that according to the Primary Legislation both in case of direct and of indirect issuance the cover assets may not be attached. This has the indirect result that the Greek law claims constituting cover assets are no longer subject to set-off, because according to article 451 of the Greek Civil Code claims which are not subject to attachment are not subject to set-off. This is important because under generally applicable law borrowers the loans to whom become cover assets would have had a right to set-off, which would reduce the value of the cover pool, for all counterclaims (including notably deposits) predating the creation of the pledge or the transfer of the claims, as the case may be.

No specific provisions exist in relation to voluntary overcollateralisation. As a result the segregation applies to all assets of the cover pool, even if their value exceeds the minimum required by law. The remaining creditors of the credit institution will only have access to any remaining assets of the cover pool after the holders of the Covered Bonds and other creditors secured by the cover pool have been satisfied in full.

**X. EXERCISE OF THE CLAIMS OF COVERED BONDHOLDERS AGAINST THE REMAINING ASSETS OF THE CREDIT INSTITUTION**

The purpose of the Primary Legislation, as was expressly stated in the introductory note to the law, was to ensure that holders of Covered Bonds would have dual recourse both to the cover pool as secured creditors and to the remaining assets of the credit institution ranking as unsecured and unsubordinated creditors. This was also expressly stated in the Secondary Legislation. However, this legislative aim was put in question due to the introduction shortly before the Primary Legislation of the new Bankruptcy Code. Article 26 of the latter provides that creditors secured by a pledge may not apply to rank as unsecured creditors in the liquidation of the remaining assets of an insolvent creditor, unless they waive their rights under the pledge. While it is arguable that this provision is unconstitutional (because it imposes disproportionate conditions on the exercise of the right to apply for ranking in the proceeds of the liquidation of the remaining bankruptcy estate, which is part of the constitutionally protected right to judicial protection) and hence unenforceable and that in any case it does not apply to the statutory pledge, the existence of article 26 rendered it impossible to issue unqualified legal opinions on directly issued covered bonds. In order to solve this problem a draft law has been prepared to specifically exclude Covered Bonds from this provision and is expected to be submitted to Parliament soon.

It should be noted that article 26 does not affect indirectly issued Covered Bonds, because the holders of Covered Bonds in that case do not have a pledge over assets belonging to the credit institution and therefore have the right to appear as unsecured and unsubordinated creditors in the liquidation of the estate of the credit institution.
XI. IMPACT OF INSOLVENCY PROCEEDINGS ON COVERED BONDS
According to the Secondary Legislation Covered Bonds do not automatically accelerate upon insolvency of the credit institution having issued (in a direct issuance structure) or guaranteed (in an indirect one) the Covered Bonds. In such a case a servicer is appointed who collects the proceeds of the cover assets for the purpose of servicing the Covered Bonds. In case of an indirect issuance the obligations of the credit institution under the Guarantee are automatically accelerated in case of bankruptcy by virtue of the generally applicable provisions of bankruptcy law, but this does not lead to automatic prepayment of the Covered Bonds. To the contrary the terms of the Covered Bonds may provide that the proceeds of the Guarantee will be placed in a special account to be used for the servicing of the Covered Bonds.

XII. ACCESS TO LIQUIDITY IN CASE OF INSOLVENCY
According to article 1254 of the Civil Code, the pledgee of a claim has the right upon default to either collect it on maturity, or to assign it to himself at the face value, but not to dispose of it in another way. Therefore, as a matter of the law of pledge, the trustee for the Covered Bondholders cannot cause the sale of part of the pool to provide liquidity in case of insolvency of the credit institution. However, as a contractual matter and provided the relevant contracts are subject to a foreign law, the issuer may agree to consent to the sale of part of the cover assets to provide liquidity. In a direct issuance, however, such a contractual clause would not be enforceable against the bankruptcy representative (syndikos) of the credit institution and for this purpose the draft law intended to amend the primary legislation specifically provides for an exemption from article 1254. Indirect issuances with special purpose entities established outside of Greece can be structured in a way that ensures the effectiveness of such contractual arrangements.

XIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION
The risk weighting of Covered Bonds (both Greek and foreign) is regulated by Part B par. 8 2588/20.8.2007, transposing part of the Capital Requirements Directive into Greek law. According to this bonds falling within the provisions of art. 22 par. 4 of the UCITS Directive are considered to constitute Covered Bonds, provided that the cover pool consists of the assets enumerated in the Capital Requirements Directive. By way of exception, bonds issued before the 31st December 2007 and falling within the provisions of art. 22 par. 4 of the UCITS Directive are considered as Covered Bonds, even if the cover assets do not comply with the Capital Requirements Directive. Covered Bonds have a risk weighting of 10%, if openings to the issuing credit institution have a risk weighting of 20%, and a risk weighting of 20%, if openings to the issuing credit institution have a risk weighting of 50%.

Directly issued Greek Covered Bonds comply with both the UCITS Directive and the Capital Requirements Directive and therefore have the reduced risk weighting mentioned above in Greece and should also have it in other EU member states. In relation to indirectly issued Covered Bonds it must be noted that they do not fall within the letter of art. 22 par. 4 of the UCITS Directive, because they are not issued by a credit institution, but according to a purposive interpretation of such directive they should be deemed to fall within its scope, as they offer protection to the holders of the Covered Bonds, which is fully equivalent to that of holders of Covered Bonds issued directly by credit institutions.
> **FIGURE 1: COVERED BONDS OUTSTANDING 2003-2008, €M**

![Graph showing covered bonds outstanding 2003-2008, €M.](image)

Source: EMF/ECBC

> **FIGURE 2: COVERED BONDS ISSUANCE, 2003-2008, €M**

![Graph showing covered bonds issuance 2003-2008, €M.](image)

Source: EMF/ECBC

**Issuers:** There are three issuers in Greece: Alpha Covered Bond Plc, Marfin Egnatia Bank S.A. and National Bank of Greece.
3.10 HUNGARY

By Andras Gabor Botos, Association of Hungarian Mortgage Banks

I. LEGAL FRAMEWORK

Act No. XXX of 1997 on Mortgage Banks and Mortgage Bonds (Mortgage Bank Act) contains the specific rules applicable to mortgage banks and mortgage bonds. Act No. CXII of 1996 on Credit Institutions and Financial Enterprises is applicable generally to the establishment, operation, supervision and liquidation of mortgage banks, unless otherwise provided by the Mortgage Bank Act.

II. STRUCTURE OF THE ISSUER

Mortgage banks are specialized credit institutions in Hungary whose business activity is restricted in principle to mortgage lending and auxiliary financial services: mortgage banks grant financial loans secured by mortgages – including independent mortgage liens – on real estate property located on the territory of the Republic of Hungary and other EEA countries. Funds will be raised by way of issuing mortgage bonds. In the Hungarian banking sector only mortgage banks are entitled to issue mortgage bonds (“jelzáloglevél”). Cover assets will be held on the balance sheet of the mortgage bank. All the mortgage bonds of a single mortgage bank are covered by the same coverage pool which is only open to changes with the prior permission of the coverage supervisor, acting in the interest of mortgage bond holders.

III. COVER ASSETS

The Mortgage Bank Act provides that mortgage banks shall always possess cover surpassing the principal of outstanding mortgage bonds and the interest thereon both on a nominal basis and based on present value calculation. Decree No. 40/2005. (XII. 9.) of the Minister of Finance contains the detailed provisions on the present value calculation of cover assets and the methodology of stress tests to be published on a regular basis. Furthermore, mortgage banks shall prepare a manual of keeping the register of cover assets (“fedezet-nyilvántartás”), which also needs the approval of the Hungarian Financial Supervisory Authority (HFSA) and the coverage supervisor.

Loans secured by a residential real estate can be taken in cover up to 70 per cent of the mortgage lending value of the property. In case of loans secured by commercial real estate the limit is 60 per cent. Mortgage bonds are covered by loans secured by mortgages (“jelzálogjog”), independent mortgage liens (“önálló zálogjog”) or by joint and several surety assumed by the Hungarian State (“állami készfizető kezességvállalás”). Supplementary coverage may exclusively consist of liquid assets listed in the Mortgage Bank Act and may not exceed 20 per cent of the coverage. Pursuant to the Mortgage Bank Act, cover assets must be entered into the register of cover. The availability and quality of cover assets is permanently monitored by the coverage supervisor, reports on availability and quality of cover assets are disclosed on a daily basis.

According to Section 14 (5) of the Mortgage Bank Act, in case mortgage bonds and their coverage are not denominated in the same currency, the mortgage bank is obligated to hedge the currency exchange risk by entering into derivative transactions. Section 3 (10) of the Mortgage Bank Act provides that mortgage banks are entitled to conclude such transactions exclusively for hedging purposes, i.e. risk management and liquidity. The Mortgage Bank Act entitles mortgage banks to include derivatives in the ordinary coverage as well.
IV. VALUATION AND LTV CRITERIA

The rules of calculation of the mortgage lending value ("hitelbiztosítéki érték") are included in the Decree of the Minister of Finance No. 25/1997. on the Calculation Methods of the Mortgage Lending Value of Real Estate not Qualifying as Agricultural Land and the Decree of the Minister of Agriculture No. 54/1997 on the Calculation Methods of the Mortgage Lending Value of Real Estate Qualifying as Agricultural Land. Both decrees prescribe the use of comparative methods, and prescribe the application of the principle of carefulness in the valuation process. Furthermore, they also determine the validity of the valuation report.

Mortgage banks may also provide appraisal services to determine the market value and the mortgage lending value of real properties.

Mortgage lending value calculation provisions refer to the sustainable aspects of the property. The mortgage bank’s internal regulation for determining mortgage lending value is based on methodological principles defined in the above decrees. Such internal regulations are also subject to the former approval of the HFSA.

V. ASSET - LIABILITY MANAGEMENT

As indicated above, the Mortgage Bank Act provides that mortgage banks shall always possess cover surpassing the principal of outstanding mortgage bonds and the interest thereon. Mortgage banks shall comply with the above requirements as follows:

> The aggregate amount of the outstanding principal claims considered as coverage, reduced by the amount of any value adjustments, shall exceed 100 per cent of the amount of the nominal value of the outstanding Mortgage Bonds; and

> The aggregate amount of interest accrued on the outstanding principal claims considered as coverage, reduced by the amount of any value adjustments, shall exceed 100 per cent of the amount of interest accrued on the nominal value of the outstanding mortgage bonds (Section 14 (2) of the Mortgage Bank Act).

Mortgage banks shall publish the amount of the nominal value and the accrued interest of the outstanding mortgage bonds as well as the value of the coverage assets in a national daily newspaper and in the Exchange Journal as of the last day of each quarter, before the last day of the next month. Such figures need to be certified by the coverage supervisor and disclosed to the HFSA as well.

Under Section 14 (4) of the Mortgage Bank Act the amount of coverage for mortgage bonds shall always be calculated and published at their present value as well.

Cash flow mismatch between cover assets and cover bonds is furthermore reduced by the prepayment rules of the Mortgage Bank Act. Pursuant to Section 7, mortgage banks may claim their costs emerging in connection with the prepayment.

VI. COVERPOOL MONITOR AND BANKING SUPERVISION

The coverage supervisor (cover pool monitor) shall be appointed by the mortgage bank and approved by HFSA. According to Section 16 of the Mortgage Bank Act, a company auditor or an auditor may be appointed; however, the coverage supervisor may not be identical with the auditor of the mortgage bank.
As a matter of fact, Hungarian mortgage banks have had one of the “big four” audit companies as coverage supervisor from the beginning of their operations. The coverage supervisor is responsible for monitoring and certifying, on a permanent basis:

> the existence of eligible security; and

> the registration of the eligible security in the coverage register. In accordance with Section 11 (2) (n) of the Mortgage Bank Act, a certificate from the coverage supervisor shall be attached to each mortgage bond regarding the existence of the coverage.

According to section 16 (7) of the Mortgage Bank Act, a coverage supervisor may be appointed for a fixed period of time, not exceeding five years, however, he may be re-appointed following the termination of the period of his appointment. Although the contract of appointment concluded between the mortgage bank and the coverage supervisor is governed by civil law, it may not be lawfully terminated without the approval of the HFSA. Within the scope of his coverage supervision activities, the coverage supervisor may not be instructed by the mortgage bank.

The HFSA is responsible for verifying the compliance of the credit institutions, including the mortgage banks, with the Credit Institutions Act and other acts e.g. the Mortgage Banks Act, and applicable banking regulations. The HFSA is entitled to impose various sanctions on credit institutions, including warnings of non-compliance, withdrawing licences and imposing fines on credit institutions and their management.

Section 22 and 23 of the Mortgage Bank Act provides that the Hungarian Financial Supervisory Authority shall exercise special supervision over mortgage banks in addition to the provisions of the Credit Institutions Act and the provisions of the Capital Markets Act. Within the framework of such special supervision, HFSA shall draw up an analysis schedule and conduct on site audits of mortgage banks according to the analysis schedule it compiles.

VII. HOW ARE SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS REGULATED?

The sophisticated new regulation effective since 1 January, 2007 should provide for the timely satisfaction of principal and interest claims of bondholders and derivative partners in case of a possible insolvency situation. The cover pool administrator will only safeguard the interests of bondholders and derivative partners and will also have an access to the part of assets not qualifying as coverage and those not recorded in the cover register. The transfer of the portfolio or parts of it to another mortgage bank may grant for liquidity, however, the transfer of the portfolio or parts of it requires the prior written consent of the HFSA in order to avoid “cherry picking”.

As a general rule, Section 20/A (4) of the Mortgage Bank Act declares that the cover pool administrator is obliged to maintain the liquidity of the pool on a constant basis, allowing transfer of the pool or parts of it to another mortgage bank and to enter into derivative transactions. Within two years after the commencement of the liquidation procedure, both the cover pool administrator and the bondholders may request the court to complete the cover from the general insolvency estate. The cover pool administrator shall be entitled to receive remuneration for his work and refund of appropriate expenses. Although holders of the mortgage bonds, derivative partners or the coverage supervisor may inform HFSA or the only competent Metropolitan Court Budapest on issuer default, after proving all relevant circumstances, it is only the HFSA who is entitled to initiate an insolvency proceeding against the mortgage bank.
Hungarian legal provisions also provide for a wide-range of measurements, including extraordinary measurements, to be taken by the HFSA prior to any insolvency situation.

For example, the HFSA is entitled to delegate a Supervisory Commissioner to the mortgage bank. This extraordinary measurement may be taken by the HFSA prior to the commencement of any insolvency procedure – in accordance with Section 157 (1) of the Credit Institution Act. In this case both the rights of the owners of the mortgage bank and the rights of the management of the mortgage bank will be restricted in order to guarantee the satisfaction of the claims of the mortgage bank’s creditors, e.g., bondholders’ and derivative partners’ claims.

**VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION**

Hungarian mortgage bonds comply with the requirements of Art. 22 par. 4 of the UCITS Directive as well as with those of the CRD Directive, Annex VI, Part 1, Paragraph 68 a) to f) as have been reported to the Commission in accordance with Article 63 of the Directive 2000/12/EC and published on its website.

Hungarian covered bonds issued in euro zone countries qualify as ECB eligible; furthermore, in February 2008 one of the Hungarian mortgage banks successfully closed its debut transaction in the “Jumbo” covered bond market. The covered bonds issued by FHB Mortgage Bank Ltd. are rated Aa3, while the covered bonds issued by OTP Mortgage Bank Ltd. are rated Aa1 by Moody’s.
Issuers: There are three mortgage banks issuing mortgage bonds on the Hungarian market: OTP Jelzálogbank Zrt. (OTP Mortgage Bank Ltd.), FHB Jelzálogbank Nyrt. (FHB Mortgage Bank Ltd.) and UniCredit Jelzálogbank Zrt. (UniCredit Mortgage Bank Ltd.).
3.11 IRELAND

I. LEGAL FRAMEWORK AND STRUCTURE OF THE ISSUER

Irish covered bonds benefit from the protection of specialist covered bond legislation under the Irish Asset Covered Securities Act, 2001 and the Asset Covered Securities (Amendment) Act 2007 (the “ACS Act”) and the regulations thereunder. The ACS Act follows the specialist banking principle by requiring an Irish asset covered securities issuer (an “ACS Issuer”) to have, or to obtain, a banking licence and to limit the scope of its banking activities. As a bank an ACS Issuer is regulated by the Irish Financial Regulator. Furthermore each ACS Issuer must be registered as a designated credit institution to issue asset covered securities (“ACS”) in accordance with the ACS Act. Each ACS Issuer will be registered as one or more of the following: a designated public credit institution (authorised to issue public credit covered securities); a designated mortgage credit institution (authorised to issue mortgage credit covered securities) or a designated commercial mortgage credit institution (authorised to issue commercial mortgage credit covered securities).

The ACS Issuer holds the assets backing the ACS on its balance sheet. The collection of either mortgage credit assets, commercial mortgage credit assets or public credit assets (the “cover assets”) backing the issue of ACS (the “cover pool”) is described as dynamic or open in the sense that the ACS Issuer may move cover assets in and out of the cover pool provided they do so in accordance with the controls and other terms and conditions set out in the ACS Act. One such control is that the ACS Issuer must maintain a register (a “cover register”) of all ACS issued, all cover asset hedge contracts and the cover assets (including any substitution assets and any assets providing ‘over-collateralisation’) and any amendment to the cover register can only be effected with the approval of a cover-assets monitor (the “CAM”) which is an independent professional third party.

Statutory Preference

The claims of ACS holders are protected by a statutory preference under the ACS Act. As preferred creditors ACS holders are entitled to have recourse to the cover assets included in the cover pool ahead of other creditors (who do not benefit from the statutory preference under the ACS Act) such as members of and contributories to the ACS Issuer and all other creditors of the ACS Issuer, its parent entity or any company related to the ACS Issuer. In this way the ACS holders have protection against the general Irish insolvency laws.

Restriction on business activities

An ACS Issuer’s primary focus will be to issue ACS for the purpose of financing its public sector financing or mortgage or commercial mortgage lending activities.

The ACS Act provides that an ACS Issuer may not carry on a business activity other than a permitted business activity as set out in the ACS Act. Under the ACS Act permitted business activities are restricted to dealing in and holding public credit, mortgage credit assets or commercial mortgage credit assets and limited classes of other assets, engaging in activities connected with the financing and refinancing of such assets, entering into certain hedging contracts, holding pool hedge collateral and engaging in other activities which are incidental or ancillary to the above activities. The ACS Act limits the scope
of non-core ACS business that an ACS Issuer can undertake by restricting its dealing in or holding of financial assets that are not otherwise eligible for inclusion in the cover pool to 10% of the total of all the ACS Issuer’s assets. There is also a similar 10% limit imposed on the volume of non cover pool eligible OECD assets that an ACS Issuer can acquire.

For designated mortgage and commercial mortgage credit institutions the aggregate prudent loan to value (LTV) of its overall mortgage book cannot exceed 80%.

II. COVER ASSETS

The classes of assets which are eligible for inclusion in a cover pool is dependent upon whether the ACS Issuer is a designated public credit institution; a designated mortgage credit institution; or a designated commercial mortgage credit institution.

For a designated public credit institution eligible public credit assets are financial obligations (including obligations given as a guarantor or surety, and may be indirect or contingent) in respect of money borrowed or raised (whether in the form of a security that represents other public credit that is securitised or not) where the person who has the obligation is any one of the following:

(a) central governments, central banks, (“Sovereigns”) public sector entities, regional governments or local authorities (“Sub-Sovereigns”) in any EEA country;
(b) Sovereigns in Australia, Canada, Japan, New Zealand, the Swiss Confederation or the USA (the “Non-EEA countries”);
(c) Sub-sovereigns in the Non-EEA countries; and
(d) Multilateral development banks or international organisations (which qualify for the purposes of the Capital Requirement Directive, also known as the Codified Banking Directive, “CRD”).

Risk weighting and credit worthiness tests apply to the categories of cover assets outside the EEA countries to comply with the CRD Covered Bond eligibility requirements. This means that any Sovereign or Sub-sovereign entity within a Non-EEA country must have an independent credit rating of at least A-/A3 and any Sub-sovereign entity within a Non-EEA country must have, in addition, a risk weighting at least equal to that of a financial institution (i.e. 20% or lower). In addition the aggregate nominal value of any such assets included in the cover pool from Non-EEA countries with credit ratings below AA-/AA3 (but at least A-/A3) cannot exceed 20% of the total aggregate value of the cover pool.

Eligible assets for a designated mortgage credit institution include mortgage credit assets which are financial obligations in respect of money borrowed or raised that are secured by a mortgage, charge, or other security on residential or commercial property that is located in any of the EEA or Non-EEA countries described above. A mortgage credit institution is limited in the amount of mortgage credit assets secured on commercial property that it can include in a cover pool. Such commercial mortgage credit assets cannot exceed 10% of the total prudent value of all mortgage credit assets and substitution assets in the cover pool. A mortgage credit institution may also include securitised mortgage credit subject to certain credit quality criteria and limits as to percentage of the cover pool.

Furthermore a mortgage credit asset may not be included in a cover pool if a building related to that mortgage credit asset is being or is to be constructed until the building is ready for occupation as a commercial or residential property, or if it is non-performing.
Eligible assets for a designated commercial mortgage credit institution are financial obligations in respect of money borrowed or raised that are secured by a mortgage, charge, or other security on commercial property that is located in any of the EEA or Non-EEA countries described above.

‘Substitution assets’ can also be included in the cover pools provided they comply with the CRD requirements and certain other restrictions. Effectively these are deposits with eligible financial institutions or property of institutions with minimum independent credit ratings of at least Step 2, with a limited duration of 100 days and where the total volume of such assets is limited to 15% of the total prudent market value of the cover pool.

III. COVER ASSET MONITOR AND BANKING SUPERVISION

One of the key features of the ACS legislation is the strong monitoring requirements undertaken by the CAM. The CAM is appointed by the ACS Issuer and such appointment must then be approved by the Financial Regulator.

There are strict eligibility requirements for a CAM. A CAM must be a body corporate or partnership, comprising personnel or partners who are members of a professional representative body. They must demonstrate to the Regulator that they are experienced and competent in (i) financial risk management techniques, (ii) regulatory compliance reporting and (iii) capital markets, derivatives, public credit business. The CAM must demonstrate that it has sufficient resources at its disposal, sufficient academic or professional qualifications and experience in the financial services industry to satisfy firstly the designated credit institution and secondly the Financial Regulator, that it is capable of fulfilling this role.

The CAM is responsible for monitoring the cover pool, the ACS Issuer’s compliance with specific provisions of the ACS Act and to report breaches to the Financial Regulator. The CAM issues regular reports to the ACS Issuer (every 1-4 weeks) and submits a report on a quarterly basis to the Financial Regulator.

Some of the CAM’s principal obligations include: ensuring that the matching requirements of the ACS Act with respect to the cover assets and the ACS are met; ensuring that the asset eligibility requirements are met; approving any inclusion or removal of a cover asset, ACS or hedge contract from the cover register; checking the level of substitution assets included in the cover pool doesn’t exceed the required percentage; and ensuring the contracted level of over-collateralisation is maintained.

The Financial Regulator is responsible for supervising each ACS Issuer. The Financial Regulator may, with the consent of the Minister for Finance, revoke the registration of an ACS Issuer and/or suspend its business if an ACS Issuer breaches any provision of the ACS Act.

IV. VALUATION AND LTV CRITERIA

Mortgage ACS Issuers

For a mortgage ACS Issuer the maximum prudent LTV levels for mortgages in the cover pool are 75% for residential and 60% for commercial. Prudent LTV levels for loans in the cover pool can exceed the 75% threshold, however the balance of the loan above the 75% is disregarded for valuation purposes. The inclusion in the mortgage cover pool of mortgage credit assets secured on commercial property is restricted to 10% of the prudent market value of all mortgage credit assets and substitution assets included in the Pool at any time.
A mortgage ACS Issuer is first required to determine the market value of the property asset at the time of origination of the mortgage credit asset secured on it. The mortgage ACS Issuer is then required to calculate the prudent market value of each property asset at the time of inclusion in the cover pool and also at such intervals (at least once a year) as may be specified by the Financial Regulator so that it can demonstrate compliance with the asset-liability requirements of the ACS Act and any over-collateralisation commitment. In practice the CAM imposes additional requirements on the mortgage ACS Issuer to ensure that the requirements are met at least on a quarterly basis.

It is a legal requirement for a mortgage ACS Issuer to obtain a valuation report on the property before the loan is advanced and it is market practice that such valuation report is provided by an independent valuer. This initial market valuation is used to calculate the prudent market value going forward using a recognised house price index. This calculation is verified by the CAM on a monthly basis.

**Commercial Mortgage ACS Issuers**

For a commercial mortgage ACS Issuer the maximum prudent LTV levels for mortgages in the cover pool is 60%. Prudent LTV levels for loans in the cover pool can exceed the 60% threshold, however the balance of the loan above the 60% is not considered for eligibility purposes.

The prudent market valuation of a commercial property asset is its market value at the time of origination or, where relevant, the most recent independent valuation of the property asset, reduced to take account of any declines in the designated commercial property reference index since the valuation was carried out.

The market value of a commercial property asset must be reviewed by an independent valuer where the reference index falls by more than 7% in any 6 month period or where information indicates that the value of the property asset has declined materially relative to general market prices. For commercial mortgage loans greater than €3million, the valuation must be reviewed by an independent valuer at least every 3 years.

A commercial mortgage ACS Issuer is required to calculate the prudent market value of each property asset at the time of inclusion in the cover pool and at least once every 3 months thereafter.

**V. ASSET-LIABILITY MANAGEMENT**

The ACS Act includes important asset-liability controls to minimise various market risks.

Duration matching: The weighted average term to maturity of the cover pool cannot be less than that of the ACS that relate to the cover pool.

Over-collateralisation: The prudent market value of the cover pool must be at least 3% (10% for commercial mortgage ACS issuers) greater than the total of the principal amount of the ACS in issue. (For contractual levels of over-collateralisation see further discussion below under separate heading.)

Interest matching: The amount of interest payable on the cover assets over a 12 month period must not be less than the amount of interest payable on the ACS over the same period.

Currency matching: The currency in which each cover asset is denominated has to be the same as the currency in which the ACS are denominated, after taking into account the effect of any cover assets hedge contract.
Interest rate risk control: The net present value changes on the balance sheet of an ACS Issuer arising from (i) 100bps upward shift, (ii) 100bps downward shift and (iii) 100bps twist, in the yield curve, must not exceed 10% of the ACS Issuer’s total own funds at any time.

**Hedge contracts**

Hedge contracts are used in the cover pool to minimise risks on interest rates, currency exchange rates, credit or other risks that may adversely affect the ACS Issuer’s business activities that relate to an ACS or cover asset. All such hedge contracts are entered on the cover register. Hedge counterparties rank as preferred creditors, pari passu with the ACS holders, provided they are not in default of any of their financial obligations. Upon an ACS Issuer insolvency the hedge contract will remain in place subject to the terms of the underlying hedge contract. No collateral can be posted by an ACS Issuer to a hedge counterparty. Any collateral posted under a hedge contract by a hedge counterparty will be maintained on a separate register within the cover pool.

**Over-collateralisation**

There is a minimum 3% over-collateralisation of cover assets in the cover pool required by law for public credit and mortgage ACS. The minimum over-collateralisation for commercial mortgage ACS is 10%. In addition, each existing public and mortgage ACS Issuer has committed to a minimum level of 5% over-collateralisation by contract (on a nominal basis) which is then specified in the terms and conditions of each issue. The commercial mortgage ACS Issuer has committed to a minimum level of 10.5% over-collateralisation by contract. The CAM is responsible for monitoring the level of regulated and contractual over-collateralisation. Upon an ACS Issuer insolvency the ACS holders will benefit from any cover assets which make up the over-collateralisation.

**Cover Asset Register**

Each ACS Issuer must maintain a cover register including the details of the ACS in issue, the cover assets and substitution assets backing the ACS and any cover asset hedge contracts in existence. The cover register is important as a cover asset or a cover asset hedge contract cannot be described as such unless and until it is recorded on the register. Their registration is prima facie evidence of such assets and hedge contracts being in the cover pool entitling the ACS holders and hedge counterparties to benefit from the insolvency protection specified in the ACS Act. It further means that their removal from the pool can be achieved only with the permission of the CAM as entries or amendments to the cover register can only be made with the consent of the CAM or the Financial Regulator.

**Impact of Insolvency Proceedings on ACS and Hedge Contracts**

Upon insolvency of an ACS Issuer all ACS issued remain outstanding and all cover asset hedge contracts will continue to have effect, in both cases subject to the terms and conditions of the documents under which they were created.

Upon an ACS Issuer becoming insolvent the claims of ACS holders on the cover pool are protected by operation of law. Cover assets and hedge contracts that are included in a cover pool are not liable to interference by a bankruptcy custodian or similar person whether by attachment, sequestration or other form of seizure, or to set-off by any persons, that would otherwise be permitted by law so long as claims secured by the insolvency provisions of the ACS Act remain unsatisfied. ACS holders have recourse to cover assets ahead of all other non-preferred creditors regardless of whether the claims of such other
creditors are preferred under any other enactment or any rule of law and whether those claims are secured or unsecured.

**The Role of the Manager and Access to Liquidity in case of Insolvency**

The ACS Act makes provision for the management of the cover pool upon an ACS Issuer insolvency through the services of the Irish National Treasury Management Agency (“NTMA”). If no suitable manager can be found by the Financial Regulator or the NTMA then the NTMA will attempt to locate an appropriate body corporate as a new parent entity for the ACS Issuer. Failing that the Financial Regulator will appoint the NTMA to act as a temporary manager until a suitable manager or new parent is found. Upon their appointment the manager will assume control of all the cover assets of the ACS Issuer and its ACS business. The manager shall manage the ACS business of the ACS Issuer in the commercial interests of the ACS holders and the hedge counterparties. The manager shall have such powers as may be divested to it by the Financial Regulator under its notice of appointment. It is possible for such manager to obtain a liquidity facility through the use of a hedge contract which would rank such facility provider pari passu with the bondholders and other hedge counterparties.

**Preferential Treatment of ACS holders**

ACS holders are preferred creditors in relation to the cover assets (ranking after the CAM and the NTMA and equally with the hedge counterparties). Cover assets included in a cover pool do not form part of the assets of the ACS Issuer for the purposes of insolvency until such time as the creditors benefiting from the insolvency protection under the ACS Act have been satisfied.

If the claims of the ACS holders (and other parties benefiting from insolvency protection including the hedge counterparties) are not fully satisfied from the proceeds of the disposal of the cover assets, such parties are, with respect to the unsatisfied part of their claims, to be regarded as unsecured creditors in the insolvency process.

**VI. RISK-WEIGHTING AND COMPLIANCE WITH EUROPEAN LEGISLATION**

The ACS meet the requirements of UCITS 22(4) and currently benefit from a risk-weighting of 10% as applied by the Financial Regulator. The eligibility of cover assets set out in the ACS Act also match the criteria for the preferential risk weighting of covered bonds set out in the CRD.
Issuers: There are 6 active issuers in Ireland: Bank of Ireland Mortgage Bank, Depfa ACS, West LB Covered Bond Bank, Allied Irish Mortgage Bank, EBS Mortgage Finance and Anglo Irish Mortgage Bank.
I. FRAMEWORK
The Italian Legislator enacted a new regulation (Law no. 80/2005) in May 2005, by means of which two specific articles (article 7-bis and article 7-ter) were inserted into the existing Italian securitization law (Law no. 130/1999), providing for covered bonds.

The legislator decided to supplement Law no. 130/99 rather than adopt a separate and autonomous law/legal framework, in light of the markets’ and international operators’ positively assessing Italian securitization law. They found that the law introduced an established and reliable legal framework (e.g. from a standpoint of “bankruptcy remoteness”).

Pursuant to paragraph 5 of the first of the two articles mentioned above, on 14 December 2006, the Ministry of Economy and Finance issued secondary rules in relation to some key issues of the structure. In particular, implementing rules have been enacted with respect to the type of assets eligible for the cover pool, the maximum allowed ratio between transferred assets and issuable securities, the type of guarantee to be provided to bondholders by the SPV.

As for the last procedural step, which formally allows Italian banks to start issuing covered bonds, the Bank of Italy enacted its implementing measures on 17 May 2007, in relation to the requirements to be complied with by issuing banks, the criteria to be adopted to evaluate the cover assets and the relevant formalities to integrate such assets, as well as the formalities to check that the banks are complying with their obligations under the same article 7-bis, also through auditors.

II. STRUCTURE OF THE ISSUE OF COVERED BONDS
Pursuant to the abovementioned article 7-bis, the structure of a covered bond transaction is as follows:

1. a bank transfers eligible assets to a special purpose vehicle (SPV), whose sole corporate purpose is the purchase of such assets and the granting of a guarantee for the issued securities over which bondholders have a senior claim;
2. the SPV purchases the transferred assets by means of a loan granted or guaranteed to it by a bank (not necessarily the same bank transferring the assets);
3. the bank transferring the assets (or another bank) issues covered bonds;
4. the assets purchased by the SPV are applied to satisfy the rights attaching to the covered bonds and the counterparties of derivative agreements entered into for hedging the risks related to the assets, and to pay the costs of the transaction.

According to the Bank of Italy’s regulation, covered bonds can be issued only by banks with the following prerequisites:

- a consolidated regulatory capital not lower than EUR 500 mln
- a total capital ratio not lower than 9%

It is also provided that these requisites must be fulfilled by the transferring banks as well (i.e. cover pool providers), if they are not the issuers.

There are no business restrictions to the issuer’s activity, hence there is no special banking principle that needs to be enforced. Bondholders hold a preferential claim on the cover assets and the covered bonds are direct, unconditional obligations of the issuer.
III. COVER ASSETS
As provided for by paragraph 1 of Article 7-bis of the securitization law, the eligible assets as coverage for covered bonds are:

a) residential mortgage loans with a maximum LTV of 80% or commercial mortgage loans with a maximum LTV of 60%;

b) claims owed by (or guaranteed by) the following entities, up to 10% of the cover pool:
   - public entities of EEA member countries and Switzerland with a maximum risk-weight of 20%;
   - public entities of non-EEA member countries with a risk weight of 0%;
   - other entities of non-EEA member countries with a risk weight of 20%.

c) notes issued under a securitisation transaction backed (for a minimum of 95%) by the claims under the abovementioned letters a) and b) with a maximum risk weighting of 20%.

As regards the transferring of such eligible assets to the SPV, the Bank of Italy sets different limits according to the different regulatory capital levels of the issuer (see Table 1)

<table>
<thead>
<tr>
<th>Regulatory capital level</th>
<th>Transfer limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td>Total capital ratio ≥ 11% and,</td>
</tr>
<tr>
<td></td>
<td>Tier 1 ratio ≥ 7%</td>
</tr>
<tr>
<td>Class B</td>
<td>Total capital ratio ≥ 10% and &lt; 11% and</td>
</tr>
<tr>
<td></td>
<td>Tier 1 ratio ≥ 6.5%</td>
</tr>
<tr>
<td>Class C</td>
<td>Total capital ratio ≥ 9% and &lt; 10% and</td>
</tr>
<tr>
<td></td>
<td>Tier 1 ratio ≥ 6%</td>
</tr>
</tbody>
</table>

As provided for by the secondary legislation enacted by the Italian Ministry of Economy, assets must at least equal liabilities both on the nominal and NPV bases, and the revenues arising from cover assets must be sufficient to pay coupons to bondholders and to cover the cost of derivative transactions.

The integration of cover assets can be performed through:

1. the transfer of additional eligible assets to the pool;
2. the opening of deposit accounts at banks located in an EEA member country, or in other countries with a 0% risk-weight;
3. the transfer of banks’ own debt securities (with maturity of less than 1 year) to the pool.

It is also provided that integration through assets under points 2 and 3 is allowed only up to 15% of the cover pool’s nominal value. With respect to such provisions, the Bank of Italy established that integration is allowed only to:

- maintain the ratio of issued bond to cover assets up to the abovementioned level provided for by the Ministry of Economy;
- in case of voluntary over-collateralisation, maintain the ratio of issued bond to cover assets up to the contractually-agreed limit;
- respect the abovementioned 15% limit for eligible supplementary assets.
IV. ASSET-LIABILITY MANAGEMENT

In order to allow the SPV to fulfil its obligations, issuing banks are required to adopt proper asset-liability management techniques and to perform specific controls at least every 6 months, to ensure that the proceeds from the cover pool assets are always sufficient to pay the coupons on the covered bonds, and the overall cost of the transaction.

V. COVER POOL MONITOR AND BANKING SUPERVISION

As far as regulatory supervision is concerned, the Bank of Italy sets and monitors, on an ongoing basis, the abovementioned specific eligibility requirements for issuing banks which are stricter than those provided for traditional banking activities. These parameters require, in particular, a consolidated supervisory capital of at least €500 million and a consolidated total capital ratio of at least 9%. It is also provided that eligible assets may be assigned to the SPV only subject to a series of restrictions, graduated based on the total capital ratio and Tier 1 ratio at the consolidated level.

Although in some European countries the issuance of covered bond is subject to a “licence” granted by the Supervisory Authority upon the fulfilment of specific requirements, the Italian legislator has decided to make a different choice. Rather than introducing a “licence” system, it has defined a series of requirements and limitations to issuance which together can be de facto considered as the objective basis upon which to grant an issuance authorization. Moreover, it must be considered that such requirements and limitations are in most cases stricter than those required by other regulatory frameworks.

Furthermore, Italian regulation prescribes that the monitoring of the regularity of the transaction and of the integrity of the collateral securing investors must also be performed by an external asset monitor (AM) appointed by the issuer. The AM must be an auditing firm possessing the professional skills required to perform such duties and must be independent from the bank engaging it (e.g. it cannot be the same firm appointed to audit the accounts of the issuing bank) and of any other person participating in the transaction. It has to report at least once a year to the Board of Directors and to the internal audit department of the bank.

Although no specific reporting to the Bank of Italy is prescribed by law, in practice the AM will report to the Supervisor any material anomaly found. It must also be considered that the AM’s report is reviewed by the bank’s auditor which reports regularly to the Bank of Italy. Should such report contain negative evaluations, the bank’s auditor is obligated to bring the issue to the Bank of Italy’s attention.

In general terms, specific control requirements on banks issuing covered bonds find their primary source from EU and national legislation. Additionally, in consideration of the peculiarities of a covered bond transaction, the Bank of Italy assigns to issuers the primary responsibility to evaluate the risk involved in the operations, to arrange a proper control mechanism and to ensure its functioning through the time. In particular, at least every six months and for each operation, issuers have to check: i) the quality of the cover pool; ii) compliance with the predetermined ratio between outstanding covered bonds and cover assets; iii) compliance with transfer limitations and asset integration requirements; iv) the performance of any derivative agreement entered into in order to hedge risks.

As far as information flows are concerned, it is provided that issuing/transferring banks shall acquire, from all the parties involved in the structuring of the covered bonds, information relating to:
• the possessory titles of the transferred assets (in order to be able to track down each borrower whose loan has been transferred to the SPV);
• the performance of the transferred assets (in order to monitor the “health” of the cover assets).

This information is necessary to issuing/transferring banks in order to perform both the abovementioned controls in terms of cover pool monitoring and the regulatory reporting (i.e. reporting of defaulted loans to the Bank of Italy’s 

**VI. ASSET SEGREGATION AND IMPACT OF INSOLVENCY PROCEEDINGS ON COVERED BONDS AND DERIVATIVES**

As provided for by the secondary legislation enacted by the Italian Ministry of Economy, the guarantee granted by the SPV to the covered bondholders, must be irrevocable, first-demand, unconditional and independent from the issuing bank’s obligations on the covered bonds. It will be callable upon non-payment and bankruptcy of the issuing bank, and it will be limited to cover pool asset value to ensure bankruptcy remoteness of the SPV.

The SPV is a financial intermediary, registered in the “special list” provided for by article 107 of the Banking Law, and therefore subject to the Bank of Italy’s supervision.

Covered bondholders will have the right, represented exclusively by the SPV, to file a claim with the issuing bank for full repayment of the covered bonds. In case of liquidation of the issuing bank, the SPV will be exclusively responsible to make payments to covered bondholders (as well as other counterparties) and will represent covered bondholders in proceedings against the issuing bank.

All the amounts obtained as a result of the liquidation procedure will become part of the cover pool and therefore used to satisfy the rights of covered bondholders. The redemption of the subordinated loan granted by the issuer of the covered bonds to the SPV is junior to any outstanding claims of covered bondholders, swap counterparties and transaction costs.

In case the proceeds obtained as a result of the liquidation procedure are insufficient to meet the obligations to bondholders in full, investors would still have an unsecured claim against the issuer for the shortfall.

**VII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION**

Italian covered bonds fulfil both the criteria of UCITS 22(4) and Annex VI, Part 1, Paragraph 68 (a) to (f) of the Capital Requirements Directive. They are also eligible in repo transactions with the Bank of Italy. The risk-weight
**Issuers:** There are 3 active issuers in Italy: Banca Carige SpA, Banca Popolare di Milano and UniCredit.
I. FRAMEWORK
In Latvia, the legal basis for Covered Bond issuance is the Law on Mortgage Bonds (HKZL – Hipotekāro ķīlu zīmju likums) from 10th of September 1998 and subsequent amendments to the HKZL (1st of June 2000, 5th of July 2001, 6th of November 2002 and 25th of October 2006). The insolvency and bankruptcy procedure is captured both by the HKZL (Section 4) and the Law on Credit Institutions (Articles 56, 161 and 191).

II. STRUCTURE OF THE ISSUER
There is no specialised banking principle in Latvia. As a result every registered bank can issue mortgage-backed Covered Bonds. The minimum requirements a bank must fulfil in order to issue mortgage bonds are as follows:

> Tier1 and Tier2 capital should be not less than stated in the Law on Credit Institutions;
> Provision of the banking services specified in Article 1, Clause 4 of the Law on Credit Institutions without any restrictions imposed by the Financial and Capital Market Commission (FCMC);
> Submission of rules approved by the bank’s supervisory board regarding the valuation of the real estate to be mortgaged and the management of the mortgage bond cover register to the FCMC.

The issuer holds the cover assets on his balance sheet and the cover assets are not transferred to a different legal entity. All obligations from mortgage bonds are obligations of the issuing bank as a whole, to be paid from all the cover assets of the issuer. In the case of insolvency, the cover pool is segregated by law from the general insolvency estate and is reserved for the claims of the mortgage bond holders.

The HKZL does not prescribe the issuing bank to have separate employees to manage the cover pool, but it prescribes that the cover assets are managed separately from other assets of the issuer. Therefore, if employees of the bank are involved both in the management of the cover assets and the management of non-cover assets, separation of the duties and responsibilities should be clearly stipulated in the bank’s by-laws and internal procedures. There are also no specific requirements regarding the outsourcing of the management of cover assets in the Latvian Covered Bond legislation.

III. COVER ASSETS
Cover assets can be eligible mortgage loans or loans secured by either guarantees of the Latvian Government or guarantees of the local governments.

Up to 20% of the nominal volume of outstanding mortgage bonds and interest expenses (substitute cover) may consist of

(a) cash,
(b) balances with the central banks of the EU member states and
(c) securities issued and guaranteed by the EU member state’s government up to 95% of their market value whilst not exceeding the face value of these securities or securities issued by the EU member state’s financial institution and traded on the EU regulated securities market up to 95% of their market value whilst not exceeding the face value of these securities.
The eligible mortgage assets are restricted in geographical scope to the extent that a property that secures a mortgage loan should be registered with the EU member state’s property register. This means that only properties which are registered in the EU member state can be used as collateral for mortgage loans included in the cover pool. The loans secured by Latvian sovereign and sub-sovereign guarantees are not restricted by geographical scope, but they are restricted by loan purpose; loans which finance public and infrastructure projects are eligible.

Derivatives are eligible for cover pool inclusion for the purpose of mitigating currency - and interest rate risk. The volume of derivatives is not limited and the general documentation used is the standard for derivatives.

**IV. VALUATION AND LTV CRITERIA**

Property valuation is regulated in Article 15 of the HKZL. Property valuation is carried out according to the international valuation standards. The basis for property valuation is market value. Professionals responsible for the determination of the market value of a property must be in possession of a relevant professional qualification. In addition to that, Article 15\(^1\) (introduced by the amendment to the HKZL on 25\(^{th}\) of October 2006) stipulates that the market value of property registered in the EU member state is determined by the persons who have received professional, real estate valuation, licence according to the legislation of particular EU member state.

The issuer is responsible for the monitoring of the property value. The frequency of monitoring is not defined by the HKZL, but it is prescribed by the regulations of the FCMC and by-laws of the issuer.

Article 14 of the HKZL stipulates that a mortgage loan together with debts previously registered with the national property register may not exceed 75% of the market value of residential property and 60% of the market value of other type of property.

**V. ASSET - LIABILITY MANAGEMENT**

Article 9 of the HKZL stipulates the following requirements to the asset-liability management of the cover pool:

- the total volume of the cover assets must be larger than the total volume of outstanding mortgage bonds at their face value by at least 10% of the risk weighted value of the cover assets, where risk weighted value of the cover assets is calculated based on specific weights of each type of the cover assets;
- the currency of the cover assets and that of the outstanding mortgage bonds may differ only if the issuer has taken all the necessary measures to prevent the currency risk in the cover pool;
- the total interest income from the cover assets must exceed the total interest expenses on outstanding mortgage bonds;
- the cash-flows from the outstanding mortgage bonds (in accordance with the mortgage prospectus) must always be covered by the cash-flows from the cover assets in terms of volumes and maturities.

The issuer of the Covered Bonds has to prepare a report on the cash-flow mismatches and submit it to the FCMC on a semi-annual basis.
The latest amendment to the HKZL stipulates that the issuer should separate loans secured by a mortgage and loans secured by central or municipal governments. This requirement was introduced in order to separate mortgage bonds and public sector bonds.

VI. COVER POOL MONITOR AND BANKING SUPERVISION

The Latvian Covered Bond legislation does not require the appointment of a special entity to monitor the cover pool. Instead, the cover pool is managed by the issuing bank and it is the issuing bank’s responsibility to set up a system to ensure that the cover pool is managed properly. In some banks, monitoring of the cover pool is executed by the internal audit department.

The FCMC supervises cover pools. It inspects cover pool (quality and eligibility of the cover assets, quality of the asset-liability management) during regular banking supervisory audits which are carried out on average every two years.

The FCMC has the right to suspend the issue of mortgage bonds under the following circumstances:

> The issuing bank does not comply with the conditions laid down in the Law on Mortgage Bonds;
> The issuer does not ensure that the redemption and interest payments on outstanding mortgage bonds are always covered by the principal and interest payments of the cover assets of a higher value;
> By-laws on the valuation of properties securing the mortgage assets and by-laws on the management of cover pool submitted to the FCMC are not followed.

VII. HOW ARE SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS REGULATED?

A cover register facilitates the identification of the cover assets, because all the cover assets, including substitute cover as well as derivatives, are recorded in the cover register. The type and scope of the information recorded regarding the cover assets in the cover register are determined by FCMC regulations.

The legal effect of registration is the fact that in the case of insolvency of the issuer, the assets which form part of the separate legal estate can be identified and all assets recorded in the cover register qualify as part of this separate legal estate.

Asset segregation

A cover pool is a part of the general estate of the issuing bank as long as the issuer is solvent. If the insolvency proceedings are opened, by operation of law, the assets recorded in the cover register are excluded from the insolvency estate of the issuer. Those assets will not be affected by the opening of the insolvency proceedings, but automatically form a separate legal estate.

After the opening of the insolvency proceedings, a special cover pool administrator initiated by the FCMC and appointed by court carries out the administration of the cover assets.

Impact of insolvency proceedings on Covered Bonds and derivatives

Covered Bonds do not automatically accelerate when the issuing institution becomes insolvent, but will be repaid at the time of their contractual maturity. The same applies to derivatives which are registered in the cover register and form part of the cover pool. During an insolvency procedure, derivatives’ counterparties have the same rights as the holders of mortgage bonds.
**Preferential treatment of Covered Bond holders**

Covered Bond holders enjoy a preferential treatment as the HKZL and the Law on Credit Institutions stipulates the separation of the cover assets in a case of the insolvency of the issuing bank. According to Article 191 of the Law on Credit Institutions, mortgage bond holders have the first access rights to the cashflows generated by the assets recorded in the cover register.

In the case of insolvency of the issuer, it is forbidden to modify the content of the cover register and all cash flows from the cover assets must be accrued within it. As long as there is sufficient cover, a moratorium on the insolvency’s estate cannot delay the cash flows from the cover assets and, therefore, endanger the timely payment of Covered Bond holders.

Only in the case of over-indebtedness or insolvency of the cover assets shall the FCMC file an application to court regarding the insolvency of the cover register (Article 26 of the HKZL). Insolvency of the cover pool is the only catalyst which could the trigger acceleration of Covered Bonds.

**Access to liquidity in case of insolvency**

With the appointment of the cover pool administrator, the right to manage the cover assets is transferred to him by law. Thus, the cover pool administrator has first access to the cover assets and collects the cash flows according to their contractual maturity.

The cash-flows from the cover assets may only be used for the following purposes and the use of assets in any other manner is inadmissible:

- Disbursements to mortgage bond holders if the term for interest payments or mortgage bond redemption has become due
- Purchase of mortgage bonds issued by the issuer itself with their subsequent redemption in the public securities market at a price not exceeding the face value of the mortgage bonds if the remaining cover assets are sufficient to cover outstanding mortgage bonds
- Payments under derivatives’ agreements concluded on the cover asset risk mitigation, provided that the contracting parties have met the conditions of such agreements.

The cover pool administrator is permitted, in case of the insolvency of the issuer, to exceed the substitute cover limit.

No specific regulation exists with respect to the insolvency remoteness of voluntary overcollateralisation. However, the cover pool administrator is not allowed to use voluntary overcollateralisation until all payments to mortgage bond holders are made fully and on time.

The cover pool administrator may carry out legal transactions in respect of the cover pools in so far as this is necessary for an orderly settlement of the cover pool and for the full and timely satisfaction of the cover pool’s creditors.

**Sale and transfer of mortgage assets to other issuers**

The HKZL and the Law on Credit Institutions provide that the cover assets in a case of insolvency of issuer are transferred to other bank chosen by the FCMC. The bank to which the cover assets are transferred, also takes responsibility for all the obligations arising from outstanding mortgage bonds.
VIII. Risk-weighting & compliance with European legislation
Latvian mortgage bonds comply with the requirements of Art. 22 par. 4 UCITS Directive as well as with those of the CRD Directive. The current risk weight applied to mortgage bonds in Latvia is 20%.

Latvian investment legislation allows mutual funds to invest up to 25% of their assets in mortgage bonds and pension funds – up to 10% of their assets.
Issuers: At the end of 2008, there were three issuers in Latvia: A/S Privatbank (Parex Bank), Baltic Trust Bank and Mortgage and Land Bank of Latvia.
I. FRAMEWORK
The issuance of Lettres de Gage is regulated by Articles 12-1 to 12-9 of the Financial Sector Act of 5 April 1993 (the Financial Sector Act). These Articles were introduced by the Act of 21 November 1997 for banks issuing mortgage bonds and amended by the Act of 22 June 2000. The Lettres de Gage regulations are supplemented by the CSSF (Commission de Surveillance du Secteur Financier) Circular 01/42 which lays down the rules for the appraisal of real estate and CSSF Circular 03/95 which defines the minimum requirements for the maintenance and control of the cover register, for the cover assets and for the issuance limit for outstanding Lettres de Gage. The CSSF is the supervisory authority in Luxembourg.

In February 2008, the Luxembourg government introduces a new bill to amend the existing Lettre de Gage legislation which was approved by Luxembourg Parliament in October 2008. The proposed amendments include an increase of the loan-to-value limit for residential mortgage loans from 60% to 80%, the stipulation of a minimum over-collateralisation level of 2% and the permission to include securitised assets. The most important modification, however, has been the introduction of a new form of Lettres de Gage backed by movable assets including ships, aircrafts and trains.

II. STRUCTURE OF THE ISSUER
The Lettres de Gage issuers have to be credit institutions with a specialist bank licence. Their business activities are restricted: In the past, the bank’s principal activities were limited to mortgage lending and public sector financing which were primarily funded by issuing Lettres de Gage Hypothécaires and Lettres de Gage Publiques. Following the recent covered bond law amendments, the Luxembourg issuers are also allowed to issue Lettres de Gage backed by movable assets (Lettres de Gage Mobilières). Moveable assets can be mortgage loans on ships, aircrafts and trains. However, other classes of movable assets are possible as well provided that they are registered in a public register. Consequently, the permitted principal activities of an issuer have been widened to allow the origination of those movable assets. The issuers may only engage in other banking and financial activities if these activities are accessory and auxiliary to their main business.

The issuer holds the cover assets on its balance sheet in separate registers. Each class of Covered Bonds has its own register: one for assets which are allocated to the mortgage Covered Bonds, another one for the cover assets backing the public sector Covered Bonds and potentially several more for the various forms of Lettres de Gage Mobilières. Each moveable asset class requires a separate cover pool register, i.e. ship Lettres de Gage would be backed by a segregated pool of ship mortgage loans while aircraft Lettres de Gage would be backed by a pool of aircraft exposures. The cover assets remain on the balance sheet of the issuer as long as the issuer is not insolvent. They are not transferred to another legal entity (special purpose vehicle) like in a securitization. All obligations arising from Lettres de Gage are direct, unconditional obligations of the issuer. In the case of issuer insolvency, the cover pools are segregated by law from the general insolvency estate and are reserved for the claims of the Lettres de Gage holders. There is no direct legal link between a single asset in the cover pool and an outstanding Lettre de Gage. Interest and principal payments of the outstanding Lettres de Gage Hypothécaires, Lettres de Gage...
Publiques and the various forms of Lettres de Gage Mobilières (including any derivatives benefiting from the preferential treatment) are backed by the assets in the respective cover pools.

Lettres de Gage issuers employ their own staff. The issuers have to be banks and according to the Financial Sector Act they need to have sound administrative and accounting procedures, control and safeguard arrangements for electronic data processing and adequate internal control mechanisms which restrict the extent of outsourcing legally possible. In addition, the way of permitted outsourcing is described in detail in different CSSF Circulars.

III. COVER ASSETS

The eligible cover pool assets are defined in Article 12-1 of the Financial Sector Act of 5 April 1993. Since the amendments of the covered bond legislation in October 2008, there are three asset classes: mortgage assets, public sector exposures and moveable assets, i.e. mortgage loans on ships, aircrafts, trains or other classes of movable assets. In each of the various cover pools the assets may be replaced by up to 20 % of the nominal value of the outstanding Lettres de Gage by substitution assets, for example cash, assets with central banks or with credit institutions whose head office is in a member state of the EC, EEA or OECD or bonds satisfying the conditions set out in article 42 (3) of the law of 30 March 1988 concerning undertakings for collective investments.

The geographical scope of the cover assets is restricted to the member states of the EU, EEA and the OECD. There is no further limit in place. It is also possible to hold the cover assets indirectly through a third-party bank located in a member country of the EU, the EEA or the OECD.

The new Lettres de Gage Mobilières are backed by movable assets, i.e. mortgage loans on ships, aircrafts, trains or other classes of movable assets. In order to be cover pool eligible, the movable assets and the charges on the property of those assets need to be registered in a public register within the European Union (EU), the European Economic Area (EEA) or the OECD.

In addition, securitised assets are cover pool eligible if they comply with the eligibility criteria laid down for the various types of Lettres de Gage. The amount of securitised assets that are not cover pool eligible per se will be limited to 10% of the collateral pool. This can be achieved in two ways: One option would be that at least 90% of the assets of each securitisation (vehicle) are cover pool eligible. The other option would be that at least 50% of the assets of each securitisation (vehicle) are cover pool eligible. In that case, the percentage of securitisation assets shall not exceed 20% of the total collateral pool. The issuer can choose one of the two options for each type of Lettre de Gage but cannot combine the two options. Moreover, the securitisation tranches should have a minimum rating of Aa3 from Moody’s or a rating of AA- from S&P or Fitch. The law allows only true sale transactions and synthetic securitisations are explicitly excluded.

Moreover, the amended law clarifies that any kind of obligations from public sector institutions including public private partnerships (providing a controlling public sector stake; other public private partnership structures are subject to the above mentioned 10% limit) are cover pool eligible.

There is no limitation on the volume and the types of derivatives used as long as they are employed as hedging instruments.

The cover pools are dynamic. Assets can be included, excluded and exchanged as long as the requirements of the law are not breached.
There are no explicit transparency requirements regarding cover pools. However, there is common understanding among the five Lettre de Gage issuers that a broad range of information should be provided on a voluntary basis in the interest of bond holders.

IV. VALUATION AND LTV CRITERIA

The property valuation methods are defined by a CSSF Circular 01/42 and are based on the mortgage lending value of the property. A special auditor, who may not simultaneously hold the position of company auditor, has the responsibility of determining whether the property valuation has been undertaken according to the valuation rules.

The LTV limit for residential property has been increased from 60% to 80% of the estimated realisation value. The LTV ratio of 60% will remain in force for all other immovable and movable properties including commercial real estate loans. The actual loan, however, can exceed the 60% limit (or 80% limit in case of residential mortgages). In those cases, only the first 60% (80%, respectively) of the mortgage lending value is eligible for the cover pool.

V. ASSET-LIABILITY MANAGEMENT

The new law has introduced a minimum overcollateralisation level of 2% on a nominal basis as well as on a net present value basis. The Luxembourg regulator has the right to review and adjust these over-collateralisation levels. Any mismatches in terms of currency or interest rate risk have to be hedged and the respective hedge instruments have to be included in the collateral pool. In addition, there are the requirements imposed by the rating agencies.

The special auditor has to ensure that there is always sufficient collateral in the pool. This has to be certified by the special auditor when Lettres de Gage are be issued. Cover assets may only be removed from the cover pool when the prior written consent of the special auditor has been received and provided that the remaining cover assets are sufficient to guarantee the legally protected cover.

The calculation of the nominal value and of the net present value of the collateral pool as well as the outstanding Lettres de Gage volume must be reported to the supervisory authority on a monthly basis.

Moreover, the law changes removed the current restriction of the outstanding volume of Lettres de Gage to 60 times the issuer’s equity.

There is no obligation for the issuers to publish specific information referring to the collateral pool. However, there is a voluntary practice by the Lettres de Gage issuers to publish specific cover pool data on their respective internet pages.

VI. COVER POOL MONITOR AND BANKING SUPERVISION

The supervisory authority of covered bond issuers is the general banking regulator “Commission de Surveillance du Secteur Financier (CSSF)”. The CSSF has a specialised department which is responsible for supervising the Lettres de Gage issuers. It is entitled to demand relevant reports and intercede if liquidity problems have been identified at a bank. The Commission de Surveillance du Secteur Financier (CSSF) is also responsible for the approval of the various types of covered bonds secured by movable assets. Definitions, the details on which types of moveable assets qualify and other practical issues will be clarified in a separate CSSF Circular.
For the independent control of the cover pool a special auditor which is recommended by the Lettres de Gage issuer has to be approved by the supervisory authority. Only auditing firms which satisfy the conditions set forth in the law of 1984 regarding réviseurs d’entreprises (independent auditors) can be appointed as special auditors. The issuer communicates the names of the partners of these auditing firms who will fulfil the function to CSSF. The special auditor must have a suitable qualification and must be able to call upon the experience and technical expertise of a recognized international auditing firm.

The special auditor is continuously responsible for monitoring the collateral pool and the outstanding Lettres de Gage. He must ensure that there are sufficient assets in the collateral pool to service the obligations resulting from the outstanding Lettres de Gage up to the final maturity of the last outstanding bond. He is obliged to inform the supervisory authority immediately should any of the prudential limits be violated. The Lettres de Gage issuer is also obliged to immediately inform the supervisory authority of the violation of any limits.

Rating agencies do not play any mandatory role in the monitoring process. The issuers comply with the rating agencies’ requirements on a voluntary basis.

VII. HOW ARE SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS REGULATED?

The cover registers for mortgage, public sector and moveable assets include all necessary data to identify the assets and the derivatives included. As soon as an asset or derivative product is registered in the official cover register it forms part of the collateral pool.

The cover register is managed by the issuer but regularly monitored by the special auditor. The special auditor is obliged to inform the CSSF of any irregularities and provide an annual report.

Asset segregation
In the case that a Lettres de Gage issuer is declared bankrupt, the assets and derivatives in the collateral pool are separated from the other assets and liabilities of the bank. The respective collateral pools remain unchanged and are administered by the CSSF up to the final maturity of the last outstanding Lettre de Gage. By law the derivative counterparties rank pari passu with the Lettres de Gage creditors.

Impact of insolvency proceedings on Lettres de Gage and derivatives
Lettres de Gage do not automatically become due when the issuing bank becomes insolvent. Interest and principal are paid as per their original due dates. The same applies to derivatives registered in the cover register which are part of the cover pool. The net present value of the derivatives after netting ranks pari passu with the claims of the Lettres de Gage holders.

Preferential treatment of Covered Bond holders
Lettres de Gage holders benefit from a preferential treatment in case of an issuer insolvency. The registration of the cover assets in the cover register provides the Lettre de Gage holders with a preferential right, above all other rights, preferences and priorities of any nature whatsoever, including those of the Treasury. The general bankruptcy administrator has no direct access to the assets in the collateral pool.

If the assets in the collateral pool are insufficient to meet the demands of the Lettres de Gage creditors, the bondholders may draw on the bankruptcy estate and the ordinary rules of collective liquidation will apply, but restricted to the amount which has not been satisfied by the cover assets. In this case, the
Lettres de Gage holders participate in the general bankruptcy procedure and have an unsecured claim against the issuer ranking pari passu with other senior unsecured investors.

**Access to liquidity in case of insolvency**

The CSSF administers the cash flows resulting from the cover assets and according to the Article 12-8 (5) it can transfer the administration of the cover assets and the Lettres de Gage to another bank.

There is no explicit provision in the law regarding any voluntary overcollateralisation. However, Article 12-8 (5) stipulates that assets remaining after the creditors enjoying the preferential rights have been paid off in full, those assets shall be transferred to the general pool of assets comprised in the liquidation of the bank. From this regulation the conclusion can be drawn that the voluntary overcollateralisation is only available to the non-privileged creditors when the claims of the last outstanding Lettre de Gage holders have been satisfied.

**VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION**

The Luxembourg Covered Bond legislation fulfils the criteria of Art. 22 (4) of the UCITS Directive (Council Directive of 20 December 1985 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS)) and Lettres de Gage enjoy therefore a 10% risk weighting under Basel I rules in Europe. Derivatives included in the cover pool are currently 0-20% risk-weighted according to the risk weighting of the counterparties.

In its current format, the Lettres de Gage legislation does not fulfil the requirements set out in Annex VI, Part 1, Article 68 a) to f) of Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (recast), the Capital Requirements Directive (CRD). The recent amendments of the Luxembourg covered bond legislation did not make the Lettres de Gage legislation CRD-compliant. However, it should be possible for issuers to make their outstanding Lettres de Gage ‘CRD compliant’ by limiting their cover pool exposure.

Lettres de Gage are principally eligible for repo transactions with the European central bank. But this applies only to Lettres de Gage issued in Euro and in New Global Note format for Euro-System eligibility.
I. FRAMEWORK

The Dutch regulation for covered bonds (the "Regulation") came into force in the Netherlands on 1 July 2008. The Regulation aims to:

- provide Dutch issuers with a level playing field with other issuers of covered bonds within the European Union;
- facilitate a market in safe instruments in accordance with the applicable European directives; and
- impose solid conditions to protect covered bondholder interests.

The Regulation embraces a segregated structure, that is a structure where the cover assets are segregated from the issuer and owned by a covered bond company (the "CBC"). The Regulation does not recognise an integrated structure, where the cover assets would continue to be owned by the issuer. Under the Regulation, asset segregation takes place on the basis of the Dutch Civil and Bankruptcy Codes. The applicable statutory provisions are relatively creditor-friendly and have enabled the Dutch legislator to take a time-efficient and principles-based approach without having to amend the Dutch Civil or Bankruptcy Code.

The Regulation forms part of the following two layers of secondary legislation implementing the Dutch Financial Supervision Act (Wet op het financieel toezicht; the "FSA"): 

- the FSA Prudential Rules Decree (Besluit prudentieel toezicht Wft); and
- the FSA Implementing Regulation (Uitvoeringsregeling Wft).

There is however a third Dutch regulation which contains specific covered bond provisions, being the Regulation on Solvency Requirements for Credit Risk (Regeling solvabiliteitseisen voor het kredietrisico; the "Solvency Requirements"). An important distinction to bear in mind is that the Regulation focuses on issuance of covered bonds by Dutch banks out of The Netherlands (which is what this chapter is about), whereas the relevant Solvency Requirements focus on investment by Dutch banks (and investment firms) in covered bonds issued out of any country that is a party to the European Economic Area. The relevant Solvency Requirements are a number of years older than the Regulation and stipulate the regulatory beneficial treatment for investments in covered bonds that are backed by CRD-compliant assets. CRD-compliant assets are basically assets that meet the requirements of item 68 of Annex VI to the Banking Consolidation Directive (2006/48/EC; the "BCD"), which together with the Capital Adequacy Directive (2006/49/EC) constitutes the Capital Requirements Directive (the "CRD").

II. STRUCTURE OF THE ISSUER

Under the Regulation the issuer needs to be a bank (that is a credit institution as meant in article 4(1) (a) BCD) that is licensed by the Dutch Central Bank (De Nederlandsche Bank N.V.; "DNB"). General banking supervision by DNB on the solvency, liquidity, business operations et cetera of the issuer falls outside the scope of this chapter.

The covered bonds are guaranteed by the CBC owning the cover assets, thus creating dual recourse for the covered bondholders. The CBC is a special purpose vehicle set up as a bankruptcy-remote, orphan
entity, as follows. It is a private company with limited liability (besloten vennootschap met beperkte aansprakelijkheid) wholly owned by a foundation (stichting), with independent directors provided by a corporate services provider and no employees. It has a limited corporate objects clause, so that any third party dealing with the CBC will be able to see that it is dealing with a special purpose vehicle. Non-petition and limited recourse wording is agreed with all transaction parties that are creditors of the CBC under the transaction documents. Any remaining third party creditors not signing up to such non-petition and limited recourse provisions are listed high in the relevant priority of payments, so as to procure they are timely paid. An insolvency of the issuer does in itself not result in an insolvency of the CBC.

The cover assets are owned by the CBC, but from an accounting perspective the assets remain on the consolidated balance sheet of the issuer, which continues to carry the credit risk of the cover assets. The CBC pledges the cover assets to a security trustee. The security trustee is a foundation especially established to act as a security trustee in relation to the relevant covered bonds. The security trustee receives the rights of pledge in its own name, but acts in the interest of the covered bondholders and certain other transaction parties that are creditors of the CBC.

III. COVER ASSETS
To date all Dutch covered bond programmes (i.e. ABN AMRO, Achmea, ING, NIBC and SNS) are backed by residential mortgage loans. In addition they allow for inclusion of substitution assets, meaning euro-denominated:
- cash; or
- subject to minimum rating and maximum percentage requirements (this differs per programme), other assets eligible under the CRD to collateralise covered bonds.

All programmes allow for inclusion of non-Dutch residential mortgage loans, subject to certain restrictions. In practice all cover pools consist of Dutch residential mortgage loans and, in one programme, German residential mortgage loans.

Although the Solvency Requirements contain detailed provisions on cover assets as prescribed by the CRD, the Regulation only lists the general requirements of article 22(4) of the Undertakings for Collective Investment in Transferable Securities Directive (85/11/EC; “UCITS”). The Regulation therefore introduces CRD-compliance as an option, and not as a requirement. In covered bond regulation across Europe this is a novel feature. It allows issuers of (and thus investors in) Dutch covered bonds the flexibility to choose whether they wish to issue (or invest in) covered bonds which are either:
- UCITS-compliant; or
- both UCITS- and CRD-compliant.

The ABN AMRO and ING covered bond programmes are designed to be both UCITS- and CRD-compliant. The Achmea, NIBC and SNS covered bond programmes are designed to be both UCITS- and CRD-compliant in all respects but one: they apply a 125% rather than an 80% LTV Cut-Off Percentage. This will be explained in more detail in paragraph IV below.

UCITS- and CRD-compliance of Dutch covered bonds can only be achieved if the relevant covered bonds are registered by DNB under the Regulation. The DNB register indicates whether the relevant covered bonds are CRD-compliant. All covered bonds registered by DNB are in principle UCITS-compliant. The
requirements for, and status of, registration of Dutch covered bond programmes will be set out in paragraph VI below.

**IV. VALUATION AND LTV CRITERIA**

The above novel feature of CRD-compliance as an option, should be seen against the background that the CRD prescribes that covered bonds may be backed by residential mortgage loans only up to the lesser of (a) the principal amount of the relevant mortgage right and (b) 80% of the value of the underlying mortgaged property. However, relevant Dutch residential mortgage loans may in practice have a loan-to-value ("LTV") ratio of up to 125%. To date all Dutch covered bond programmes take a two-step approach towards LTV-ratio’s of Dutch residential mortgage loans, as follows:

- the loan is only eligible as cover asset if its principal amount did not exceed 125% (subject to some exceptions in some programmes; the “Eligibility Percentage”) of the value of the mortgaged property at origination; and
- once a loan forms part of the cover assets, the maximum value attributed to it in valuing the cover assets is a certain percentage (this differs per programme; the "LTV Cut-Off Percentage") of the value of the underlying mortgaged property at such time. For example, if (a) the relevant LTV Cut-Off Percentage is 80% and (b) a residential mortgage loan has a principal amount of 110 and is backed by mortgaged property with a value of 100, then such loan would be valued at no more than 80 in the asset cover test determining the value of the cover assets. The 30 excess value of the loan would serve as extra credit enhancement in Dutch covered bond programmes. That would not be the case in integrated covered bond structures used in other countries applying prescriptive (that is rule-based rather than principles-based) regulations.

The LTV Cut-Off Percentage applied to Dutch residential mortgage loans is:

- 80% in Dutch covered bond programmes which are designed to be backed by CRD-compliant cover assets (i.e. ABN AMRO and ING);
- 125% in Dutch covered bond programmes which are not designed to be backed by CRD-compliant cover assets (i.e. Achmea, NIBC and SNS); and
- notwithstanding the percentages mentioned in the previous two paragraphs, 100% or a different percentage for residential mortgage loans that have the benefit of a Dutch National Mortgage Guarantee (Nationale Hypotheek Garantie).

The CRD does not (nor does the Regulation) prescribe which value of the underlying mortgaged property should be taken into account when calculating the LTV-ratio: the foreclosure value or the market value. To date under the Dutch covered bond programmes:

- the Eligibility Percentage is applied to the foreclosure value at origination; and
- the LTV Cut-Off Percentage is applied to the market value of the mortgaged property at the relevant time. The market value is in turn calculated at 85-90% (this differs per programme) of the applicable foreclosure value at origination, subject to indexation. As to indexation, (a) if prices go up, the property value is increased by 85-100% (this differs per programme) of the increase and (b) if prices go down, the value is reduced by 100% of the decrease.
V. ASSET - LIABILITY MANAGEMENT

Under all current Dutch covered bond programmes a total return swap is entered into at inception of the programme in relation to the cover assets. The total return swap basically swaps the different types of interest to be received on the cover assets to 1 month’s EURIBOR. In addition, an interest rate swap or structured swap is entered into each time a series of covered bonds is issued. The interest rate/structured swap basically swaps 1 month’s EURIBOR/euro’s to the interest rate/currency payable under the relevant series of covered bonds. In some cases where the issuer has a high credit rating, the issuer has opted to postpone the entering into of such interest rate and structured swaps until the occurrence of certain trigger events.

All Dutch covered bond programmes require the issuer to establish a reserve fund equal to 1 month’s interest payments on the covered bonds plus certain costs and expenses for 1 month if the issuer’s short term rating is or falls below P-1/F1/A-1 or A-1+ (this differs per programme).

To mitigate liquidity risk on principal payments all Dutch covered bond programmes use either:
- a pre-maturity test which is taken on each business day during the following number of months preceding the maturity of the relevant covered bonds:
  (a) in the case of S&P, 6 months; or
  (b) in the case of Moody’s and Fitch, 12 months.
The pre-maturity test is failed if on the relevant test date the issuer’s short term rating is or falls below P-1/F1+/A-1+. A breach of the pre-maturity test requires (a) the issuer to cash-collateralise hard bullet maturities or (b) the CBC to procure alternative remedies such as a guarantee of the issuer’s obligations, a liquidity facility and/or a sale or refinancing of cover assets; or
- a one-year maturity extension. The possible extension applies only to the CBC and only to any final redemption amount payable by the CBC in relation to a series of covered bonds under the guarantee.

For all Dutch covered bond programmes a minimum level over-collateralisation is required, which is measured by applying an asset cover test with asset percentages ranging from approximately 87.5 to 94%. This translates into a minimum degree of over-collateralisation of 6.3 to 14.3% (this differs per programme).

VI. COVER POOL MONITOR AND BANKING SUPERVISION

Under all Dutch covered bond programmes the issuer is obliged to frequently send out investor reports that contain detailed information about, among other things, the cover assets and the performance of a monthly asset cover test. The accuracy of the asset cover test calculation is required to be tested at least annually by an independent auditor. Each year the CBC is required to produce audited financial statements.

When reviewing a Dutch covered bond programme submitted to it for registration under the Regulation, DNB requires:
- a valid safeguarding of sufficient cover assets for the covered bondholders. The assets must be validly transferred by the issuer to the CBC and pledged by the CBC to the security trustee;
- the covered bonds to have a credit rating of at least AA-/Aa3;
- a healthy ratio between the programme/issuance amount on the one hand and on the other hand (a) the value of the cover assets, (b) the value of the remaining assets of the issuer eligible for addition to the cover assets and (c) the consolidated balance sheet of the issuer (the latter to protect other stakeholders); and

- the issuer to have solid and effective strategies and procedures for verifying and procuring the sufficiency of the cover assets, taking into account the composition of the cover assets, the over-collateralisation and the applicable risks and stress tests.

To date the ABN AMRO, ING and NIBC covered bond programmes have been registered by DNB. At least one other registration request is pending. The register is available on-line and can be found at www.dnb.nl/openboek/extern/id/en/all/41-186085.html (click on: Wft CB Register).

Once a Dutch covered bond programme has been registered by DNB, the issuer will have ongoing administration and reporting obligations towards DNB. If the covered bonds no longer meet the requirements set by the Regulation or if the issuer no longer complies with its ongoing administration and reporting obligations towards DNB, there are likely to be short communication lines between the issuer and DNB. If it comes to sanctions, it may be that an issuance-stop is imposed on the issuer, which may be disclosed by DNB in its register. DNB is entitled to ultimately strike the registration of a covered bond. In practice it is not very likely that DNB would ever exercise its deregistration authority. Apart from verbal assurance this is confirmed by the explanatory notes to the Regulation, which in short state:

- that deregistration will only occur (a) after due consideration of the interests of the issuer and the covered bondholders and (b) in the exceptional circumstance that DNB’s supervision is no longer in the interest of the issuer and no longer grants protection to covered bondholders; and

- that the interests of the issuer and the covered bondholders include that the registration and supervision be maintained.

VII. HOW ARE SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS REGULATED?

The regulations enabling the segregation of the cover assets and bankruptcy-remoteness of the CBC are set out in the Dutch Civil and Bankruptcy Codes.

VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

As explained above, Dutch covered bonds registered by DNB under the Regulation are registered either as UCITS-compliant or as UCITS- and CRD-compliant. Dutch covered bonds which are not registered under the Regulation are neither UCITS- nor CRD-compliant.

It differs per type of investor whether investing in a certain category of covered bonds provides regulatory special treatment. For ease of reference such regulatory treatment is set out in more detail below, focusing on Dutch covered bonds registered under the Regulation:
A further regulatory special treatment applies to CRD-compliant Dutch covered bonds in the context of banks and investment firms entering into repurchase transactions (repo’s) with Dutch banks. If the Dutch bank posts its own CRD-compliant covered bonds as collateral under the repo, then such covered bonds qualify as financial collateral under the CRD for the purpose of mitigating the credit risk of the bank/investment firm on the Dutch bank as its repo counterparty.

Finally, if Dutch covered bonds are UCITS-compliant, they receive special treatment by the European Central Bank (“ECB”) in determining their eligibility for monetary policy operations (such as the marginal lending facility to obtain overnight liquidity from national central banks), including:

- they are eligible even where the posting bank is the issuer (or has ‘close links’ with the issuer or guarantor) of the covered bonds. This means for example that a Dutch bank wishing to borrow from DNB may use its own UCITS-compliant covered bonds as collateral (informal assurance suggests that CRD-compliance is currently not required and that ‘own’ general-law-based covered bonds will not be accepted);
- they need not be admitted to trading on a regulated market (as defined in the Markets in financial Instruments directive; MiFID); and
- unlike other asset-backed securities:
  (a) they are not eligible for an exemption from the general rule that debt instruments must have a fixed, unconditional principal amount;
  (b) they may be backed by credit-linked notes or similar claims resulting from the transfer of credit risk by means of credit derivatives; and
  (c) they are exempt from certain true sale requirements. In addition, they are exempt from certain credit quality thresholds. However, these exemptions are of lesser relevance for Dutch UCITS-compliant covered bonds because the Regulation requires a segregated structure as well as a credit rating of at least AA-/Aa3.
Issuers: There are five issuers in the Netherlands: ABN AMRO Bank N.V., Achmea Hypotheekbank N.V., ING Bank N.V., NIBC Bank N.V. and SNS Bank N.V.
I. NORWEGIAN MORTGAGE MARKET

With only 4.8 million people, the Norwegian housing market is comparatively small. As people typically do not want to lose their home and Norway has a homeownership ratio of 80%, Norwegian residential mortgage lending is comparably safe. Owner-occupied mortgage loans benefit from full tax relief on interest payments. Over 90% of the mortgages are floating rate. Rates on floating rate mortgages can be reset at any time and at the bank’s own discretion, by giving debtors 6 week notice. Norges Bank forecasted housing investments to go down by 20% in 2009. Housing starts in 2009 are forecasted at 20,000 versus 25000 in 2008 and 31000 in 2007. Norges Bank expects pressure on housing market to improve during 2009 due to low interest rates and improved access to funding. In fact, rate cuts by Norges Bank helped to Norwegian housing market to stabilise recently with housing prices even increasing at the beginning of the year. Even in case of further housing market pressure, typical low risk residential mortgage collateral of Norwegian covered bonds should not be significantly impacted. High cover pool credit quality of Norwegian covered bond issuers is suggested by typically very low Moody’s collateral scores (between 1.8% and 3.6% in 2008).

II. NORWEGIAN COVERED BOND MARKET

The Norwegian housing loan market was historically mainly a banking market. As bank lending has increased more rapidly than bank deposits for several years until 2007, banks experienced an increasing funding gap, and searched for alternative funding sources. Covered bonds were considered the best answer to funding need, being probably the most cost-effective solution.

As of end of 15 June 2009, a total of EUR 10.5 bn of Norwegian EUR Jumbo covered bonds were outstanding, making it one of the small EUR Jumbo covered bond markets but also second to Sweden (EUR 21 bn). At the end of its inaugural year 2007, the outstanding volume of Norwegian EUR Jumbo covered bonds amounted to EUR 4.5 bn. New issue spreads varied from ms+4 bp for DNB Nor’s (DNBNOR) July 2012 covered bond issued in June 2007 to ms+84 bp for SpareBank 1 Boligkreditt (SPABOL) Sept 2013 covered bond issued in Sept 2008.

According to Bloomberg data, the total outstanding volume of (Jumbo and non-Jumbo in all currencies) of Norwegian covered bonds amounted to EUR 27.3 bn as of 15 Jun 2009. Despite the absence of EUR Jumbo covered bond market issuance since pre-crisis, the Norwegian covered bond market grew significantly, mainly driven by the “Special-Liquidity-Scheme” (see below).

DNB NOR is the biggest issuer of Norwegian covered bonds with the highest market share of 58%. DNB NOR is followed by SPABOL and TERBOL with market share of 22% and 9% respectively. BN Boligkreditt (BNBOLI), Storebrand Kreditforetak (STBNO) and Sparebanken Vest Boligkreditt (VESTBO) came into market in 2008 and three more issuers PLUSSB, SFFBUS and MOREBO in 2009. DnB NOR has been the top issuer in all the three years. The new issuers of Norwegian covered bonds in 2008 BN Bolikreditt, Storebrand Kreditforeta and Sparebanken Vest have been predominantly short term issuers and new issuers in 2009 with small issuance amount have issued in 3 to 7 year maturity basket.

EUR was the dominant issuance currency until June 2008
EUR was the predominant issuance currency till June 08, however currently more than half of the total amount outstanding in the Norwegian covered bond market is issued in NOK with EUR accounting for 43%. Moreover, all 2009 year to date issuance has been denominated in NOK only. The change in the currency focus is mainly due to the “Special-Liquidity-Scheme”. In October, the Norwegian authorities introduced this scheme allowing banks to swap covered bonds into Norwegian covered bonds up to a volume of NOK 350 bn (EUR 39.5 bn). As of May 2009, banks already swapped NOK109 bn of covered bonds into Norwegian government bonds. As this is done at NIBOR minus 20 bp there are no incentives for issuers to tap the market, even more so as smaller banks established covered bonds to access to the liquidity scheme. While it seems likely that Norwegian covered bonds would be able to sell covered bonds in the market at spreads similar to other core covered bond countries like Sweden, France or Germany, it seems also likely that Norwegian authority would extend the scheme in case of need.

Legal Framework for Norwegian Covered Bonds

III. ISSUE STRUCTURE

In Dec 2002 the Norwegian legal framework for covered bonds was established by amendments to the Law on the Financing Business. The necessary secondary legislation was established in 2007. The specialist banking principle, allowing only specialised institutions restricted in their business to issue covered bonds, applies in Norway. These specialized credit institutions, so called Kredittforetak, are limited to origination/holding of eligible assets and refinancing these assets by issuing Norwegian covered bonds. These institutions are licensed credit institutions, supervised by the Financial Supervisory Authority (Kredittilsynet) of Norway, in accordance with European banking legislation. A commercial bank or a savings bank cannot be allowed to issue such bonds in its own name, but has to establish a mortgage institution as a wholly owned subsidiary. The subsidiary can also be jointly owned by banks (Sparebank1 and Terra). Existing mortgage institutions have to restrict the scope of their business in order to comply with the law. The term ‘covered bonds’ (Obligasjoner met fortrinnsrett) or literally ‘bonds with preferential claim’ is protected by law. In line with the UCITS 22(4) requirements, the issuer will be subject to specific public supervision. Issuers have to inform the regulator Kredittilsynet no later than 30 days before the first issue. The regulator may refuse the mortgage credit institution the right to issue covered bonds due to credit quality reasons.

IV. COVER POOL CREDIT QUALITY

Similar to the French and Swedish legal framework for covered bonds, mixed pools of public sector and mortgage assets are allowed.

Eligibility Criteria

The cover pool may only consist of the following assets:

- loans secured on residential property, on a document of proprietary lease of a housing unit or on a certificate showing that the lessee owns a share in the housing cooperative that owns the housing structure of which the unit forms part (residential mortgages), loans secured on other real estate (commercial mortgages);
- loans secured on other registered assets;
- loans to municipalities and loans guaranteed by the State, a municipality or corresponding public;
- body in other states (public sector loans);
assets in the form of derivative contracts which meet further requirements set in regulations; and
assets which constitute substitute collateral under the Norwegian law.

**Mortgage lending**

Eligible mortgage assets are: Loans secured on residential property, on a document of proprietary lease of a housing unit or on a certificate showing that the lessee owns a share in the housing cooperative that owns the housing structure of which the unit forms part (residential mortgages) loans secured on other real estate (commercial mortgages) and on other registered assets. Residential mortgage loans qualifying for the cover pool may be secured on property to a maximum LTV of 75%, commercial loans with 60%. Lending activity is restricted to EEA and the OECD in case of mortgage loans. Loans with a higher LTV are allowed in the cover pool, however only accounted for up to the specified LTV limit. The Norwegian law does not require non-performing loans to be removed from the cover pool. However, only performing loans are accounted for in the matching calculation. LTV’s in excess of 75% and defaulted loans create some hidden OC.

**Public sector lending**

Loans to municipalities and loans guaranteed by the state, a municipality or corresponding public body in other states (public sector loans), assets in the form of derivative agreements which meet further requirements set in regulations. Public sector loans can only be included if they are extended to states or local governments in the EEA or in the OECD. As Norwegian public bodies have very little debt and the banks are not very active in international public sector lending, public sector cover assets will not be important in Norwegian covered bonds.

**Property valuation**

The valuation of cover assets must be carried out in a prudent manner not exceeding the market value and the assessment must be on an individual basis by an independent valuer prior to their entry in the pool.

**MBS/Covered bonds**

In accordance with the CRD, RMBS/CMBS are eligible as cover assets if backed by eligible cover assets qualifying for credit quality step 1 and limited to 20% of the cover pool.

**Substitute assets**

Only particularly liquid and secure assets may be employed as substitute collateral. Substitute collateral may constitute up to 20% of the cover pool at any and all times (or up to 30% with the consent of the supervisor), and have to be of the same quality as the other cover assets. Claims (exposures) on institutions, etc. as mentioned in the CRD section 5-6, which qualify for credit quality step 1, shall in aggregate not exceed 15% of the nominal value of outstanding covered bonds. Amounts due to operation and management of the cover pool, including settlement of loans, and transfers of payments to preferential creditors shall not be included for the purpose of the 15% limit. The same applies to covered bonds issued by other institutions (fourth paragraph). Claims on institutions within the EEA with a maturity of up to 100 days shall qualify for credit quality step 2 or better.

**Taking derivatives in cover**

Derivatives are allowed as cover pool assets for hedging reasons, i.e. with the intention to meet the matching requirements. Derivative contracts may be entered into with the following types of counterparty:

1. Clearing houses established in the EEA or the OECD area.
2. States and central banks in the EEA or OECD area 3. Credit institutions established in the EEA or OECD area Derivative counterparties’ claims rank pari passu with those of covered bond holders in case of issuer insolvency. Derivatives ensuring the balance principle are allowed to be part of the cover pool. If the derivative agreement is net present value positive, it will be part of the cover pool, if negative, the derivative counterparties will have a preferential claim over the pool, pari passu with the holders of covered bonds.

**Transparency requirements**

Mortgage credit institutions have to report the register on a regular basis to the Norwegian banking regulator, which checks the adequacy of cash flows, the market risk exposure and the evaluation of cover pool assets. Most issuers regularly publish cover pool data on a voluntary basis.

**Cover register**

The mortgage institution shall maintain a register of the covered bonds it issues, and of the cover assets assigned thereto, including derivative agreements.

**Cover pool monitor**

The independent cover pool inspector (gransker) has to be appointed by the Norwegian supervisory authority. The inspector checks on a quarterly basis the issuer’s compliance with the requirements stipulated in the law and reports directly to the supervisory authority.

**V. COVER POOL RISK MANAGEMENT**

**Matching requirements**

The law establishes a strict balance principle, i.e. the value of the cover pool assets including derivatives must at all times exceed the value of the covered bonds with a preferential claim over the pool. According to the law, loans, interest rates and foreign exchange contracts, and substitute assets, hence the cover pool assets, shall be valued at prudent market value. Issued bonds and future interest coupon payments shall be valued at net present value. Accordingly, the fair market value of the cover pool shall at times exceed the net present value of the secured liabilities. On top of this, e.g. DNB Boligkreditt committed itself to nominal matching, i.e. that the nominal value of the cover assets will not at any time be less than the nominal value of the issued covered bonds. Equally, the mortgage credit institution shall ensure that the payment flows from the cover pool enable the institution to honour its payment obligations. The mortgage institution will have to adopt strict internal regulations with respect to liquidity, interest rate and currency risk. The law does not explicitly require hedging of all currency risk. However, issuers are expected to fully hedge the currency risk. Issuers of Norwegian covered bonds have to model prepayment risk and if necessary have to build a liquidity reserve. The issuer must also set limits for interest rate risk under the consideration of 100 bp parallel shifts and twists of the yield curve (divided into maturity classes). Also, stress tests for the whole balance sheets are required. The Norwegian legal framework contains a 5% maximum exposure limit to reduce concentration risk. This borrower limit on a cover pool basis is unique in covered bond legislations. Loans to the same borrower and loans secured on the same collateral can only be included up to 5% of the total value of the cover pool. The Norwegian regulator Kredittilsynet can define exceptions to the 5% limit in cases where additional collateral exists.

**Liquidity risk**

The mortgage credit institution shall establish a liquidity reserve to be included in the cover pool as substitute collateral. In respect to liquidity risk, periodic stress tests are stipulated to make sure that
there is a satisfactory liquidity reserve. With respect to liquidity requirements, section 2-32 of the revised Mortgage Act states that cash flows from collateral assets must at all time meet scheduled payments of the covered bondholders and derivatives’ counterparts. Secondary legislation only states that an issuer must not take on more liquidity risk than can be considered ‘securely’. Thus, it is up to the separate issuers to set the liquidity limits. On top of this, e.g. DNB NOR committed itself to the cash flow of the cover pool and covered bonds (including redemptions) being positive on a 6 months horizon.

VI. COVER POOL BANKRUPTCY RISK

Asset segregation and bankruptcy remoteness
The law explicitly defines the mandatory procedures to be followed in case of bankruptcy and procedures to ensure timely payments. The cover assets remain with the estate in case of bankruptcy, but the bondholders have exclusive, equal and proportionate preferential claim over the asset pool, and the administrator is bound to assure timely payment, provided the pool gives full cover to the said claims. In case of bankruptcy of the issuer an administrator shall be appointed by the court. Bankruptcy or insolvency itself does not give the bondholders the right to accelerate their claims. In case of issuer insolvency, a cover pool administrator (bostyret) is appointed. He has broad legal competences to ensure that the covered bonds and derivative contracts are paid. Together with the creditors’ committee, the cover pool administrator can decide to sell cover assets in order to be liquid to repay covered bonds becoming due. If case of need, even new covered bonds may be issued against the separated cover pool. Potential fees and administration costs have to be borne by the cover pool and are senior to the covered bondholders. Only payment default will give the holders of preferential claims the right to declare default. If the cover pool is not sufficient to cover all the preferential claims, the administrator shall declare default of the pool and halt of payments. The cover pool administrator must respect and honour the rights of the bondholders and derivative agreements counterparties.

Preferential claim and bankruptcy remoteness
In the revised act, the preferential right to cover assets is explicitly stipulated. Hence, in case of insolvency of the mortgage institution, the bondholders/derivatives counterparts have a statutory preferential right to the cover pool. As long as covered bonds receive payments in due time, the claimants have no right to declare default. Details about this will be reflected in the individual agreements between the issuer and the trustee of the bondholders. This will also apply to any netting agreement between the company and its counterparties.

Legal protection of OC
No mandatory overcollateralisation (OC) is stipulated, but any voluntary OC is protected if it is registered in the cover register.

Ratings
All Norwegian covered bonds are rated triple A. Most issuers have no separate senior bank rating (DNB Nor Boligkreditt is rated A+ at Fitch and Sparebanken 1 Boligkreditt is rated A by Fitch). According to Moody’s, all Norwegian covered bonds benefit from a strong legal framework. Moreover, Norwegian covered bonds have extended refinance periods stipulated in their documentation – which should mitigate refinancing risks – and typically benefit from the lowest so called collateral scores (of between 1.8% and 3.6% in 2008) in the covered bond market. In case of Fitch, Norwegian covered bonds typically receive a comparably low discontinuity factor of between 11.1% and 12.1% in 2008.
**Risk Weighting**

UCITS 22 (4)/CRD is applicable to EEA countries. This is stipulated in article 36 in the contract of the European Economic Area. Besides the UCITS 22 (4), covered bonds have also to fulfill the requirements of CRD to get a privileged risk weighting. In the Norwegian legal framework for covered bonds, lending is geographically restricted according to risk classes. In line with CRD, eligible countries have to be credit quality step 2 (equivalent to a minimum A- rating). In line with the CRD ‘credit quality steps’ as referred to in the MoF regulation imply the same credit quality steps as referred to in the CRD. Generally, the Norwegian law sticks very closely to CRD. Hence, investors benefit from a privileged risk weighting.
Issuers: There are ten issuers in Norway: BN Boligkreditt, DnB NOR Boligkreditt, Møre Boligkreditt AS, Nordea Eiendomskreditt AS, Pluss Boligkreditt AS, Sparebank1 Boligkreditt, Sparebanken Vest, SSF Bustadkreditt AS, Storebrand Kredittfondas and Terra Boligkreditt.
**3.17 POLAND**

By Agnieszka Drewicz-Tułodziecka, Mortgage Credit Foundation, and Piotr Cyburt, BRE Bank Hipoteczny

**I. LEGAL FRAMEWORK**


**II. STRUCTURE OF THE ISSUER**

The issuer is a specialised mortgage bank, licensed by the National Bank of Poland.

A mortgage bank may only engage in the activities specified in the LZ Act.

According to the Art. 12 LZ Act, **the core operations** of mortgage banks include:

1) granting credits secured with mortgages;
2) granting loans not secured by mortgage, only if the borrower, guarantor or underwriter of a loan repayment to its full amount, including the interest due, is the National Bank of Poland, Central European Bank, governments or central banks of the European Union states, Organisation for Economic Cooperation and Development, excluding those countries, which are or have been for the past 5 years restructuring their foreign debt, or by means of a guarantee or security granted by the State Treasury;
3) acquisition of other banks’ receivables on account of loans granted by them, secured by a mortgage and receivables on account of credits not secured by a mortgage, granted to the entities of the local self-government;
4) the issue of mortgage bonds the base of which constitute the Bank’s receivables on account of the granted loans secured by a mortgage or purchased receivables of other banks on account of the loans granted by them secured by mortgage;
5) issuing public mortgage bonds on the basis of:
   a) the mortgage bank’s receivables arising from its credits not secured by mortgages referred to in point 2);
   b) purchased receivables of other banks arising from their credits not secured by mortgages referred in point 2).

According to the article 15 LZ Act, **apart from core operations** referred to in Article 12, mortgage banks may engage in the following activities:

1) accepting term deposits;
2) taking credits and loans;
3) issuing bonds;
4) safekeeping securities;
5) purchasing and taking up shares and stocks of other entities whose legal form limits the liability of a mortgage bank to the sum invested insofar as it helps the performance of activities of a mortgage
bank, where the total value of purchased or taken up shares and stocks may not be higher than 10% of the mortgage bank’s equity;

6) keeping bank accounts for servicing investment projects financed through credits granted by a mortgage bank;

7) providing consulting and advice with respect to the property market, including help in establishing the mortgage lending value of the property;

8) managing receivables of a mortgage bank and other banks arising from credits referred to in Article 12 LZ Act, as well as granting these credits on behalf of other banks on the basis of relevant cooperation agreements.

All the listed activities may be executed also in foreign currencies upon obtaining relevant authorizations.

Under the LZ Act, the range of activities that can be performed by mortgage banks is specified in a closed catalogue as mentioned above. Particularly, mortgage banks cannot collect deposits of individual saver. The narrowing of activity of mortgage banks facilitates the development of a simplified and clear activity structure (which facilitates supervision, especially external one), the specialization of the loan division and an improvement in methods of credit risk assessment in the field of real (estate) property financing. Due to the above limitations, funds resulting from the issue of mortgage bonds are mainly used towards the financing of the lending activity.

The issuer holds the cover assets on his balance sheet. The covered bonds are direct, unconditional obligations of the issuer.

III. COVER ASSETS

All covered bonds must be fully secured by cover assets. There are two specific classes of the covered bonds: hipoteczne listy zastawne (mortgage covered bonds) and publiczne listy zastawne (public covered bonds); registered in two separate cover registers.

a. The cover register for mortgage bonds.

The LZ Act provides for a cover register for the mortgage assets, which will be used in the cover pool for the mortgage covered bonds.

There is also a provision for substitute assets, which is limited to 10% of the cover pool and come from the asset categories below:

(i) in securities issued or guaranteed by the National Bank of Poland, European Central Bank, governments or central banks of European Union Member States, OECD (with the exclusion of states which are or were restructuring their foreign debt in the last 5 years), and the State Treasury;

(ii) in the National Bank of Poland;

(iii) in cash.

In addition, receivables secured by mortgages established on buildings which are in construction phase may not in total exceed 10% of the overall value of mortgage-secured receivables in the cover pool. Within this limit, the receivables secured by mortgages on construction plots in compliance with the land use plan, may not exceed 10% (Art. 23 of LZ Act).
b. The cover register for public covered bonds.

A public bond is a registered or bearer security issued on the basis of receivables of a mortgage bank arising from:

1) credits within the secured part with due interest, a guarantee or surety of the National Bank of Poland, the European Central Bank, governments or central banks of the EU Member States, the Organisation for Economic Cooperation and Development, except for states which are currently in the process of restructuring of restructured their foreign debts during the last 5 years, as well as a guarantee or surety of the State Treasury in accordance with provisions of separate laws; or

2) credits granted to entities listed in point 1); or

3) credits in the secured part with due interest, a guarantee or surety of local government units and credits granted to such local government units.

In regard to collateral location, mortgage collateral is restricted to mortgages against the right of perpetual usufruct or the right of ownership to a property situated in Poland are eligible for the cover. For public covered bonds, there is a wider scope and includes the following countries and institutions as eligible for the cover: National Bank of Poland, the European Central Bank, governments or central banks of the EU Member States, the OECD, except for states which are currently in the process of restructuring of restructured their foreign debts during the last 5 years, as well as a guarantee or surety of the State Treasury.

IV. VALUATION AND LTV CRITERIA

The mortgage lending value of real estate is determined under the LZ Act. The mortgage lending value of real property is determined prudently, with due diligence, on the basis of an expert opinion prepared by the mortgage bank or entities with appropriate real estate appraisal qualifications commissioned by the mortgage bank. The mortgage lending value can not be higher than the market value of the real estate.

There are special banking supervisory regulations, which stipulate in details the assessment of the mortgage lending value and impose on the bank a duty to have a database for real estate prices.

The LTV limits are as follows:

- single Loan to Value of Security limit: not more than 100% of mortgage lending value (Art 13.2 LZ Act)

- portfolio bonds o/s to Value of Security limit: max. 60%, to refinance eligible assets (Art 14 LZ Act: Funds raised from the issue of mortgage bonds may be used by a mortgage bank for refinancing mortgage-secured credits and purchased receivables of other banks arising from their mortgage-secured credits; the refinancing may not, however, exceed 60% of the mortgage lending value of the property)

- absolute portfolio Loan to Value of Security limit: (Art 13.1 LZ Act: The total amount of receivables from granting credits secured with the mortgages or purchased receivables of other banks arising from their mortgage-secured credits, in the part above 60% of the mortgage lending value of the property, may not exceed 30% of the total sum of the mortgage bank’s receivables secured with mortgages).
V. ASSET-LIABILITY MANAGEMENT

According to Art. 18 of the LZ Act:

1. The total nominal value of all outstanding mortgage bonds shall not exceed the sum of nominal amounts of the bank’s receivables secured with mortgages, which form the basis for the mortgage bond issue.

1. The bank’s income from interest on its mortgage-secured receivables, referred to in paragraph 1, may not be lower than the amount of the bank’s payable interest on outstanding mortgage bonds.

The Act also ensures a suitable monitoring, according to the article 25: A mortgage bank shall keep a mortgage cover account to ensure compliance, in the long term perspective, with the requirements referred above.

Additionally, according to the internal policy of each mortgage bank, the internal limits are set using management’s experience in a development bank as reference.

VI. COVER POOL MONITOR AND BANKING SUPERVISION

According to the art. 31 LZ Act, the cover pool monitor (powiernik) maintains ongoing supervision of the management of the mortgage cover register.

The cover pool monitor should ensure that:

1) commitments pertaining to the outstanding mortgage bonds are at all times covered by the mortgage bank in compliance with the provisions of LZ Act;

2) the mortgage lending value of the property adopted by the mortgage bank has been established in accordance with the regulations referred to in Article 22, paragraph 2; the cover pool monitor shall not be required to investigate whether the mortgage lending value of the property corresponds to its actual value;

3) the mortgage bank observes the limits laid down in Article 18 LZ Act; the cover pool monitor shall promptly inform the Banking Supervisory Commission of any cases of non-compliance by the mortgage bank with these limits.

4) the manner in which the mortgage bank keeps the mortgage cover register is in compliance with this Act;

5) the mortgage bank ensures appropriate cover for planned mortgage bond issues in accordance with the provisions of this Act, and proper control of appropriate entries in the mortgage cover register.

In order to perform tasks referred to in Article 30 LZ Act, the cover pool monitor shall have the right to inspect accounting books, registers and other bank documents at any time.

In matters not regulated by the LZ Act, supervision over mortgage banks shall be exercised in compliance with the Banking Law and the regulations on the National Bank of Poland (NBP). The NBP regularly checks the cover assets.

The Banking Supervisory Commission may commission an independent expert at the expense of the inspected mortgage bank to inspection of the appropriateness of the mortgage bank’s entries to the mortgage cover register. This would also including establishing the mortgage lending value of the property was in compliance with the rules referred to in Article 22, paragraph 5 LZ Act.
VII. HOW ARE SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS REGULATED?

The Act of 28 February 2003 – Bankruptcy and Rehabilitation Law (Journal of Law no. 60 item 535) contains separate chapter: Chapter II - Bankruptcy proceedings for mortgage banks – Articles 442-450.

In case of bankruptcy of the mortgage Bank, the claims, rights and means referred to in Article 18.3 and 18.4 of LZ Act, recorded in the mortgage bonds cover register, shall constitute a separate bankruptcy estate, which shall serve in the first place to satisfy the claims of mortgage bond creditors; after satisfying the mortgage bonds creditors, the surplus of the assets of the separate estate shall be allocated to the bankruptcy estate.

In declaring the bankruptcy, the court appoints a curator (kurator) who represents the rights of covered bond holders in the bankruptcy proceedings. Before the appointment of the curator, the court seeks an opinion on the proposed curator of the Banking Supervisory Commission (Art. 443.1. of the Bankruptcy and Rehabilitation Law).

The following order shall apply to the satisfaction from the separate bankruptcy estate:

- the costs of liquidation of this estate, including also the remuneration of the curator,
- the amounts due to the mortgage bonds per their nominal value,
- interest (coupons).

In case that the separate bankruptcy estate does not fully satisfy the mortgage bondholders, the remaining balance shall be satisfied from the whole bankruptcy estate funds; with that sum the curator shall vote when the arrangement is being adopted – according to article 449 of the Bankruptcy and Rehabilitation Law: *If the separate estate is not sufficient for full satisfaction of covered bond holders, the remaining sum is satisfied from the distribution of the funds of the bankrupt estate; with this sum the curator votes in the signing of the arrangement; he has one vote for each sum resulting from dividing the sum of all other claims of those entitled to vote by the number of creditors representing these claims. The sum earmarked for the satisfaction of covered bond holders is moved from the funds of the bankrupt estate fund to the funds of the separate bankrupt estate.*

In that case, the additional amount for satisfying the mortgage bondholders shall be transferred from the bankruptcy estate funds to the separate bankruptcy estate funds. It means that the covered bond holders get preference over other creditors.

According to the art. 446 Bankruptcy Act – The declaration of bankruptcy of a mortgage bank does not infringe maturity dates of its obligations towards covered bond holders. It means that the covered bonds do not accelerate.

VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Covered bonds are risk weighted 20%.

Polish “list zastawny” meets the criteria of UCITS 22(4) as well as of the CRD Directive, Annex VI, Paragraph 65 a) to f), so hopefully soon the Polish covered bond will be weighted 10%. In July 2008, the Polish Ministry of Finance sent a letter to the EU Commission to report that the “list zastawny” fulfils the criteria of Art. 22 (IV) of the UCITS Directive.

In Poland, the investment regulations pertaining to the limits for covered bonds are as follows:
> Banks – no limits
> Insurance companies – up to 40% of technical-insurance reserves – insurance companies (10% in covered bonds which were not allowed to public trading)
> Investment funds – open: 25% of the assets may be invested in covered bonds issued by one mortgage bank; but: total investments in covered bonds may not exceed 80% of the fund’s assets and total value of investments in securities or in monetary market instruments, issued by the same mortgage bank, deposits in that entity, as well as the total value of risk connected with the transactions on non-standardised derivatives, which were dealt with that bank, can’t exceed 35% of the fund’s assets.
> Pension funds up to 40% of the total asset value.

Only the specialised mortgage banks are entitled to the issue of the “list zastawny” (the Polish covered bond). The current “list zastawny” issuers are: BRE Bank Hipoteczny S.A., BPH Bank Hipoteczny S.A. and ING Bank Hipoteczny S.A.
> **Figure 1: Covered Bonds Outstanding 2003-2008, €M**

![Bar chart showing covered bonds outstanding 2003-2008 in €M for Poland. The chart shows a steady increase with a peak in 2007. The data is sourced from EMF/ECBC.]

Source: EMF/ECBC

> **Figure 2: Covered Bonds Issuance, 2003-2008, €M**

![Bar chart showing covered bonds issuance 2003-2008 in €M for Poland. The chart shows a steady increase with a peak in 2007. The data is sourced from EMF/ECBC.]

Source: EMF/ECBC
I. FRAMEWORK

In Portugal, the legislation on Covered Bonds (Obrigações Hipotecárias and Obrigações Sobre o Sector Público) is regulated by Decree-law no. 59/2006 of March 20th 2006 and complemented by secondary legislation - Notices and Regulatory Instruments of the Central Bank (Avisos e Instruções), which address issues such as the segregation of assets from the insolvent estate in case of issuer insolvency, the compliance of asset and liability matching and mortgage valuation methodology.

The exemption of withholding tax for non-resident investors for bonds issued by Portuguese entities was passed in November 2005 (Decree Law n. º 193/2005).

II. STRUCTURE OF THE ISSUER

Obrigações Hipotecárias and Obrigações Sector Público may be issued by credit institutions legally authorised to grant credits guaranteed by mortgages on real estate and with own funds amounting to no less than 7 500 000 euros. These credit institutions are either universal banks or special issuance entities - Mortgage Credit Institutions (MCI).

If the issuer is a universal bank, a direct issue will take place with the cover assets remaining on its balance sheet. If the issuer is a MCI, its authorised business activity is restricted to the granting and acquisition of credits guaranteed by a mortgage or loans of the central government, regional or local authorities or credits guaranteed by these entities. They may also undertake the management of assets that have been repossessed from credits in default, and undertake the activities necessary to obtain additional liquidity and adequately manage the pool.

Assuming the MCI is wholly-owned, the asset originator then transfers the cover assets to this institution and the assets and liabilities will consolidate on the originator’s balance sheet. However, it is also possible for the MCI to have multiple owners and, in this case, the assets may or may not consolidate back to the originator.

Considering the MCI has a limited business activity which only makes sense within the context of Covered Bond issuance, one could expect the MCI to be a 100% owned subsidiary and, as such, act as a complement to the originator’s business and funding activity. In this sense, it seems reasonable to expect that it could draw on the parent company’s resources to operate.

However, the Bank of Portugal will always determine, on a case by case basis, the necessary conditions that must be met in order to set up an MCI.

III. COVER ASSETS

Credit mortgage loans are eligible as collateral for mortgage Covered Bonds i.e. credits guaranteed by first ranking mortgage loans. Second mortgage loans can be assigned to the pool if the first mortgage loan was previously assigned as well – therefore both loans are attached to the same property, provided that the total amount of these loans does not exceed the maximum Loan to Value (LTV) permitted.

Public sector assets are eligible as collateral for Public sector bonds i.e. loans granted to the central governments, regional or local authorities or guaranteed by these entities.
The Law specifies that the registration of the assets must assure mortgage credit and public sector segregation. This means that separated pools will have to be set up.

Substitution assets (up to 20%) can be included in the pool:

- Deposits with the Bank of Portugal in cash, government bonds or other eligible bonds (ECB Tier 1 assets);
- Deposits in other credit institutions rated at least "A-";
- Other low risk and high quality assets – if necessary, to be defined by the Bank of Portugal.

Even thought, at first look, it would seem that OH would not meet all the requirements of the CAD since Portuguese law allows for substitution assets up to a limit of 20% of the pool, this cannot be considered per si. In fact, Bank of Portugal’s regulation establishes that the pool can only trade with credit institutions qualifying for credit quality assessment step 1 and that the aggregate risk positions cannot exceed 15% of the aggregate nominal value of the outstanding covered bonds or public sector covered bonds.

The geographical scope of eligible assets is restricted to loans guaranteed by first lien mortgages on property located in the European Union (EU) or loans granted to the central governments and regional or local authorities located in an EU member state.

Derivatives contracts are permitted in the cover pool for hedging purposes, namely to mitigate interest rate, exchange rate and liquidity risks. The transactions involving derivatives, must be executed in a regulated market of a Member State of the European Union, in a legally established exchange of a full member of the OECD, or entered into with a counterparty that must be a credit institution rated "A-" or above. The legal documentation (agreement between the parties) should be standard, however this will have to safeguard the preferential claim for the counterparty. If the currency of the issue is not in EUR, the use of exchange rate derivative contracts is mandatory in order to hedge the inherent risk of the issue.

The cover pool is dynamic while the originator is solvent and issuers are required to maintain a record of all the assets in the cover pool, including derivatives contracts.

**IV. VALUATION AND LTV CRITERIA**

The value of the mortgaged asset is the commercial value of the real estate, considering:

- Sustainable characteristics over the long term;
- Pricing under normal market conditions;
- The peculiarities of the local market;
- The current and alternative uses given to the mortgage asset.

The value of the mortgage asset ascertained by the issuer cannot be superior to its market value, which is the price that the object could be sold at the time the appraisal is made. This assumes that the real estate is placed on sale and that market conditions allow for a regular transmission of the mortgaged asset within an adequate timing.

The property appraisal should be carried out by an independent appraisal specialist, previous to the respective mortgage credits being assigned to the Covered Bond pool.

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1 Notice n.º 6/2006  
2 Notice n.º 5/2006
Appraisals already carried out by a property appraisal expert are also accepted as long as the following conditions have been met:

- Appraisals have been carried out by an expert independently of the credit analysis and decision process of the bank;
- Appraisals have been documented in a written report that includes, in a clear and rigorous form, the elements that allow for an understanding of the analysis conducted and the conclusions arrived at by the expert;
- The property was appraised from a market value perspective or a property value perspective as defined in the law;
- There is no evidence that the property appraisal, arrived at from the perspective above mentioned, was overvalued at the time the loan was assigned to the Covered Bond pool.

The value of the mortgaged property must be checked by the institution on a periodic basis, at least every three years for residential mortgages and at least once a year for commercial properties. More frequent checks must be carried out if market conditions are prone to significant changes.

In order to check the value of the mortgaged property or to identify those properties that require periodic appraisal by an expert, the institution may use indices or accepted statistical methods that it considers appropriate. When indices or statistical methods are employed, the credit institution must submit to the Bank of Portugal a report detailing the foundations for the use of those indices or statistical methods along with an opinion on their adequacy by an external independent appraisal specialist.

Property appraisal must be revised by an expert whenever there is relevant information that indicates that a substantial reduction of the asset value has occurred or that the asset value relative to the general trend of the market has declined significantly.

For loans that exceed 5% of the institutions’ own funds or exceed €500,000 for residential mortgages and €1 million for commercial mortgages, the appraisal must be carried out at least every three years.

Revision of the value of an asset must be documented by the credit institution, in a clear and rigorous way, namely a description of the criteria and frequency of such a revision.

The property appraisal should be carried out by an independent appraisal specialist, with qualifications, competency and professional experience to perform this function.

The appraisal specialist is deemed not to be independent if he is in a situation susceptible of affecting his unbiased opinion, namely if he has any specific interest in the real estate being appraised or any relationship - commercial or personal - with the debtor, or if his compensation is dependent on the appraisal value of the property. The appraisal specialist may belong to the institution; however, he must have independence from the credit analysis and decision process.

The selection of the appraisal specialist by the institution must assure both diversification and rotation, and the credit institution has to maintain an updated list of the selected appraisal specialists, identifying the criteria justifying their selection and the real estate appraised by each specialist.

This list should be sent to the Bank of Portugal until the end of January of each year, reporting up to the 31st of December of the previous year, and indicate any changes from the last report. If there are
any doubts on the performance of the appraisal specialist, the Bank of Portugal can refuse to accept the valuations, demanding the appointment of another appraisal specialist by the credit institution.

When choosing the appropriate method, the appraisal specialists should consider the specific characteristics of the real estate and its local market. The appraisal of the real estate performed by the specialist should take the form of a written report and include all the elements that allow for an understanding of the analysis carried out and conclusions arrived at.

The maximum loan to value accepted for assets to be eligible into the pool is 80% for residential mortgages and 60% for commercial mortgages loans.

V. ASSET - LIABILITY MANAGEMENT

There are various asset and liability matching requirements established in the decree-law:

> The global nominal value of the outstanding mortgage bonds cannot exceed 95% of the global value of mortgage credits and other assets at any point in time assigned to the bonds (i.e., mandatory overcollateralisation of 5.2632%);
> The average maturity of outstanding mortgage bonds can never exceed the average life of the mortgage credits and substitution assets assigned to the issues;
> The total amount of interest to be paid by the mortgage bonds shall not exceed, at any point in time, the amount of interest to be collected from mortgage credits and other assets assigned to the bonds – cash flows from the cover pool must all be sufficient to meet all scheduled payments due to Covered Bond holders.

The law also promotes a sound cover pool management by allowing the issuer to apply the funds (for example, funds received from early repayment) to other assets and assign new mortgages to the pool. This option allows issuers to avoid potential cash-flow mismatches. It is also possible for issuers to establish a credit facility to provide for liquidity. This credit facility counterparty is required to have a minimum credit rating of “A-”.

Issuers may use derivatives contracts to hedge the interest and exchange rate and liquidity risks. The derivatives are included in the cover pool and derivative counterparties – who also benefit from preferential claim - have to be rated “A-” or above.

If the limits defined in the Decree Law are exceeded, the issuer shall immediately resolve this situation by assigning new mortgage credits, purchasing outstanding bonds in the secondary market and/or assigning other eligible assets. These will, in turn, be exclusively assigned to the debt service of the bond.

Regarding these matters, the secondary legislation\(^3\) determines the application of the following criteria:

> Loans must be accounted according to their outstanding principal, including matured interest;
> Deposits shall be accounted according to their amount including accrued interest;
> Interests eligible for Eurosystem credit transactions shall be accounted according to the value resulting from the rules regarding valuation margins defined by the Eurosystem or, if lower, according to its nominal value, including accrued interest;

\(^3\) Notice n.º 6/2006
Covered Bonds and public sector Covered Bonds shall be accounted according to the corresponding outstanding principal, including accrued interest. Interest rate or FX derivatives must be accounted in accordance with their market value and in the event that the corresponding loans and other substitute assets are denominated in different currencies, the issuer must ensure hedging of the relevant currency risk, and the reference exchange rates published by the European Central Bank shall be used for this purpose.

Single name risk is also addressed. The aggregate in risk positions with credit institutions - excluding those with a residual maturity date of 100 days or less - cannot exceed 15% of the aggregate nominal value of the Covered Bonds or public sector Covered Bonds outstanding.

The actual amount of the liabilities arising from the issuance of mortgages Covered Bonds or public sector Covered Bonds cannot be higher than the actual amount of the portfolio allocated to such bonds, taking into account any derivative instruments put in place. The ratio established shall be able to comply even when 200 basis points parallel movements of the curve are considered.

Each issuer must deliver in writing the specific and individual policies in written form for risk management, namely exchange risk, liquidity risk, interest rate risk, counterparty risk and operational risk and any other procedures aimed at ensuring compliance with the applicable regulatory regime and with any devised risk limitation policies set by the Issuer.

The Bank of Portugal may also make use of its regulatory role to require additional steps by the issuers to meet with all the asset-liability criteria that it sets out.

VI. COVER POOL MONITOR AND BANKING SUPERVISION

The Board of the issuer will appoint an independent auditor who must be registered with the Portuguese Securities Commission, with the task of defending the interests of the bondholders and verifying the compliance to applicable legal and regulatory guidelines. An annual report must be published. The Bank of Portugal will review its content and may make use of its regulatory role to request additional information.

In the law, there are no specific rules on the cover pool monitor’s responsibility. General rules on civil and contractual responsibility apply. The cover pool monitor will only be liable in case it does not comply with rules applicable to its activity or with its contractual obligations. If the cover pool monitor has complied with all its obligations it will not be liable in case the issuer has not respected the applicable regulation.

Also, a bondholders’ joint representative – common to all mortgages or public bond issues - is to be appointed by the Board of Directors of the issuer in order to represent the interest of the bondholders and supervise the cover pool.

The Bank of Portugal and the Portuguese Securities Commission (CMVM) are responsible for banking and capital markets supervision. The law grants powers to the Bank of Portugal to regulate and supervise the issuers of Covered Bonds, so they must comply with the requirements of the law and all applicable regulations. Non-compliance by the issuer could imply the application of fines and other sanctions and, ultimately (in a worst case scenario) could determine the revocation of the issuer’s licence.

Additionally, the Bank of Portugal has been granted powers to control compliance of the applicable rules for as long as the bonds remain outstanding, namely it may:

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4 Regulatory Instrument n.º 13/2006
> Refuse asset valuations made by a valuation’s expert if it has doubts concerning its performance, and demand to the issuer its replacement;
> Require new asset valuations by different experts; and
> Ask for clarifications or additional documents concerning all reports required and received.

**VII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS**

**Preferred status for Portuguese Covered Bonds holders and bankruptcy remoteness**

Holders of Covered Bonds benefit from special preferential claim over the assets assigned to the issue, with precedence over any other creditors - the Covered Bond law supersedes the general bankruptcy regulation – for the redemption of principal and payment of interest.

The mortgages that guarantee these credits prevail over any real estate preferential claims. The derivatives contracts are part of the pool and derivatives counterparties rank pari passu with bondholders in terms of preferential claim over the assets in the pool, and consequently, their contracts are not expected to be called in case of insolvency of the originator.

Despite the absence of a direct link between the cover assets and the outstanding Covered Bond issuance, there is a legal provision that links the cover pool to the payment of capital and interest on the Covered Bonds thus rendering Covered Bonds direct, unconditional obligations of the issuer. The issuer of Covered Bonds holds the claims on the cover assets and these, in turn, will guarantee the Covered Bonds until all payments due to bondholders have been met.

If the issuer becomes insolvent, cover assets form a separate legal estate - a pool that is to be administered in favour of the Covered Bondholders, and consequently there is no automatic acceleration of the mortgage bonds.

However, bondholders may convene a bondholders’ assembly and may decide by a majority of 2/3 with regard to the outstanding bond volume to call the mortgage bonds, in which case, the administrator shall provide for the liquidation of the estate assigned to the issues and thereafter the payment of creditors in accordance with the provisions defined in the decree-law.

If the cover assets are not sufficient for the Covered Bonds, bondholders and derivative counterparties will rank pari passu with any common creditors of the issuer in relation to all other assets of the issuer (not included in the cover pool), after all guaranteed and privileged creditors have been duly paid up, for the payment of the remaining debt due to them.

**Asset segregation**

The assets - mortgages loans or public sector loans and substitute assets – and derivative contracts assigned to the issues are held by the issuer in separated accounts – cover register - and can be identified under a codified form. This information is deposited in the Bank of Portugal in the form of a code key. The Bank of Portugal regulates the terms and conditions by which the bondholders will have access to such key in case of default.

The legal effect of registration is to segregate those assets from the insolvent estate over which bondholders will have a special claim in case of insolvency/bankruptcy. In this situation the assets pledged to one or more issues of mortgage bonds will be separated from the insolvent estate for the purpose of its

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5 Notice n.º8/2006
autonomous management until full payments due to the bondholders have been met. Despite this, the law stipulates that timely payments of interest and reimbursements should continue. In that way, cover assets form a separate legal estate, a pool administered in favour of the Covered Bondholders.

In an insolvency situation of the issuer two situations may occur:

> The issuer voluntarily assumes that it is insolvent and will present a project to the Bank of Portugal pursuant to article 35.-A of the Credit Institutions General Regime, containing the identification of the credit institution that will be appointed to manage the cover pool, together with the terms under which those services will be rendered;

> The revocation of the authorisation of the issuer with outstanding Covered Bonds or public sector Covered Bonds takes place, and the Bank of Portugal shall appoint a credit institution1 to undertake the management of the cover pool.

The cover pool will be managed autonomously by this credit institution, which should prepare, immediately upon initiating its management, an opening balance sheet in relation to each autonomous portfolio and relevant bonds, supplemented by the necessary explanatory notes and should perform all acts and deals necessary for a sound management of the loan portfolio and its guarantees with the aim of ensuring a timely payment on the Covered Bonds, including selling credits, assuring their servicing all administrative procedures pertaining to these credits, the relationship with the debtors, and all modifying and extinguishing acts relating to their guarantees and must carry out and keep updated a registry, in off-balance sheet accounts, the details of the cover pool, in the terms set forth in the Decree-law no. 59/2006.

**VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION**

According to secondary legislation, stated in the notice of Bank of Portugal2, and in compliance with Basel I, Article 22(4) of UCITS, a 10% risk-weighting can be applied for Covered Bonds issued within the scope of the Portuguese jurisdiction, as well as to Covered Bonds that already benefit from a 10% risk-weighting in their home country. The risk-weighting of derivatives that are included in the cover pool will be 20%. Investment funds can invest a maximum of 25% of their own funds in a single issuer’s Covered Bonds. Portuguese Covered Bonds also meet the requirements of the Annex 6 of CRD of June 2006.

**DEVELOPMENTS IN THE PORTUGUESE COVERED BOND MARKET**

During 2008, the market was characterised by the liquidity squeeze, increased volatility and the widening of swap spreads of covered bonds. Primary and secondary market were placed under pressure especially after September 2008, when financial turmoil increased investors’ risk aversion, even to a secured investment as covered bonds, albeit to a lesser extension than senior financial debt. Portuguese Covered Bonds spreads followed this widening trend.

Nevertheless, Obrigações Hipotecárias have been more resilient than other established jurisdictions and four Portuguese banks went to the market, issuing 5 new jumbo covered bond totalling Eur 5.65 billions with a weighted average maturity of 2.4 years. At the end of 2008, the Jumbo market achieved an outstanding of €12.15 billion.

Even though these new issues were shorter maturities than the year before, this indicates that Portuguese covered bonds remained a secure option for investors who valued its intrinsic characteristics, legal

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1 Designated Credit Institution
2 Notice n.º7/2006
framework, as well as the performance of the stable evolution of the Portuguese real estate market, not perceived no to be as overvalued as other markets.

In 2008, Banco BPI has set up a Public Sector Covered Bond Programme of up to €2,000,000,000 and in February 2009 CGD also has set up its own Public Sector Covered Bond Programme of up to €5,000,000,000, with benchmark inaugural issuance expected during the course of this year.

In the first half of 2009, there were very few windows of opportunity for issuance and there weren’t many jumbo covered bonds issues compared to preceding years while spreads widened again to unrecorded levels. However the announcement of an ECB purchase programme rattled the market and with levels tightening, we expect the major Portuguese banks to return to the covered bond market again on a regular basis.
Issuers: There are 5 active issuers in Portugal: Banco Comercial Portugues, Banco Espirito Santo, Banco Portugues de Investimento, Caixa Geral de Depositos and Santander Totta.
I. FRAMEWORK

In Romania, the legal basis for Covered Bond issuance is the Mortgage Bond Law and the Assets Securitization Law from March 2006. These laws supersede the general bankruptcy regulation.

II. STRUCTURE OF THE ISSUER

Pursuant to the mortgage bond law, the issuer holds the assets on his balance sheet. To qualify as a mortgage bond, the issuer has to be a credit institution (as defined by Romanian Banking Law which is in line with EU Directive). Therefore, all commercial or mortgage banks may be an issuer and no other special license is required.

Mortgage banks are credit institutions but their licensing is limited since these types of credit institutions are not allowed to receive deposits.

The issuer has to comply with all National Bank\(^3\) regulations. The National Bank has not yet issued the set of applicable regulations for mortgage banks.

The mortgage bond issuer holds the ownership title over the portfolio. A direct legal link between single cover assets and mortgage bonds does not exist. All obligations from bonds are obligations of the issuing bank as a whole. However, there is a legal link between each bond issue and its pool of cover assets. In the event of insolvency, the cover pool is segregated by law from the general insolvency estate and is reserved for the claims of holders of the specific bond issue.

Assets servicing may be outsourced, but for mortgage bonds it is expressly regulated only in case of issuer’s bankruptcy. While not forbidden, in cases other than bankruptcy the precise applicable regulations are not very clear.

In the case of the assets securitisation law, which sets the legal framework for off-balance sheet financing, the assets originator transfers the assets from his balance sheet to a special purpose vehicle (SPV) which becomes the issuer of the mortgage backed securities. The securities issued may be of the type equity or debt. Under this structure, the originator of the assets is not subject to any restriction in terms of object of activity and it is not required to have special authorisation or a supervisory body. The issuer (which is a special purpose vehicle) is not allowed to have its own employees and all of the important decisions have to be undertaken by either the originator of the assets or by a third party servicer, if such a mandate is provided.

In the case of mortgage backed securities, servicing is made by a portfolio management entity (different to the issuer) which is the SPV.

Under both structures (i.e. mortgage bonds and mortgage backed securities) the Covered Bonds are direct and unconditional obligations of the issuer, however the issuer is the originator in case of mortgage bonds and the SPV in case of mortgage backed securities. The claims of the holders of mortgage backed securities and mortgage bonds are secured by a first rank security interest over the cover assets, which are segregated in bankruptcy. Each bond issue is guaranteed by a distinct pool of assets. In the event of

\(^3\) Central Bank being the regulator and the supervisor of the financial market
bankruptcy, the bonds holders in a specific issue will have first priority over the pool of assets dedicated to the specific issue.

III. COVER ASSETS

The Assets Securitisation Law allows any type of asset to be securitised and for mortgage backed securities structured under this law no special eligibility criteria for the underlying assets is set in place. Furthermore, asset (mortgage) backed securities are allowed to be part of the cover pool.

In the case of mortgage bonds structured under the Mortgage Bond Law, two kinds of assets, mortgage loans (i.e. residential or commercial mortgage loans) and other eligible assets, can be included in a cover pool which is to be established by the National Bank Regulation. Such eligible assets will only be used for supplementing the cover pool if the issuer has no other mortgage loans that could be used for such a purpose. Eligible mortgage loans may be underwritten only by financial institutions that are under National Bank supervision.

Concerning the mortgage loans included in the cover pool, several eligibility or performance criteria are imposed by the Mortgage Bonds Law:

a. the pool is homogenous comprising of only one type of mortgage loan according to their investment destination;

b. the weighted average of the maturities of the mortgage loans included in the cover pool securing an issue is higher than the maturity of the mortgage bonds secured by such a cover pool; the weighted average of maturities shall be calculated by weighting the outstanding life time of the loans included in the cover pool with the nominal value of the loan as at the date of issue;

c. the updated value of mortgage loans securing an issue of mortgage bonds is to be at least equal with the updated value of the payment obligations of the issuer towards the bondholders;

d. the aggregated value of the mortgage loans secured with mortgages on properties with no constructions built on them and of those secured with mortgages on immovable assets in the process of being built is not to exceed 20% of the value of the portfolio;

e. each mortgage loan in the cover pool meets the general eligibility criteria provided by this law and the performing criteria established through the prospectus;

f. the nominal value of a mortgage loan is not to exceed, in case of a residential mortgage loan, 80% of the reference value of the immovable asset over which the security interest was created and, in case of a commercial mortgage loan, 70% of the reference value of the immovable asset over which the security interest was created;

g. the amount representing the principal granted through a mortgage loan agreement has been fully disbursed to the beneficiary;

h. the amount granted to a single beneficiary or to a single beneficiary and all affiliated persons of the beneficiary does not exceed 10% of the value of the cover pool;

i. the receivables deriving from the mortgage loans are not subject to a security interest in favor of any other person;

j. the mortgage loan must not register delayed payments exceeding 61 days;
k. the real estate over which a security has been created for the reimbursement of the mortgage loan is insured against all risks for an amount equal with the reference value of the immovable established on the date of the mortgage agreement;

In terms of geographical coverage, the sole restriction imposed under the Mortgage Bonds Law, provides that, in order to be included in the cover pool, the mortgage loans were granted for real estate investments on the territory of Romania or on the territory of member states of the European Union or the European Economic Area.

In terms of derivatives allowed to be included in the cover pool, no special provisions are contained in this respect in the Mortgage Bonds Law. However, the National Bank is entitled to regulate the categories of eligible assets that can be used for supplementing the cover pool in case the issuer has no other mortgage loans. The only restriction imposed by the Mortgage Bonds Law stipulates that the general maximum ratio allowed for supplementing the portfolio and the substitution of the mortgage loans in a cover pool with eligible assets may not exceed 20% of the portfolio value.

The Assets Securitisation Law allows for a dynamic pool, while the mortgage bond law generally stipulates that the cover pool is static. The replacement of the mortgage loans included in the cover pool is prescribed as an obligation only in when certain mortgage loans: no longer comply with the eligibility criteria; have become non-performing in the meaning of this law; or determine the reduction of the weighted average of the maturities of the mortgage loans included in the cover pool, of the value of the mortgage loans included in the pool or of the interest amount, according to the limits provided by law.

Both legal frameworks include disclosure requirements. Detailed information concerning the assets included in the cover have to be provided by the offering circular, such as: the value of the mortgage loans included in the cover pool; the reference value of the collateral created for the reimbursement of the mortgage loans as established at the conclusion of the collateral agreement against the nominal value of the issue; the interest coverage provided by the cover pool; geographical dispersion of the mortgage loans, maturity, interest, interest computational method and payment schedule as well as prepayment conditions under the respective mortgage loans.

The internal cover register shall contain detailed information on the cover pool and a separate section for registering the substitute assets included in the cover pool. The internal cover register shall be kept and filled in by the issuer with respect to any amendments or changes to the data since the initial registration.

**IV. VALUATION AND LTV CRITERIA**

Property valuation is regulated and is required to be undertaken by an authorized person. The reference for a property value is considered to be the market value as opposed to the mortgage lending value. Details about the valuation process and the qualifications of valuers are regulated by the Romanian Association of Evaluators. The legal framework does not incorporate any special monitoring requirement. We would also like to emphasize the idea that in countries (like Romania) where we do not have a long history of real estate transactions, or the market has been heavily distorted by certain events (e.g. political or other types) the mortgage lending value may not be measured/estimated. Therefore, the level of discount from the market value is, and has to be, a credit risk decision and not a valuers one.

The Mortgage Bond Law stipulates limits for LTV on both commercial and residential loans at 70% and 80%, respectively. This LTV is not a relative limit; partial mortgage loans may not be included in the
pool. The Assets Securitisation Law does not impose any limit to the LTV, but includes full disclosure on the principles

**V. ASSET - LIABILITY MANAGEMENT**

The Mortgage Bond Law stipulates that the net present value of the outstanding bonds must be covered at all times by the net present value of the assets and that the weighted average term to maturity of the assets should be higher than the bonds’ maturity. The issuer is not required to provide any overcollateralisation.

If any of these limits is breached the bondholders may request that the bonds are immediately repaid, unless the breach is remedied within 30 days.

**VI. COVER POOL MONITOR AND BANKING SUPERVISION**

Under the Mortgage Bond Law, the activity of a mortgage bond issuer is monitored by the National Securities Commission (CNVM) and the National Bank. As far as mortgage backed securities are concerned, under the Securitisation Law special supervision is carried out by the Securities Commission. Supervision by the National Bank is limited to credit institutions acting as the portfolio management companies of the mortgage backed securities issues. The respective roles of the Securities Commissions and the National Bank are clearly segregated; the Securities Commission authorises and supervises the public offering, while the National Bank of Romania authorises and supervises the issuer and portfolio manager.

For mortgage bonds, the law provides for the mandatory appointment of an agent. For mortgage backed securities, the appointment of an agent is optional. The agents have to be authorised jointly by the Securities Commission and by the National Bank. Initially, the agent shall be appointed by the issuer (mandatory pre-requisite for the issuance of mortgage bonds). Upon subscription of the mortgage bonds by the investors, the revocation/appointment of the agent shall be made exclusively by the general meeting of bondholders.

The agent’s main role is to monitor the cover pool on behalf of the bondholders. Its monitoring obligations shall be performed on a monthly basis, based on the synthetic documentation provided by the issuer. The agent has to observe issuer’s compliance with the law and prospectus requirements. Based on the documentation provided by the issuer, the agent shall issue a certificate attesting the issuer’s compliance with the provisions of the law and with the offering curricular regarding the cover pool structure. The agent shall be jointly and severally liable towards the bondholders, with the issuer, with the financial investment services company handling the sale and with the issuer’s financial auditor for the damages caused by non-fulfillment of several duties provided for under the law (including the obligation to monitor the issuer’s compliance with the requirements related to the cover pool).

**VII. HOW ARE SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS REGULATED?**

A cover register allows for the identification of the cover assets for each issue. The issuer has the obligation to keep a cover register for each mortgage bond or mortgage backed security issue.

Registration in the cover register reflects the structure and dynamic of the portfolio at any time throughout the life of the issue. The cover register contains information with respect to each mortgage loan included in the cover pool (i.e. type: commercial or residential, beneficiary of the loan, immovable asset over which the security for reimbursement of the mortgage loan has been created, land book number, value
of the mortgage loan and reference value of the immovable asset, any other collateral and its nominal value) and substitute assets.

Registration in the cover register triggers an obligation for the issuer to have a security interest, which is registered with the Electronic Archive and covers each and all assets registered in the register. These assets are specifically registered in the accounting books of the issuer and segregated from the estate of the issuer in the event of bankruptcy. The cover register also provides the legal means for the bondholders (through the agent) and for the supervising authority (National Bank of Romania) to check compliance by the issuer of all requirements under the law with respect to the structure of the portfolio, net asset value coverage etc.

The cover register is kept by the issuer and subject to checks by the agent and supervision by the National Bank of Romania.

Under the Securitisation Law, the cover register is kept by the portfolio management company which is obliged obligation to send a copy of the cover register to the SPV manager on a monthly basis. The SPV manager also sends information received from the portfolio management company to the National Securities Commission. The holders of asset-backed securities or the agent, as the case may be, may request a copy of the cover register from the portfolio management company on a monthly basis.

**Asset segregation**

The segregation of the cover assets from the insolvent’s estate is a consequence of the operation of the law - the asset pool is not included in the bankrupt estate. After the launching of the insolvency proceedings, a special cover portfolio management company carries out the administration of the cover assets. The appointment of the cover pool manager is made by the general meeting of shareholders.

**Impact of insolvency proceedings on Covered Bonds and derivatives**

Covered Bonds do not automatically accelerate when the issuing institution becomes insolvent, but will be repaid at the time of their contractual maturity. The Covered Bond issues continue to be administrated until full realisation of the receivables in the respective portfolio. In the event that the bankrupt issuer pays in full all the amounts due to the bondholders, the bondholders have the option to decide in the general meeting of bondholders to accept payment in advance with a vote of 25% of the total number of bonds in the respective issue.

** Preferential treatment of Covered Bond holders**

Covered Bond holders enjoy preferential treatment as the law stipulates the separation of the cover assets on the one hand and the insolvent issuer’s estate on the other.

In the event that the cover assets of a specific issue are not sufficient to cover the payments of that issue, the Mortgage Bond Law provides for a cross-subsidy principle amongst different issues of cover bonds of the respective issuer if there is a surplus after payment of all the obligations towards the bondholders in a specific issue. If the cover assets are not sufficient, the bondholders have an unsecured claim towards the bankrupt estate for the difference.

A moratorium on the insolvent issuer’s estate cannot delay the cash flows from the cover assets and, therefore, endanger the timely payment of Covered Bond holders.
Access to liquidity in case of insolvency
With the appointment of the cover pool management company, the right to manage and dispose of the recorded assets is transferred to him by law. Thus, the cover pool manager first has access to the cover assets and collects the cash flows according to their contractual maturity.

There are no specific regulations expressly addressing the issue of voluntary overcollateralisation in insolvency. It may be argued that voluntary overcollateralisation is part of the cover pool with all legal consequences regarding segregation in the event of bankruptcy applicable to the respective pool. Full disclosure in the prospectus with respect to the voluntary overcollateralisation is advisable as a potential means to mitigate the risk of voluntary overcollateralisation being claimed by the insolvent issuer's creditors.

Sale and transfer of mortgage assets to other issuers
The portfolio of assets may be sold to other issuers in a transaction concluded after the launching of the bankruptcy proceedings if the liquidator's report provides the sources from which the insolvent issuer may pay in full the amounts due to the bondholders, and if the bondholders in each issue (if more than one) have decided in the general meeting of bondholders to accept payment in advance under the terms provided in the liquidator’s report.

VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION
For substitution or overcollateralisation purposes, (but only up to 20%) other types of assets (but only up to 20%) with at least the same risk level as the eligible loans of the pool may be included in the cover pool. The types of such assets and their risk-weighting are to be defined by the National Bank of Romania at a later stage.

The cover bonds issued under the Mortgage Bond Law fulfil the UCITS 22(4) criteria. The law requires such bonds to be issued by a credit institution, which is subject by law to special public supervision designed to protect bondholders (i.e. supervision by the National Bank of Romania and respectively, by the National Securities Commission) and provides coverage by law of the claims attaching to the bonds, in the event of failure of the issuer, on a first priority basis for the reimbursement of the principal and payment of the accrued interest.

Covered Bonds issued under the Mortgage Bond Law also comply with the CRD Directive Annex VI, Part 1, Paragraph 68 a) to f), with the exception of Paragraph 68(e), according to which, in the case of commercial real estate cover pools, the LTV ratio may exceed 60% only provided the following two conditions are met: the value of the total assets pledged as collateral for the Covered Bonds should exceed the nominal amount outstanding on the Covered Bonds by at least 10%, and the bondholders’ claims should meet a number of certainty criteria. While the certainty criteria are met, the Romanian Mortgage Bonds Law does not stipulate overcollateralisation (the updated value of mortgage loans securing an issue of mortgage bonds has to be at least equal to the updated value of the payment obligations of the issuer towards the holders of mortgage bonds of the issue secured with the respective pool). It nevertheless requires an LTV ratio of 70% for commercial mortgages.
3.20 RUSSIA

By Tim Lassen, Eurohypo AG

I. FRAMEWORK

In Russia, the legal basis for covered bonds has not changed since the last year’s Fact Book. The aim of this country report for 2009 is to provide a description of a draft law to change the Federal law “On mortgage securities” (“Ob ipotechnyk cennykh bumagakh”) No 152-FZ¹, dated 11 November 2003.²

As of today this law foresees as mortgage securities:³
  - Two types of “mortgage obligations” (obligation issues (i) by a credit organisation or (ii) by a SPV (“mortgage agent”), art. 7 sec 14).
  - Mortgage participation certificates (art. 17 – 31). These certificates a similar to investment fund certificates, giving a direct share in the mortgage secured loans.

The draft amendment to the Covered bond law will introduce a new (forth) type of mortgage security, now clearly modelled after the German Pfandbrief, the “mortgage bond” (in Russian zakladnoy list⁵).

Planned main changes are:
  - Only credit institutions, fulfilling strong requirements, may obtain a licence to issue mortgage bonds.
  - Introduction of one dynamic cover pool as basis for all mortgage bonds in circulation.
  - Clear bankruptcy rules for segregation of the pool.

II. STRUCTURE OF THE ISSUER

Due to the draft law, issuer of mortgage bonds will be only credit institutions, which have obtained a special licence from the Central Bank⁶.

1. Credit institution

A credit organisation has to comply with the law “On Banking and banking activities”⁷ and the rules, set up by the Central bank for covered bond issuing credit organisations.

Special conditions for a licence to issue mortgage bonds are:
  - an equity capital of the credit organisation of not less than 500 mln RUB;
  - the banking licence of the credit organisation shall cover the issue of mortgage loans; and
  - the credit organisation has to define and to use risk management standards for the issue of mortgage bonds and operations with the mortgage cover.

The Central Bank can revoke this special licence,
  - if the credit organisation fails to comply with the above mentioned conditions; and

¹ SZ, 2003, no 46, sec 4448; following: Covered bond law.
³ See ECB European Covered Bond Fact Book 2008, p. 219 - 221, sec II.
⁴ Law citations without link are citations of the Covered bond law. Regulations from the draft amendment will be without law citations, as this might still change during the law adopting process.
⁵ This name was used for Russian covered bonds before 1917. Also at that time this bonds have been modelled after the Pfandbrief type.
⁶ The Central Bank also has to set up an order for obtaining special licences.
⁷ Federal law dated 2 December 1990 No 395-1 (Bulletin of the Congress People’s Deputies of the RSFSR and the Supreme Soviet of the RSFSR, 1990, no 27, sec 357). Due to art 1 of this law credit organisations are banks and non-bank credit organisations. Main difference is the right of banks to take deposits and keep accounts.
- if the credit organisation hasn’t issued mortgage bonds since two years and it is not expected, that it will start issuing on a regular and systematic basis during the next six months.

Furthermore the issuers have to be in line with two rules, to be set up by the Central Bank: The maximum ratio of the mortgage cover against

(1) amount of mortgage bonds in circulation and

This ratio will fix the reserve cover\(^8\).

(2) amount of mortgage loans in the cover pool.

This ratio will fix the share of other liquid cover assets (state bonds, money) in the cover pool.

In addition the Central Bank can implement special accounting rules and meanings for the normatives of sufficient equity (capital), general liquidity and the proportion of interest and f/x risk.

If the issuer does not comply with the rules for issuing mortgage bonds, the Central Bank may impose supervisory measurements from money fines to withdrawal of the license.\(^9\) In the case of withdrawal, the rules on bankruptcy of the issuer will apply.

The issuer has to have a reliable risk monitoring system for risks in connection with issuing mortgage bonds and operations with the cover pool. Therefore the credit organisation has to adopt rules on risk management, including inability of the borrower to pay, interest rate, f/x, market, operational and liquidity risks. Limits to avoid concentration risks have to be introduced.

### 2. Issuance of mortgage bonds

The issuance of mortgage bonds has to be in line with the covered bond law, the Federal law "On securities market"\(^10\) and the respective normatives of the Central Bank.

Mortgage bonds will be issued, based on an issuing program. The program contains rules for two or more issues. It shall define the maximum total nominal value of the expected mortgage bonds and planned time frame of issues. The program needs to be registered by the Central Bank, the prospectus does not need to be registered. In the decision of the issuance a premature repayment of the mortgage bonds can be foreseen. The mortgage bond holders cannot claim for this.

Mortgage bonds have to bear interest.\(^11\)

**Protection of terms:**

The term “mortgage bond” (in Russian “zakladnoy list”) may due to art 6 only be used for the purposes of the covered bond law.

### III. COVER ASSETS

Eligible assets will be – as for the other types of mortgage securities under the Covered bond law\(^12\) - mortgage secured claims under a loan or credit agreement, including interest (art 3 sec 1). These

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8 In Russian: Rezervnoe pokrytie.
11 Art 10 of the Covered band law will also apply to mortgage bonds.
12 See ECBC European Covered Bond Fact Book 2008, p. 221, sec III.
secured claims may be certified by mortgage certificates or mortgage participation certificates under
the Covered bond law.

Money and state bonds can also be used as cover, in the limits of the according normative.

**Publishing of information**

Issuers of mortgage bonds have to publish information in accordance with the covered bond law, the
law “On Banking and banking activities” and the normatives of the Central Bank.

Due to the covered bond law, the issuer has to provide quarterly disclosures and in the annex to the
annual report

- total amount of outstanding obligations under mortgage bonds as well as nominal and net present
  value of the cover; and
- total amount of outstanding obligations and interest rates in the cover pool in a breakdown by
time: Less than 1 year, 1 – 5 years, 5 – 10 years and more than 10 years.

Additionally the following information on the cover pool has to be published:

- Nominal distribution
  - By loans in groups of less than 5 mln RUB, 5 – 50 mln RUB and more than 50 mln RUB,
  - by regions,
  - by type of real estate (commercial, housing, flats, unfinished construction etc.).
- Total amount of claims, with payment overdue for more than 90 days.

Only in the annex to the annual report the following information has to be shown:

- Number of foreclosures on mortgaged properties,
- number of acquisitions of mortgaged properties by the issuer,
- total amount of overdue interest payments of the borrowers,
- total amount of received payments on mortgage secured loans, divided by payments on principal
  and on interest.
- These data has to be given separately for commercial and for housing properties.

The issuer bears responsibility for observing the duties on publishing information (art 38 sec 2). The
FFMS may apply to a court, if the rights of the covered bond holders are violated due to insufficient or
incorrect publishing of information (art 38 para 7).

**IV. VALUATION AND LTV CRITERIA**

Due to art 3 sec 2 para 2 the LTV limit is 70% of the market value of the property. The valuation has to
be made by an independent valuer.

The law does not contain special regulations on the valuation.

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13 In Russian: Zakladnaya.
14 For cover assets: See ECBC European Covered Bond Fact Book 2008, p. 221.
no 31, sec 3813.
**V. ASSET-LIABILITY MANAGEMENT**

Despite the existing regulations for mortgage obligations, the draft changes foresee for mortgage bonds one dynamic cover pool\(^{16}\) for all outstanding mortgage bonds. Mortgage bonds cannot be issued without a sufficient cover, registered in the cover register.

The volume of the mortgage bond cover as well as the return of the cover assets over the whole term of the mortgage bonds shall not be less than the overall outstanding nominal value and return of the mortgage bonds. In addition a reserve cover has to be set up, in an amount stipulated by a Central Bank’s normative. Money received from the repayment of the mortgage loans in the cover pool, are not included into the pool. Repaid cover assets shall be replaced by other new cover assets.

Cover assets cannot be assigned or pledged, if the remaining cover would not be sufficient for the outstanding mortgage bonds.

**VI. COVER POOL MONITOR AND BANKING SUPERVISION**

**Cover Pool Monitor**

Cover assets have to be registered in a "register of mortgage cover\(^{17}\) (art 5).

The register of mortgage cover is maintained by a cover monitor (the "specialised depositor of the mortgage cover\(^{18}\))", art 33 sec 1.\(^{19}\)

Calculation and safekeeping\(^{20}\) of the cover assets will be made by the issuer.\(^{21}\)

**Supervision**

State regulation of issuing covered bonds is done by the FFMS in co-ordination with the Central Bank of the Russian Federation (art 42).

Mortgage bond issuers are subject to the regular supervision of the Central Bank as well as to a special supervision according to the Covered bond law.

**VII. HOW ARE SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF MORTGAGE BONDS REGULATED?**

The mortgage bonds will – different from the other types of Russian mortgage securities – not be secured by a pledge over the cover assets. As in other covered bond jurisdictions, the security in case of bankruptcy is a mechanism to segregate the cover pool from the general bankruptcy’s estate and to ensure timely payment by rules for administrating the cover pool and the mortgage bonds.

**Asset segregation**

In case of bankruptcy of the issuer the cover pool is excluded from the overall bankruptcy’s estate of the issuer. Claims of the mortgage bond holders will be satisfied by the cover pool. Seizure and foreclosure regarding cover assets are only possible for claims of the mortgage bond holders. The laws

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16 In Russian: Edinoye ipotečnoe pokrytie.
17 In Russian: Reestr ipotechnogo pokrytiya.
18 In Russian: Spetsializirovannyj depositariy ipotechnogo pokrytiya.
19 Requirements for the cover monitor: See ECBC Covered Bond Fact Book 2008, p. 223/224, sec VI.
20 In Russian: Učët i khranenie.
21 For other types of Russian mortgage securities this is done by the cover monitor. See ECBC Covered Bond Fact Book 2008, p. 224 and art 33 of the Covered bond law.
Impact of insolvency proceedings on Mortgage Bonds

The Credit organisations bankruptcy law stipulates for credit institutions a temporary administration to avoid insolvency. If a temporary administrator is appointed by the Central bank, at the same time a special receiver for the cover pool (cover pool receiver)\(^3\) has to be appointed. If the temporary administration ends due to remedy of their reasons, also the cover pool receiver will be discharged.

In case of bankruptcy of the issuer, a bankruptcy receiver will be appointed for the general bankruptcy’s estate of the credit organisation and a special receiver for the cover pool. From the day of the respective court decision the cover assets cannot be changed any more.

From the moment of his appointment the right to administer and dispose over the cover assets devolves on the cover pool receiver. All disposals made by the bodies of the credit organisation after appointment of the cover pool receiver are void.

The temporary administrator and the bankruptcy receiver can claim for exclusion of all cover assets from the cover pool and their transfer to the general bankruptcy’s estate, if these assets are obviously not necessary to satisfy the claims of the mortgage bond holders. After satisfaction of all mortgage bond holders’ claims, possible remaining cover assets will be included into the general bankruptcy’s estate.

The payments on mortgage bonds (principal and interest) are not subject to a moratorium, generally foreseen in case of insolvency of a credit organisation\(^4\).

Preferential treatment of Mortgage Bond holders

In case of bankruptcy of the issuer the cover pool (the assets registered in the cover register) and the obligations under the mortgage bonds will be excluded from the general bankruptcy’s estate. The claims of the mortgage bond holders will be satisfied out of the cash flow of the cover assets, according to the contractual maturity of the mortgage bonds.

Foreclosure in and seizure of cover assets are only possible for claims of the mortgage bond holders.

Access to liquidity in case of insolvency

The cover pool receiver has to set up a balance of the cover pool and to prepare an annual report. The cover pool receiver is entitled for all transactions with cover assets, if this is necessary to fulfil the obligations in front of the mortgage bond holders in time.

Sale and transfer of mortgage assets to other issuers

Three different types for administration of the cover pool are foreseen:

Administration by the cover pool receiver

The cover pool receiver is allowed to undertake all transactions necessary to ensure the timely payment of all obligations in front the mortgage bond holders and the orderly settlement of the cover pool.

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1 Federal law dated 25 February 1999, no 40-FZ; SZ, 1999, no 9, sec 1097; following: “Credit organizations bankruptcy law”.
3 In Russian: Upravlyayuščiy ipotečnym pokrytiem.
4 Art 26 Credit organisations bankruptcy law.
Transfer of cover pool and obligations under mortgage bonds

In case of bankruptcy of the issuer, the cover pool receiver can transfer the cover pool together with the obligations under the mortgage bonds to another mortgage bonds issuing credit organisation (the acquirer). In this case it is not necessary to obtain the approval of the credit organisation’s creditors for the change in the debtor. The cover pool receiver shall act in good faith, reasonable and obey the principle of equivalency of transferred rights and obligations.

By obtaining the cover pool together with the obligations under the mortgage bonds the acquirer takes all obligations for paying principal and interest on the mortgage bonds under the conditions of the issues by using the transferred cover assets.

The cover pool receiver has to choose the acquirer in a restricted selection process. In this process can take part only credit organisations, having a special licence to issue mortgage bonds. Condition to take part in the process is, that the financial situation of the potential acquirer allows to fulfilling all obligations under the mortgage bonds to be obtained as well as the binding normatives and reserve requirements of the Central Bank.

For the transfer the cover pool receiver and the acquirer have to conclude a contract, containing the conditions for the transfer. This contract can also stipulate consequences in case of improper quality of the transferred assets. This contract has to be in writing and to be state registered. The cover pool receiver has to notify the Federal Financial Markets Service (FFMS) about the contract.

Holding the cover pool in trust administration

The cover pool receiver may also sign an agreement with another credit organisation, having a special licence to issue mortgage bonds (the settler of administration), that the cover pool receiver will keep the cover pool in trust administration for the settler. Under this agreement the settler will leave the cover pool for trust administration to the cover pool receiver. The cover pool receiver will administer for the settler the cover pool as long as the obligations under the mortgage bonds are not changed to the settler.

In relations between the cover pool receiver and the bankrupt issuer or its bankruptcy receiver the assets administered in trust are treated as assets of the settler, even if they have not been transferred to him. The assets, registered in the cover register of the insolvent issuer, are also deemed to be registered in the cover register of the settler.

The agreement on trust administration has to be made in writing and is subject to state registration.

Asset segregation

In case of bankruptcy the cover pool is excluded from the bankruptcy estate of the issuer (Art. 131 sec 2 Bankruptcy law; art 50.35 sec 2 and 4 Credit organizations bankruptcy law).

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5 In Russian: Передача ипотечного покрытия и обязанностей по закладным списам.
   This mechanism is also prescribed in art 9 of the Federal law "On additional measures for strengthening the stability of the banking system for the period until 31 December 2011" dated 27 October 2008, no 175-FZ; SZ, 2008, no 44, sec 4981. This law aims for the stability of the Russian banking sector in the financial crises and allows the transfer of banking assets and liabilities to other banks.

6 In Russian: Закрытый отбор.

7 In Russian: Доверительное управление ипотечным покрытием закладных списов.

8 Under an agreement of “trust administration of assets” one side (the settler) leaves to the other side (the trust administrator) assets for administration. The administrator has to act in the interest of the settler (art 1012 – 1026 Civil code of the RF).


10 A special rule is of course also stipulated in the draft law.
A special administrator of the cover pool (cover pool receiver), different from the bankruptcy receiver of the general bankruptcy’s estate is now foreseen.

**Preferential treatment of Mortgage Bond holders**
Mortgage bond holders enjoy preferential treatment as the Russian law stipulates the separation of the cover pool from the general insolvency estate of the issuer (stipulated changes in the Covered bond law; art 131 sec 2 Bankruptcy law; art 50.35 sec 2 and 4 Credit organizations bankruptcy law).

**VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION**
No special treatment for mortgage bonds is foreseen.

Russian mortgage bonds under the draft law, comply with the requirements of art 22 sec 4 UCITS as well as those of the Directive of the business of credit institutions\(^{11}\), Annex VI, Part 1, Paragraph 68 a) to f).

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3.21 SLOVAK REPUBLIC

By Viktória Múčková, Mortgage trustee\(^1\), CSOB

I. FRAMEWORK

According to §§14-17 of the Act on Bonds, a mortgage bond, or *Hypotekárny Záložný List* (HZL) in Slovak, is a bond which both in terms of face value as well as in terms of interest payment is guaranteed by a claim against a bank (§ 16 Subsection 4) or a branch of a foreign bank as well as by mortgage loans secured by a pledge on real estate or through a substitute coverage (collateral) (§ 16 Subsection 5). In order to become a mortgage bond issuing institution, the respective bank has to apply for a license. The minimum amount of cash contribution to the bank’s equity capital necessary to establish a mortgage bond issuing institution is SKK 1,000,000,000 (EUR 33 mn) or an equivalent amount in fully convertible foreign currency, which is twice the amount necessary to establish a non-mortgage bond issuing bank. Furthermore, the license application has to contain details on the minimum requirements, as outlined in Section II.: 

Article 16

(4) The total par value of issued mortgage bonds must be covered at least in the same amount and at least with the same yield as the par value of the mortgage bank’s receivables from mortgage loans, and this shall represent due (ordinary) coverage.

(5) Due coverage of issued mortgage bonds may be replaced by substitute coverage at most up to the level of 10% of the total par value of issued mortgage bonds.

- the methods of keeping a mortgage register;
- the proposal for appointment of the mortgage controller (trustee) and his/her deputy;
- the real estate assessment methods (valuation); and
- the method of keeping a separate analytical record of mortgage activities within the bank’s accounting system.

As the criteria indicated in the criteria above, in order to be distinguishable from the insolvency estate of the bank, the mortgage loans serving as due (ordinary) coverage for mortgage covered bonds, just as all other items serving as substitute collateral, have to be recorded in separate mortgage (coverage) register by the issuing bank.

With respect to the general approach to covered bonds the model, applied by Slovakian lawmakers is similar to common practice in Germany and Spain.

However, what is significantly different is the introductory period. In order to allow for a smooth start of the covered bond business after a covered bond issuing license has been granted, the Slovakian covered bond law defines the conception of temporary mortgage bonds.

Within eighteen months following the effective date of mortgage business license, a bank may issue, upon a decision taken by its general meeting, temporary mortgage bonds in form of bearer securities with a total nominal value not exceeding 50% of the bank’s basic capital. The bank is obliged to exchange

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\(^1\) The term mortgage trustee can be used interchangeably with cover pool monitor or mortgage controller.
such temporary mortgage bonds for mortgage bonds covered in accordance with § 16 Subsections 4 and 5 (full collateralisation including maximum share of substitute collateral) of the covered bond law within two years of issue thereof. The provisions of the covered bond law shall not apply in time from issue of temporary mortgage bonds until their exchange for mortgage bonds covered in accordance with the above mentioned paragraphs.

Should a bank fail to exchange the temporary mortgage bonds for mortgage bonds covered within two years following issue of relevant temporary mortgage bonds, the bank is obliged to repay such temporary mortgage bonds in their nominal value including yields for the period from issue until repayment. In practise the conception of temporary mortgage bonds has not been realised up to now.

Another specialty of Slovakian Covered Bonds lies in the fact that a covered bond issued by a specific institution terminates automatically when bought back by the issuer. Hence, activities like market making in own issues or minor price nursing is very restricted. Certainly, this is not an issue for the time being as Slovakian Covered Bonds are not heavily traded products. However, this might become an issue in the future when the euro will be the dominating predominant currency and bonds might be placed more with international investors.

II. STRUCTURE OF THE ISSUER

The mortgage bonds issuers are universal credit institutions. In accordance with Act on Banks, No. 483/2001, amendments, and with relevant decree the minimum requirements to obtain and keep the special licence are as follows:

the minimum amount of cash contribution to the bank equity capital, is SKK 1,000,000,000 (EUR 33,193,919) or an equivalent amount in fully convertible foreign currency;

- the methods of keeping a mortgage register;
- the proposal for appointment of the mortgage supervisor (trustee) and his/her deputy;
- the real estate assessment methods (valuation); and
- the method of keeping a separate analytical record of mortgage activities within the bank’s accounting system.

Basic principles (rules, limits) of mortgage transactions are included in Part Twelve Mortgage Banking, Articles 67 – 88.

The issuer holds the cover assets on his balance sheet. A subsequent transfer of the cover assets to another legal entity does not take place. Given that a direct legal link between single cover assets and Hypotekárny záložný list (HZL) does not exist, all obligations relating to HZL are obligations of the issuing bank as a whole, to be paid from all the cover assets of the issuer.

III. COVER ASSETS

Slovak covered bonds benefit from coverage in the form of original collateral as well as substitute collateral. The latter must not exceed 10% of the total nominal value of mortgage bonds issued. The definition of ordinary collateral is based on the definition of mortgage loans stipulated in Art. 68 of the Slovak Banking Act Nr 483/2001. According to this article, a mortgage loan is defined as a loan with a maturity of at least four years and a maximum of thirty years, secured by the right of lien established upon a domestic real estate, (including on an uncompleted unfinished construction, which is at least to
the amount of 90% complete), **unless this Act requests otherwise**, financed by the issue and sale of mortgage bonds by a mortgage bank pursuant to the Slovak covered bond regulation. The National Bank of Slovakia may, by its decision issued on the basis of an application of mortgage bank for reasons worthy of special attention maximum for a maximum period of two years stipulate special conditions for financing of mortgage and municipal loans, at least **70%**, even repeatedly. A reason worthy of special attention is in particular an attempt to maintain the stability of the financial sector.

The loan in question is supposed to finance one of the following items:

- acquisition of domestic real estate or any part thereof;
- construction or modification of existing structures;
- maintenance of domestic real estate; or
- repayment of an outstanding loan drawn for purposes above;
- repayment of an outstanding loan drawn for purposes mentioned above.

In order to be eligible for collateral (coverage) purposes, the LTV of a mortgage loan is capped at 70%. A bank may grant loans also above this limit, however, the total amount of loans with LTV ratios larger than 70% are capped at 10% of the total amount of mortgage loans granted by the bank. These mortgage loans do not serve as mortgage bonds coverage, and therefore, the part above 70% reduces relevant cover pool. A mortgage loan may not be secured by a lien on the real estate, on which a lien has already been established and continues in favour of a third party. As already indicated, substitute collateral may be used up to a share of 10% of the total nominal value of issued covered bonds. The following property values belonging to the mortgage bank may be used for the substitute coverage:

- deposits in the National Bank of Slovakia;
- National Bank of Slovakia bills;
- deposits in banks with registered offices in the Slovak Republic;
- deposits in branches of foreign banks in the Slovak Republic;
- cash;
- treasury bonds;
- treasury bills; and
- covered bonds issued by another bank;

It is important to note that neither ABS nor derivatives qualify for the cover pool.

**IV. VALUATION AND LTV CRITERIA**

Property valuation is regulated in the Act on Banks, Article 73: (1) For the purposes of this Act, the value of real estate shall be determined by a mortgage bank on the basis of an overall assessment of the real estate concerned. In determining the value, the mortgage bank may only take into account permanent features of the real estate and benefits that can be derived by the owner from the real estate in the long run. For real estate burdened by a lien or transfer restrictions in accordance with Article 74, paragraph 2, a mortgage bank shall lower the value of the real estate by the amount of claims guaranteed by such lien or transfer restrictions. Article 73 (2) A mortgage bank shall only be bound by its own valuation of real estate.
Monitoring requirements result from the Decree of the National Bank of Slovakia of 13 March 2007 on banks’ own funds of financing and banks’ capital requirements and on securities dealers’ own funds of financing and securities dealers’ capital requirements, Article 110, letter a) – d):

a) legal certainty exists, meaning that the bank’s right arising under an agreement on establishing a lien or under an agreement on pledging a right or assigning a receivable is enforceable in all jurisdictions relevant in regard to the collateralising and payment function of the respective credit protection;

b) the property values are monitored, meaning that the value of the property is monitored on a sufficiently frequent basis and at a minimum once every three years for residential real estate. More frequent monitoring is carried out where the market is subject to significant changes in market conditions. Statistical methods may be used to monitor the value of the property and to identify property that needs revaluation. The property valuation shall be reviewed by an independent valuer when information indicates that the value of the property may have declined materially relative to general market prices. For loans exceeding EUR 3 million or 5% of the own funds of the bank, the property valuation shall be reviewed by an independent valuer at least every three years.

c) the types of residential real estate accepted by the bank under its lending policy are documented;

d) procedures are in place to monitor that the property taken as collateral (or the object of a pledged right) is adequately insured against damage.

For both commercial and residential property, the LTV limit is 70% of the mortgage lending value of the property. This LTV is a relative limit, i.e. when the loan exceeds the 70% limit, the part of the loan up to 70% LTV remains eligible for the cover pool. Over this limit a bank may grant mortgage loans exclusively if their total value does not exceed 10% of the total amount of mortgage loans granted by the bank.

V. ASSET-LIABILITY MANAGEMENT

Article 16 (4) of the Act on Bonds stipulates that the total volume of HZL outstanding must be covered at all times by assets of at least the same amount and with at least the same interest income. Thus, the nominal value of the cover assets must permanently be higher than the respective total value of the HZL and the interest yield must be at least the same.

Cash flow mismatch between cover assets and cover bonds is furthermore reduced by the prepayment rules applicable to fixed interest rate mortgage loans. Prepayments of mortgages during fixed rate periods are only permitted in cases of ‘legitimate interest’ of the borrower or after a period of the fixation term. (This is a part of loan agreement). If the mortgage is prepaid, the borrower has to compensate the damage of the lender caused by the prepayment.

VI. COVER POOL MONITOR AND BANKING SUPERVISION

A cover pool monitor (mortgage trustee, mortgage controller) supervises the cover pool. He/she is appointed by the National Bank of Slovakia (central bank) and must possess the expertise and experience necessary to fulfil all duties. A mortgage controller or his deputy may only be a natural person who has the necessary professional competence and integrity to carry out this activity. A natural person with completed university education, who has at least five years experience in economics or law in the banking sector, shall be deemed professionally competent. A person shall be deemed to have the necessary
integrity if he has not been lawfully sentenced for a criminal offence committed in the discharge of a management office or any intentional criminal offence.

**Article 80, Act on Banks**

(1) A mortgage controller shall supervise the issuance of mortgage bonds and municipal bonds with regard to their particulars and coverage pursuant to a separate regulation.

(2) Prior to each issue of mortgage bonds or municipal bonds, a mortgage controller shall be obligated to issue a written certificate testifying that they are covered in accordance with a separate regulation, and that an entry was made in the register of mortgages.

(3) A mortgage controller shall check whether a mortgage bank provides mortgage and municipal loans, including their securing through mortgage and whether a mortgage bank meets its obligations in respect of the mortgage register in accordance with this Act and other generally binding regulations.

(4) If requested by a mortgage bank, a mortgage controller shall be obligated to assist in activities related to the performance of mortgage operations, which could not be completed by the mortgage bank without his assistance.

How are segregation of cover assets and bankruptcy remoteness of covered bonds regulated?

A cover register permits the identification of the cover assets. The register records the cover assets being used to cover HZL. A list of mortgage and municipal loans and their amounts, liens and claims of a mortgage bank under mortgage and municipal loans that serve to cover mortgage and municipal bonds, or other assets serving as substitute coverage, must be kept separately by a mortgage bank in its register of mortgages (Article 76 paragraph 1, Banking Act). The register of mortgages and the documents on the basis of which the entries have been made in the register of mortgages must be kept by a mortgage bank separately from other documents and protected against misuse, destruction, damage or loss (Article 76 paragraph 2, Banking Act). By the end of January and July of each calendar year, a mortgage bank shall be obligated to notify the National Bank of Slovakia and the Ministry of all entries made in the register of mortgages in the last six months (Article 76 paragraph 3, Banking Act). The due form and method for keeping the register of mortgages pursuant to paragraph 2 and the due form of information disclosed pursuant to paragraph 3 shall be determined in detail by the National Bank of Slovakia and the Ministry of Finance by means of a generally applicable regulation (Decree No. 661/2004 Coll. on mortgages register and details over position and activities of a mortgage trustee (supervisor)).

**Asset segregation**

The cover pool is a part of the general estate of the bank as long as the issuer is solvent. If insolvency proceedings are launched, the assets recorded in the cover registers are governed by the Act No 7/2005 Coll. on bankruptcy (§8, §§ 28 (2), § 50, § 67), also § 72 (3) of Act on banks. See also preferential treatment of covered bond holders.

**Impact of insolvency proceedings on covered bonds**

Covered bonds do not automatically accelerate when the issuing institution is insolvent, but will be repaid at the time of their contractual maturity.
Preferential treatment of covered bond holders

Privilege right of mortgage (municipal) bonds owner is specified explicitly in the Slovak relevant acts:

"Mortgage (municipal) bonds owners shall have pre-emptive security right to assets used to secure issued mortgage (municipal) bonds, including the right of lien to real estate pursuant to Act on banks (Article 74); this security right in procedure according to Act on banks, No. 483/2001 Coll., or separate regulations - for instance, Article 8, Article 28 par. 2, Articles 69 and 176 to 196 of Act No. 7/2005 Coll. on bankruptcy as amended – shall secure secured receivables of mortgage (municipal) bonds owners against the mortgage bank for the payment of the nominal value and yields upon mortgage (municipal) bonds".

VII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

Slovak "Hypotekárny záložný list" fully comply with the requirements of Art. 22 par. 4 UCITS Directive.

**Article 45 (7) and (11) of Collective Investment Act**

(7) The value of bonds issued by a single bank, or by a foreign bank in a Member State which is subject to supervision that protects the interests of bondholders, may not constitute more than 25% of the value of an open-end fund’s assets. Funds raised by the issue of bonds shall be invested in such assets which, until the maturity of the bonds, cover the issuer’s liabilities related to the bond issue and which may, in the event that the issuer becomes insolvent, be used to redeem the nominal value of the bonds and to pay the income on them. The aggregate value of bonds acquired for an open-end fund’s assets under the first sentence may not exceed 80% of the value of the open-end fund’s assets.

(11) Bonds which are issued in the Slovak Republic and meet the criteria laid down in paragraph (7) shall be deemed to include **mortgage bonds** and **municipal bonds** (municipal debt) issued by a bank which, with the funds raised from their sale, provides a municipal loan to a municipality or higher territorial fund share, and provided that these municipal bonds are guaranteed in accordance with the conditions stipulated by a separate law (Act on Bonds).

In regard to the bonds mentioned in paragraph (7) that are issued in a Member State, the management company shall take into account the similar list of bonds compiled in accordance with the law of this Member State, provided that such a list exists.

- Finally, Slovak institutional investors investment legislation allowsmutual funds to invest up to 25% of their assets in HZL;
- insurance companies up to 20 % of their technical reserves in HZL; and,
- pension funds up to 15 % of their assets in HZL.
\textbf{SLOVAK REPUBLIC}

\textbf{Figure 1: Covered Bonds Outstanding 2003-2008, €M}

Source: EMF/ECBC

\textbf{Figure 2: Covered Bonds Issuance, 2003-2008, €M}

Source: EMF/ECBC

Issuers: were nine issuers in Slovakia as of the end of 2008: CSOB, Dexia Banka, Istrobanka, Volksbank, OTP Banka Slovensko, Slovenská sporiteľna, Tatra Banka, UniCredit Bank (Slovakia) and Všeobecná úverová Banka.
I. FRAMEWORK
Legal basis for Cover bond issuance in Slovenia is Mortgage Bond and Municipal Bond Act (ZHKO, Official Gazette of Republic of Slovenia, No. 17/06, dated 17.6.2006). Together with a secondary legislation it represents a sufficient legislative framework for mortgage and municipal bonds. Secondary legislation governing the issue of mortgage and municipal bonds with regard to the Mortgage Bond and Municipal Bond Act comprises:

- Regulation on the conditions for acquiring an authorisation to issue mortgage bonds and municipal bonds (Official Gazette of Republic of Slovenia, No. 78/06, dated 25.7.2006), which regulates in detail how it is determined for banks whether the conditions for acquiring an authorisation to issue mortgage or municipal bonds have been met. Bank shall demonstrate its capability to have adequate systems for identifying, measuring, controlling and assessing all risks linked to covered bond issue, first of all credit, liquidity, operational, interest-rate and market risks. Taking the business plan into account, the bank shall have organizational and technical qualification, rules regarding conducting of cover register;

- Regulation on the calculation of the net present value of cover assets (Official Gazette of Republic of Slovenia, No. 78/06, dated 25.7.2006), which determines detailed rules for matching cover assets and liabilities from issued mortgage or municipal bonds based on the net present value principle, and other rules for matching the maturities, interest rate and currency exposure of the cover assets with the liabilities from issued mortgage or municipal bonds;

- Regulation on the inclusion of derivatives in cover assets (Official Gazette of Republic of Slovenia, No. 78/06, dated 25.7.2006) sets out the maximum level of the inclusion of derivatives in cover assets, the type and credit ratings of the parties conducting such transactions, and other detailed instructions for the use of derivatives;

- Regulation on custodian of the cover register (Official Gazette of Republic of Slovenia, No. 78/06, dated 25.7.2006) regulates the conditions for appointing the custodian of a cover register and for acquiring a Bank of Slovenia’s authorisation to act as the custodian of a cover register.

II. STRUCTURE OF THE ISSUER
The issuer of mortgage and municipal bonds can be a bank with license of Bank of Slovenia pursuant to a Banking act (ZBan-1). A bank which has intention to issue covered bonds according to the Mortgage Bond and Municipal Bond Act (ZHKO, Article 9) should meet the following conditions in order to obtain a special license of Bank of Slovenia:

- A bank shall have adequate systems for managing risks connected with issue of mortgage and municipal bonds and risks connected with cover assets;

- A bank shall insure an adequate number of qualified employees and shall be organizationally and technically qualified for issuing mortgage and municipal bonds and financing of real estate and public sector entities;
• A bank should ensure ongoing business activities concerning granting mortgage loans and loans to public sector entities and issuing mortgage and municipal bonds apart from the other business activities;
• A bank shall prepare rules regarding conducting a cover register;
• A bank shall prepare rules concerning assessment of real estate and employ an appraiser who is independent from the credit decision process (persons who are licensed independent appraisers pursuant to the law governing auditing shall be considered to have necessary qualifications, ability and experience for the assessment);
• A bank shall give a statement to the Bank of Slovenia that it has appropriate contractual relations with its creditors. It means that concluded agreements (contracts) do not contain clauses that allow creditor to rescind a contract to an extent which could threaten a liquidity or solvency of the bank.

The issuer holds cover assets on his balance sheet and at the same time ensures separate activity according to the 3rd indent of this section. A subsequent segregation of the cover assets and obligations from the other assets and obligations of the issuer takes place only in the case of insolvency or dispossession of a special license of Bank of Slovenia (ZHKO, Article 15, 47). In these cases Bank of Slovenia names a receiver of cover assets (ZHKO, Article 48). A transfer to another legal entity is possible only in the case of insolvency on the basis of the contract which is a subject of the written approval of the Bank of Slovenia (ZHKO, Article 50). There is no direct legal link between single cover assets and bonds, all obligations related to bonds are obligations of the issuing bank as a whole, and have to be paid from all the cover assets of the issuer.

### III. COVER ASSETS

Cover assets are produced by mortgage and public sector lending. In accordance with the Mortgage Bond and Municipal Bond Act (ZHKO, Article 19-24) cover pool of mortgage bonds may consist of receivables related to credits secured by mortgages on residential properties, credits secured by mortgages on commercial properties, substitutional cover assets (up to 20% of cover assets), financial derivative instruments. Real estate shall be located in area of EEA and Switzerland.

Cover pool of municipal bonds may consist of receivables related to credits granted to public sector entities (state, local community or other public sector entities with a guarantee of the state), substitutional cover assets (up to 20% of cover assets), financial derivative instruments.

Substitutional cover assets comprise:

- cash on the account at Bank of Slovenia,
- marketable securities issued by Member state EEA or its central bank or ECB,
- other debt securities issued by EIB, EBRD or other bank according to criterion of ECB

Issuer may apply financial derivative instruments if they contribute to the reduction of risks connected with cover assets. Financial derivative instruments may present not more than 12% of cover assets pursuant to the “Regulation on the inclusion of derivatives in cover assets” (Point 8-9).

There are certain limits concerning cover assets which comprise cover pool:
• credits secured by mortgages on residential property under construction shall not exceed 5% of cover assets,
• credits secured by mortgages on commercial property shall not exceed 20% of cover assets,
• credits secured by mortgages on property outside Republic of Slovenia shall not exceed 50% of cover assets,
• credits to affiliated parties shall not exceed 20% of cover assets and shall never exceed the maximum allowable exposure according to ZBan-1 and Regulation on large exposures of banks and savings banks (Article 8).

IV. VALUATION AND LTV CRITERIA

Mortgage lending value is the value of the property determined by a prudent assessment of its future marketability, taking into consideration the long-term sustainable aspects of the property, the normal and local market conditions and the current and alternative appropriate uses of the property. Persons who are licensed appraisers pursuant to the law governing auditing (Slovenian Institute of Auditors) shall be considered to have necessary qualifications, ability and experience to assess mortgage lending value of the property. Every issuer of mortgage and municipal bonds shall apply methodology for valuation of mortgage lending value in the special document Rules of valuation. This document has to be confirmed by Slovenian Institute of Auditors (ZHKO, Article 25-27).

The value of receivables related to an individual mortgage credit, which could be considered as the cover asset, may not exceed 60% of the mortgage lending value of the pledged property.

All other details about the valuation process, qualifications of appraisers, valuation and monitoring are prescribed in the Mortgage Bond and Municipal Bond Act (ZHKO, Article 28). Monitoring requirements are in accordance with the Capital Requirements Directive (once a year for commercial real estate and once every three years for residential real estate), in addition Mortgage Bond and Municipal Bond Act explicitly requires a review of the underlying assumptions of the mortgage lending value when the market value of the property has declined for more than 10%.

V. ASSET - LIABILITY MANAGEMENT

Total volume of cover bonds outstanding must be covered by assets of at least the same nominal value at all times. At the same time, the congruence between bonds and assets should be assured on the basis of net present value principle (ZHKO, Article 22).

“Regulation on the calculation of the net present value of cover assets” determines rules for matching cover assets and liabilities from issued mortgage bonds or municipal bonds based on the net present value principle, and other rules for matching the maturities, interest rate and currency exposure of the cover assets with the liabilities from issued bonds. (Point 1-3)

The calculation of net present value shall be carried out for all kinds of bonds every day. If the net present value of mortgage bonds or municipal bonds exceeds the net present value of cover assets, the issuer has to cover the difference with additional funds. In addition, stress tests shall be performed at least once a week. The difference between current net present value and net present value on the basis of stress test shall be covered with immediate enhancement of cover assets. (Point 10-11)
Yield curve which can be used for the calculation of net present value shall be shifted with application of static or dynamic approach in order to assess the influence of change in interest rates. Issuer can use internal model for the assessment of interest rate and foreign exchange risk on the basis of previous notification at Bank of Slovenia and under certain conditions which should be fulfilled. The difference between the net present value of cover assets and the net present value of covered bonds shall be calculated also for individual currencies. (Point 12-23)

VI. COVER REGISTER, CUSTODIAN OF COVER REGISTER AND BANKING SUPERVISION

A cover register enables the identification of cover assets and covered bonds. Covered assets are recorded on the individual basis (individual receivables which arise from mortgage or municipal credits, substitutional cover assets and financial derivative instruments). Nominal value of cover assets and covered bonds outstanding shall be known at all times (ZHKO, Article 38). Issuers are obliged to manage their cover registers and they shall not turn the business over to another transactor. Every issuer shall have an independent custodian of cover register. He is appointed by the issuer and has to be either an authorized auditor who must comply with conditions in accordance to the law governing auditing or he must possess other necessary expert qualifications. Custodianship is possible only on the basis of license from Bank of Slovenia (ZHKO, Article 40-41).

Cover assets could be recorded in the cover register only on the basis of the custodian’s approval. Receivables from mortgage credits which beside the registration of mortgage in the land register include a note in the land register, that a secured receivable is earmarked for the registration in the cover register, are eligible receivables for the cover register (ZHKO, Article 39).

Pursuant to the Mortgage Bond and Municipal Bond Act (ZHKO, Article 52) and “Regulation on the conditions for acquiring an authorisation to issue mortgage bonds and municipal bonds” cover register should be managed separately for mortgage bonds and municipal bonds, whereas particular cover register should consist of at least 4 sub-registers: sub-register of mortgage or municipal credits, sub-register of substitutional cover assets, sub-register of financial derivative instruments and sub-register of mortgage or municipal bonds issued by the bank. Each sub-register should have its own analytical support. According to the “Regulation on the calculation of the net present value of cover assets” the calculation of net present value of cover assets should be carried out for each kind of mortgage and municipal bonds separately and should take into consideration characteristics of a particular sub-register. “Regulation on custodian of the cover register” regulates conditions for appointing the custodian of a cover register and conditions for acquiring an authorisation of Bank of Slovenia to act as the custodian of a cover register. (Point 18-22)

The custodian of cover register supervises the cover pool. He has to ensure that prescribed cover for the covered bonds exists at all times and that the cover assets are recorded correctly in the cover register. Without his approval, no assets may be removed from the cover pool and no mortgages may be erased from the land register. If cover assets are not sufficient to cover bonds outstanding and issuer has not assured additional assets, a custodian of the cover assets is obliged to inform Bank of Slovenia. (ZHKO, Article 39, 42)

Issuer shall submit to the Bank of Slovenia an extract of the cover register (signed by the custodian of the cover register) within 10 days after expiration of the quarter for the report as of the last day of the quarter. Issuer’s annual report shall include a number of mortgage credits, amounts of mortgage credits
with regard to mortgage on commercial and residential properties, a number of sales based on compulsory executions and a number of compulsory executions started in the previous year, a number of closed executions in the previous year. Annual report should provide information separately for commercial and residential properties. Bank of Slovenia as the banking supervisor supervises banks which issue mortgage and municipal bonds. Securities Market Agency shall exercise supervision over the initial public or non-public offering of mortgage bonds or municipal bonds, prospectus for public offering, resolution of bond issue. (ZHKO, Article 53-54)

VII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS

Cover assets could be simply identified in case of insolvency of the issuer on the basis of the record of cover register, where cover assets are stated in contrast to mortgage or municipal bonds issued. In addition, mortgage assets could be identified by means of a special notice in the land register, that a secured receivable is earmarked for the registration in the cover register. Note in the land register indicates that compulsory execution of the collateral and any change in the mortgage are possible only on the basis of written confirmation by the custodian of the cover register. (ZHKO, Article 35, 38)

The legal effect of registration is that in the case of insolvency of the issuer, the assets which form part of the separate legal estate can be identified: All values contained in the register would be qualified as part of the separate legal estate.

Asset segregation
Assets from the cover pool are a part of the issuer’s assets as long as the issuer is solvent. In case of insolvency of the issuer, cover assets recorded in the cover registers (including financial derivative instruments) are segregated from the insolvency estate and designated for further uninterrupted repayment of holders of the mortgage or municipal bonds. Bankruptcy senate names a receiver of cover assets upon the proposal of Bank of Slovenia. Receiver of cover assets carries out the administration of the cover assets and shall not be the same person as the bankruptcy receiver. (ZHKO, Article 47-48)

Receiver of cover assets is entitled to administer that part of receivables related to the mortgage or municipal credits that is not a part of cover assets (the value of receivables related to an individual mortgage or municipal credit, which exceeds 60% of the mortgage lending value of the encumbered property). Such residual is transferred into insolvency estate. (ZHKO, Article 49)

Impact of insolvency proceedings on Covered Bonds and derivatives
Covered Bonds do not automatically become due when the issuing institution is insolvent, but will be repaid at the time of their contractual maturity (ZHKO, Article 47). The same applies to derivatives which are registered in the cover register and form part of the cover pool. Receiver of cover assets represents holders of the mortgage or municipal bonds in court (ZHKO, Article 49).

 Preferential treatment of Covered Bond holders
Covered bond holders have preferential rights to be repaid (including costs) from the cover assets prior to any other creditors of the issuer (ZHKO, Article 46). If cover assets are not sufficient for further uninterrupted repayment of total debt from the mortgage or municipal bonds, Bank of Slovenia shall institute separated bankruptcy proceedings above cover assets of the issuer. If holders of the mortgage or municipal bonds in separated bankruptcy proceedings are not fully repaid from the cover assets, remaining receivables may participate in the regular bankruptcy proceedings of the issuer. (ZHKO, Article 51).
Sale and transfer of cover assets to other issuers
Receiver of cover assets may transfer entire cover assets and liabilities from issued covered bonds to another issuer on the basis of the contract which is a subject of the written approval of the Bank of Slovenia. (ZHKO, Article 50).

VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION
The risk weighting of Covered Bonds is regulated by the “Regulation on the calculation of capital requirements for credit risk under standardised approach for banks and savings banks”, transposing the Capital Requirements Directive into Slovene legislation.

Risk weight shall be assigned to exposures in the form of covered bonds with regard to the risk weight of the credit institution that issued them. For instance, covered bonds of the credit institution with 20% risk weight would have a 10% risk weighting.

In accordance with the Investment funds and management companies Act (ZISDU-1, Article 69, Paragraph 3-4) an investment fund may invest up to 25% of its assets in certain types of bonds issued by the same issuer, which is a bank with a registered office or branch in the Republic of Slovenia or in a Member State, and which is subject to special public supervision intended for the protection of the rights of bond holders. The monetary assets or the assets gathered with the sale of bonds must be placed only in assets which would over the entire period of validity, up to the time the bonds shall be due, enable the issuing institution to pay its obligations arising from these bonds and which shall be used to purchase the principal and repay the accrued interest in the case of the issuer’s default.

Insurance act (Zzavar, ZZavar B, 121-122) regulates the types of investments permitted and restrictions on the individual investments. The value of individual types of investment of the assets covering technical provisions must not exceed 5% of the total technical provisions and for bonds or other debt securities traded on an organised securities exchange in the Republic of Slovenia, a Member State or an OECD Member State, may reach 40% of the technical provisions if such securities meet conditions from Article 121.
I. FRAMEWORK


Regarding bankruptcy regulation, article 14 of Law 2/1981 (modified by the 19th final provision of Law 22/2003, of 9th July hereinafter, the “Insolvency Law” and by Law 41/2007 provides for a special treatment for the holders of the CHs in case of insolvency of the issuer. According to this article, CH holders have special privileged claims (créditos con privilegio especial) as established in article 90 of the Insolvency Law.

Article 12 of Law 2/1981 defines that the capital and interests of the CH are secured by the entire mortgage loan book registered in favour of the CH issuer (excl. loans used in securitisations).

Moreover, article 14 of Law 2/1981 determines that in case of issuer insolvency claims of CH holders shall be treated as privileged claims against the insolvency estate (créditos contra la masa). It shall be considered as credits against the mass: all the payments which correspond to the repayment of the capital and interest of the issued cédulas hipotecarias and, if any, to the substitution assets which backup the cédulas hipotecarias and the economic flows generated by the financial instruments linked to the issues. (art. 14 Law 2/1981) Pursuant to article 84.2.7, in combination with article 154, of the Insolvency Law, claims against the insolvency estate have to be paid on their respective due dates without delay of payment, regardless of the status of the bankruptcy proceedings.

In addition, the second additional provision of the Insolvency Law, modified by Royal Decree – Law 3/2009, of 27th March, establishes that in case of insolvency of credit institutions their specific legislation, specifically articles 10, 14 y 15 of Law 2/1981 of mortgage market, shall be applicable. As a result, the mortgage market law supersedes the Insolvency Law.

II. STRUCTURE OF THE ISSUER

Issuers of CHs have to be credit institutions, entitled to participate in the mortgage market and thus, to grant the mortgage credits or loans that comply with the requirements of the Spanish Mortgage Market Legislation. In practice, issuers of CH are mainly: Commercial Banks, Saving Banks, Cooperative Banks and Financial Credit Institutions and the Spanish Confederation of Savings Banks (CECA).

The issuer of the CHs holds the Cover Assets on his balance sheet and they are not transferred to a different legal entity.

The CHs, in addition to being direct and unconditional obligations of the issuer and without prejudice to the unlimited universal nature of the liability, comprise a special privileged credit right of its holder against the issuer, and if any, against the substitution assets which backup the cédulas hipotecarias and...
the economic flows generated by the financial instruments linked to each issue. This right is guaranteed by the entire mortgage loan book registered in favour of the issuer. The effectiveness of this right is also guaranteed by the existence of mandatory over-collateralisation.

Although there is no direct link between the Covered Bonds and the underlying mortgaged properties, there is a direct link between CHs and the Cover Assets.

As a general practice, the issuer has its own employees. Due to the status of the issuer as a credit institution, one of the requirements to conduct business is to have adequate human and material resources pursuant to the credit institution legislation.

The degree of outsourcing Covered Bond issuance activities is quite low, almost irrelevant. Usually, the outsourced service has to be provided by a well-known servicer with an adequate rating. In any case the issuer is responsible and liable for the performance of the service.

Additionally, several entities can group their CHs issuances in a CDO structure (called multi-seller structure). This is based on the issuance of securitisation bonds, backed by the cash-flow generated by such CHs, by an open vehicle that, under Spanish law, is created as a separate fund without legal status, serviced by a securitisation fund trustee or management company. The Bondholders of each of the series issued by the fund will bear the risk of default on the CHs backing the bonds, being a common practice that different series of bonds are covered by different portfolios of CHs, thus, the risk of one series will not affect the other series.

It is important to point out that there is another Spanish Covered Bond called Cédulas Territoriales (CTs) with the same special privilege claim status as CHs. In this case, the cover asset pool consists of all loans to the Spanish State, its autonomous communities and local authorities, as well as their entities and dependent public companies and entities of a similar nature in the European Economic Area. The credit institutions may issue CTs up to 70% of the eligible public loan portfolio, resulting in a minimum over-collateralisation of 43%.

III. COVER ASSETS

A distinction shall be made between cover assets and eligible assets.

Cover assets consists of the entire mortgage loan book registered in favour of the issuer. The special privileged claims of the holders of CHs are guaranteed by the cover asset pool and if any, by the substitution assets which backup the cédulas hipotecarias and the economic flows generated by the financial instruments linked to each issue.

The Law 2/1981 establishes requirements for mortgage loans that constitute the cover asset pool.

For issuance purposes and their limits, it shall be considered as eligible assets in order to determine the maximum amount of CH issued and outstanding for a particular issuer.

All mortgage loans which comply with the following criteria are taken into account for the calculation of the maximum amount of CH issued and outstanding:

(i) The object of the loan or credit must be the financing of the construction, reconstruction, or acquisition of residential premises, zoning works and social equipment, construction of agrarian
buildings, tourist, industrial and commercial and any other activity or work and any other loan, regardless its purpose.

(ii) The mortgage that guarantees the loan or credit must be a first-ranked mortgage.

(iii) The loan or credit guaranteed may not exceed 60% (art. 5 Law 2/1981 modified by Law 41/2007) of the mortgage lending value of the mortgaged asset, except for the financing of the construction, reconstruction or acquisition of residential premises, in which case it may reach 80% of such value. The 80% limit in the ratio between the guaranteed loan or credit and the value of the mortgaged home mentioned in the previous section can be exceeded, without under any circumstances exceeding 95%, if the mortgage loan or credit has a bank guarantee provided by a different credit institution to the creditor or is covered by credit insurance. The bank guarantee or insurance shall be direct and will cover at least the amount of the guaranteed loan or credit which exceeds 80% of the valuation of the mortgaged asset and interests (Art. art. 5 RD 716/2009)

Notwithstanding, mortgaged loans or credits that initially exceed these percentages can be used as Cover Assets for the issuance of CHs when, as a consequence of the repayment of their principal amount or the modification of the market value of the mortgaged properties the values do not exceed said LTV, in relation to the initial or revised valuation of the mortgaged asset.

The mortgaged properties must have been valued previously by the so-called “Sociedades de Tasación” or by the valuation services of the issuer.

(iv) The mortgaged assets must be insured against damages.

All mortgage loans that do not fulfil at least one of the above mentioned criteria cannot taken into account for the calculation of the maximum amount of CH.

Excluded from cover asset pool are special types of mortgage credits or loans, such as:

> Those documented by way of registered securities, either to the order or bearer securities.
> Those which are partially or totally due.
> Those which have already been the subject of mortgage participations (“Participaciones Hipotecarias”, i.e. loans used in securitisations).
> Those subject to senior mortgages or seizure.

The right to use and enjoy (“derecho de usufructo”) administrative concessions, rights to extended areas (“derechos de superficie”) and real estate properties which do not have building codes (i.e. those which are outside the zoning regime) are excluded as well.

The cover asset pool is defined as a dynamic cover pool. ABS/MBS or other assets are not allowed in the cover pool.

It is market practice for the issuer to hedge the interest rate risk by using the corresponding derivative instrument.

The institution issuing the cédulas hipotecarias will keep a special accounting register of the loans and credits that serve as collateral of the issues of cédulas hipotecarias and, if any, of the substitute assets fixed that cover them, as well as the derivative financial instruments linked to each issue. The annual accounts of the issuing institution shall contain the essential details of said register (art. 12 Law 2/1981, art. 21 RD 716/2009 and Circular 6/2008, of 26th November of the Bank of Spain).
In order to guarantee the transparency of the cover assets, the issuers have to provide the Bank of Spain with a monthly cover pool report. Moreover, there is a general duty of disclosure as a result of the continuous supervisory power of the Bank of Spain.

**IV. VALUATION AND LTV CRITERIA**

According to mortgage market legislation, the value of the mortgaged property has to be appraised prior to the issuance of the CHs by specialised companies, the so-called *Sociedades de Tasación*.

If for market reasons or due to any other circumstance the value of the mortgaged asset drops below the initial valuation by more than 20%, and therefore exceeds, according to the capital outstanding, the issuance limits referred to in article 5.1 of Law 2/1981, the issuer, following valuation performed by an independent authorised company, can demand from the debtor the extension of the mortgage to other assets sufficient in order to cover the required ratio between the value of the asset and the loan or credit that it guarantees (Art.5 of Law 2/1981 and Art.9 of RD 716/2009).

In the event that the debtor is an individual, the drop referred to in the previous paragraph must have remained for a period of one year counting from the time when the creditor institution has recorded said drop in the special accounting register of the loans and credits that serve as collateral of the issues.

The debtor, after being requested to make the extension, can opt to refund the entire loan or credit or the part of it which exceeds the amount resulting from applying to the current value the percentage used to initially determine its amount.

If within the period of two months from the extension request, the debtor has neither done this nor refunded the part of the loan or credit referred to in the previous paragraph, it will be considered that he/she has opted to refund all of the loan or credit, which can be immediately demanded by the creditor institution.

The mortgage markets legislation also determines the regulation for the appraisal service and the requirements with which the specialised companies have to comply, such as, an exclusive corporate object, minimum corporate capital requirement, registration with the corresponding registry at the Bank of Spain. Moreover, those entities are supervised and subject to inspection by the Bank of Spain. These rules were developed by the Ministerial Order of 27th March of 2003 in relation to the appraisal of real estate goods.

**V. ASSET - LIABILITY MANAGEMENT**

The volume of CHs issued and outstanding by a particular Issuer cannot exceed 80% (art. 16 Law 2/81) per cent of the sum of the unpaid principal amounts corresponding to all the mortgage credits or loans included in the Issuer’s portfolio that comply with the requirements mentioned above under III. Cover Assets. The issuer cannot issue CHs beyond these percentages at any time.

The cédulas hipotecarias can be backed up to a limit of 5 percent of the issued capital by substitution assets (fixed income securities issued by the State and other EU Member States, cédulas hipotecarias, mortgage bonds, securities issued by Mortgage Securitisation Funds or Asset Securitisation Funds and other fixed-income securities listed on an official secondary market or on an administered market, with a credit rating equivalent to that of the Kingdom of Spain –art. 15 and 17 Law 2/1981)
Notwithstanding this general statement, if the limit is surpassed due to increases in the redemption of the Cover Assets or any other event whatsoever, the Issuer shall re-establish due balance by means of any of the following actions:

(a) Cash deposit or deposit of government paper in the Central Bank of Spain.
(b) Acquisition of CHs in the relevant marketplace.
(c) Execution of new mortgage loans or acquisition of mortgage participations, provided that they are eligible to cover CHs.
(d) Redemption of CHs by the pertinent amount until balance has been reinstated, which, if necessary, can be executed through early redemption and drawing the number of securities to be redeemed by lot.

As a general remark it should be noted that it is market practice for the issuer to hedge interest rate risk. Moreover, regulation provides for some particular rules in this respect that can be summarised as follows: Issuers shall adopt the necessary measures to avoid inappropriate imbalances between the flows from the cover portfolio and those derived from the payments due for the cédulas that they issue (article 17.6 of RD 716/2009).

Concerning foreign exchange risks, there is no legal provision in relation to the following areas:

- The currency of the Covered Bonds
- Limiting FX risks between Cover Assets and the CHs
- Limiting, managing or hedging the exchange risk as in the case of the interest rate risk. Notwithstanding, it is universal market practice to denominate the CHs in Euro if the currency of the Cover Assets is Euro.

Other risks such as early repayment, reinvestment, etc. are also mitigated by the 25% overcollateralisation as well as by the dynamic nature and structure of the cover pool.

VI. COVER POOL MONITOR AND BANKING SUPERVISION

The institution issuing the cédulas will keep a special accounting register. Please refer to Section III Cover Assets. The Spanish legislation does not require a special pool monitor other than the prudential supervision on a continuous basis by the Bank of Spain which includes the periodic disclosure of information regarding cover assets by credit institutions.

The Bank of Spain is responsible for supervising compliance with the limits and regulatory requirements and is entitled to adopt measures in order to mitigate any breach or deviation from the regulation, including sanctioning such breach or failure in accordance with article 5 of the Law 26/1988, of 29th July.

The issuer is also responsible and liable for cover and eligible assets pool monitoring. The quantitative mandatory limits have to be maintained at all times, thus the monitoring is carried out continuously by the issuer as a part of the risk management and auditing of its activity.

The “special” supervision - as per reference to UCITS Art. 22(4) - is carried out by the Comisión Nacional del Mercado de Valores (hereinafter, “CNMV”). The CNMV may also monitor and supervise compliance with statutory requirements and limits upon approval of the issuance.
The role of the rating agencies shall be decided by the issuer on a case-by-case basis, either for commercial or market reasons.

**VII. SEgregation of cover assets and bankruptcy remoteness of covered bonds**

**Identification of the cover assets**

Any mortgage that is originated in Spain must be registered in the Land Registry. Consequently, the Land Registry is the cover registry which records all the mortgages serving as the collateral for the CHs. The institution issuing the cédulas will keep a special accounting register.

**Asset Segregation from the insolvency’s estate.**

Article 14 of the Law 2/1981 of the regulation of the mortgage market (modified by the 19th final Provision of the Insolvency Law) stipulates that the institution issuing the cédulas will keep a special accounting register. This provides the legal framework regarding the position of the rights of the holders of the CHs in case of insolvency of the Spanish issuer.

In this respect, it is worth pointing out the following relevant issues:

1. According to article 14 of Law 2/1981 claims of CH holders have to be treated as privileged claims against the insolvency estate (*créditos contra la masa*). Article 84.2.7 and article 154 of the Insolvency Law require that claims against the insolvency estate have to be paid by the insolvency administrators on their respective due dates without delay of payment, regardless of the status of the bankruptcy proceedings.

   In the case of CH, the claims of the CH holders are secured by the entire mortgage loan book registered in favour of the CH issuer (article 12 of Law 2/1981) and if any, by the substitution assets which backup the cédulas hipotecarias and the economic flows generated by the financial instruments linked to each issue. The definition as stated by the Insolvency Law implies the application of the special rule of payment without enforcement of the collateral.

   The Insolvency administration is not entitled to adopt any decision against said legal provision and has to use the proceeds from the issuer’s mortgage loan book to satisfy CH principle and interest payments on their respective due dates without delay of payments.

2. The Insolvency administrators are obliged to pay such amounts as long as the cash flows produced by the Cover Assets are sufficient to meet the CHs payments pursuant to article 84.2.7 of the Insolvency Law.

   In this respect, the Insolvency Law provides a clear definition of the claims of CH holders as special privileged claims without enforcement of the collateral. It also provides an unequivocal classification of the claims of CH holders, as claims against the insolvency estate and clear identification of the cover assets, which are reserved to meet the claims of the CH holders.

   Thus, the clarity of the provision leaves no room for a different interpretation. In other words, the same legal provision that states the privilege, states the extent and limits of the same.

   All of the holders of cédulas hipotecarias, whatever their date of issue, shall have the same preference over the loans and credits covering them and if any, to the substitution assets which backup the cédulas hipotecarias and the economic flows generated by the financial instruments linked to each issue.
3. The payments to be effected by the debtor comprise all those deriving from principal and interest of the issued and outstanding CHs on the date on which the Insolvency is declared. All CH payments have to be met on their respective due dates, regardless of the status of the bankruptcy proceedings. In the case where the cover assets are insufficient to meet the CH payments, the claims of the CH holders will be realised. This realisation will not be subject to the 1 year term (or to the approval of the convention, if before) of “suspension or delay” provided for the execution of guaranties in rem pursuant to article 55.1 of the Insolvency Laws in the event of the alienation of properties and rights affected to the cédulas hipotecarias. The payment to all of the cédulas hipotecarias owners shall be done on a pro rata basis, regardless of the issue date of their securities. (art. 14 Law 2/1981). In the case of insufficient cover assets, all CH holders’ claims will be met on a pro-rata basis together with ordinary claims (Art. 157.2 of the Insolvency Law).

A judicial stay (moratorium) on the insolvency’s estate cannot delay the cash flows from the cover assets and, therefore, endanger the timely payment of interest and the principle on CHs.

In case of insolvency of the issuer, liquidity is ensured by the means discussed above, by the flows derived from the Cover Assets.

In order to comply with the payment obligations to the holders of the cédulas hipotecarias in the event of a temporary lap in the revenue received by the debtor, payments shall be made by means of liquidating the substitution assets serving as collateral of the issue. If this was insufficient, payments shall be made by means of funding operations via subrogation of the debtor in the position of the holder of the cédulas (art. 14 Law 2/1981)

**Administration of the cover assets**

In case of insolvency, it is the normal insolvency administrator who administrates the Cover Assets. In this respect, under Spanish Insolvency Law, the bankruptcy is directed by commercial court of competent jurisdiction and managed by a specific body called the “bankruptcy authority” (“administración concursal”) comprising three persons: an attorney, an auditor or accountant and a creditor with ordinary debt or general privilege.

**VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION**

The risk weight of the CHs that comply with the requirements of Law 2/1981 is dependent on the risk weight against the issuer, according to the following table:

<table>
<thead>
<tr>
<th>Risk Weight against the issuer</th>
<th>CH’s Risk Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>10</td>
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<tr>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>150</td>
<td>100</td>
</tr>
</tbody>
</table>

*(Rule 16, section L “Covered Bonds” of the Circular 3/2008, of 22 May, of the Bank of Spain)*

The CHs listed on a recognised secondary market (as AIAF) are eligible for investing the assets of the UCITS up to 25% of its net worth.
Provided that the requirements of the Law 2/1981 are met, the CHs are eligible as “Covered Bonds”. The applicable law comprises Law 36/2007, of 16 November and Royal Decree 216/2008, of 15 February, by which Directives 2006/48/EC and 2006/49/CE, of 14 June 2006 are transposed into the Spanish Law.

The CHs are also eligible in repo transactions with the Spanish Central Bank and the European Central Bank provided that they comply with the requirements of the Law 2/1981.

Finally, the CHs upon being listed or applied for listing are eligible for: i) investment by insurance companies of their technical provisions obligations; ii) the investment by mutual guarantee companies; iii) investment by Pensions Funds.
Issuers: At the end of 2008, there were 70 issuers in Spain: Banca March, Bancaja, Banco Bilbao V Argentaria, Banco Caminos, Banco de Andalucia, Banco de Castilla, Banco de Credit Local, Banco de Crédito Balear, Banco de Galicia, Banco de Valencia, Banco de Vasconia, Banco Espirito Santo (ES), Banco Gallego, Banco Guipuzcoano, Banco Pastor, Banco Popular, Banco Popular E.Com, Banco Popular Hipotecario, Banco Sabadell, Banco Santander, Banesto, BankInter, Bilbao Bizkaia Kutxa, Caixa Caomarcal de Manlleu, Caixa Catalunya, Caixa de Girona, Caixa de Terrassa, Caixa Galicia, Caixa Manresa, Caixa Ontinyent, Caixa Penedés, Caixa Sabadell, Caixa Tarragona, Caixanova, Caja Baleares, Caja Cantabria, Caja Castilla la Mancha, Caja Circulo Católico Burgos, Caja de Ávila, Caja de Burgos, Caja de Extremadura, Caja de Guadalajara, Caja de Jaén, Caja Duero (Caja Salamanca y Soria), Caja Espana, Caja General de Badajoz, Caja Gipuzkoa y san Sebastian, Caja Granada (La General), Caja Huelva y Sevilla New: CajaSol, Caja Inmaculada de Aragon, Caja Insular Canarias, Caja Laboral Popular, Caja Laietana, Caja Madrid, Caja Mediterraneo, Caja Murcia, Caja Navarra, Caja Rioja, Caja Rural Intermediterránea, Caja Segovia, Caja Sur (Caja Cordoba), Caja Vitoria y Alava (Vital Kutxa), CajAstur (Oviedo, Gijon), Dexia Sabadell, Ibercaja, Ipar Kutxa Rural (Caja Rural Vasca), La Caixa Barcelona, La Caja de Canarias, Santander Consumer Finance, Unicaja.
DEVELOPMENTS

> The Riksbank has raised the share of the total collateral in relation to the payment system that can be comprised of covered bonds to 100 per cent from 75 per cent. This decision applies to covered bonds issued by the borrower or by an institution with close links to the borrower.

> The Ministry of Finance is preparing a draft legislation amending the Covered Bonds Issuance Act giving the receiver-in-bankruptcy an explicit mandate to take out liquidity loans on behalf of a bankruptcy estate in order to maintain the liquidity matching.

> The Association of Swedish Covered Bond Issuers (ASCB) has been established with the mission to provide information about the Swedish covered bond market and be a common voice of all Swedish covered bond issuers.

I. FRAMEWORK

In Sweden, the issuance of Covered Bonds is governed by the Swedish Covered Bonds Issuance Act, which came into force on 1 July 2004 (Lag 2003:1223 om utgivning av säkerställda obligationer, hereinafter the ‘CBIA’). The CBIA supersedes the general bankruptcy regulation and grants Covered Bond investors a priority claim on eligible cover assets (CBIA: Chapter 4, Section 1). Regulatory provisions (FFFS 2004:11, hereinafter ‘CBR’) established by the Swedish Financial Supervisory Authority (Finansinspektionen, hereinafter ‘SFSA’) complement the legislation. These regulations define in more detail the criteria for obtaining an issue licence, the universe of eligible cover assets, valuation procedures for eligible cover assets, asset and liability management, and the form and maintenance of the cover register.

II. STRUCTURE OF THE ISSUER

The CBIA does not apply the specialised banking principle but allows all banks and credit institutions to issue Covered Bonds provided they have obtained a special licence from the SFSA (CBIA: Chapter 2, Section 1). The issuer must meet certain criteria to qualify for the licence. These criteria include the submission of a financial plan proving the issuer’s financial stability for the next three years, the conversion of outstanding mortgage bonds into Covered Bonds, and the conduct of business in compliance with the CBIA. The SFSA has the right to withdraw the licence should the institution be in material breach of the CBIA or have failed to issue Covered Bonds within one year of receiving the licence (Table 1). If the SFSA withdraws a licence, it must determine a plan to wind down the operation.

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1 Lag 2003:1223 om utgivning av säkerställda obligationer (Covered Bonds Issuance Act).
Despite the absence of a specialised banking principle, the history of the Swedish mortgage market suggests that, in practice, specialised mortgage banks will be the main active Covered Bond issuers. Prior to the CBIA, commercial banks were restricted on their mortgage lending activities, and mortgage loans were extended by specialised mortgage institutions, which were allowed to issue mortgage bonds. Most of the Swedish mortgage credit institutions have a strong affiliation with Nordic universal banking groups, outsourcing their activities to their respective parent. The degree of outsourcing varies among issuers. The SFSA has published general requirements regarding outsourcing.

The cover assets represent claims of the covered-bond-issuing entity and remain on the balance sheet. There is no subsequent transfer of cover assets to another legal entity. The Covered Bonds are direct, unconditional obligations on the part of the issuer. Outstanding Covered Bonds are backed in their entirety by the cover pool. Hence, there is no direct legal link between single cover assets and particular Covered Bond series. In the event of issuer insolvency, the cover pool is bankruptcy-remote from the general insolvency estate of the issuer and exclusively available to meet outstanding claims of Covered Bond holders. Moreover, Covered Bond investors enjoy ultimate recourse to the insolvency estate of the issuer, ranking pari passu with senior unsecured investors.

### III. COVER ASSETS AND COVER REGISTER

Eligible cover assets are mortgage loans and public-sector assets (CBIA: Chapter 3, Section 1). The CBIA does not specify separate cover pools for mortgage and public sector cover assets. Both asset classes are mixed in one cover pool. However, the main emphasis of Swedish issuers will be on mortgage Covered Bonds.

Eligible assets are mortgages:

> on real estate intended for residential, agricultural, office or commercial use;
> on site-leasehold rights intended for residential, office or commercial use;
> pledged against tenant-owner rights; and
> against similar foreign collateral.
The CBIA restricts mortgages against offices and commercial property to 10% of the total cover pool. Mortgage loans can be secured only with collateral comprising property located in Sweden and the European Economic Area (EEA). Neither asset-backed securities nor mortgage-backed securities are permissible as cover assets. The mortgage loans must meet valuation procedures and certain loan-to-value ratios defined by the CBIA and the CBR (see page 3).

Eligible public-sector assets are defined as securities and other claims:

- issued by or guaranteed by the Swedish state, Swedish municipality or comparable public body;
- issued by or guaranteed by a foreign state or central bank, where the investment is in the foreign state’s currency and is refinanced by the same currency;
- issued by or guaranteed by the European Communities, or any of the foreign states, or central banks as prescribed by the Swedish government; or guaranteed by a foreign municipality or public body that has the authority to collect taxes.

The cover pool is a dynamic pool, and nonperforming loans due over 60 days cannot be recognised for the purposes of meeting the matching requirements set forth by the CBIA (CBR: Chapter 3, 4§).

**Derivative contracts**

The CBIA provides for the use of derivatives for hedging interest and currency risk. The derivatives must be structured such that premature termination is not triggered by an issuer default or on demand of the counterparty. Derivative counterparties must have a minimum long-term rating of A3/A-/A- (Moody’s/S&P/Fitch) or a short-term rating of P-2/A-2/F2. The law stipulates asymmetrical collateralisation, in that it requires collateral, a guarantee or replacement language in the event that the counterparty’s rating falls below the minimum rating level. There is no reciprocal requirement by the Covered Bond issuer, given that derivative counterparties have a priority claim on the cover pool (CBR: Chapter 4, 5§ to 7§). The use of derivatives is not limited to a maximum percentage of the cover pool since they are not included in the nominal matching calculation. Their use is limited to serve the balance between cover assets and outstanding Covered Bonds when creating a balance in respect of net present value of assets and liabilities.

**Substitute assets**

Highly liquid assets can serve as substitute assets for up to 20% of the mortgage cover pool. The SFSA can temporarily raise the limit to 30%. Eligible substitute assets include eligible public sector assets plus cash, cheques and postal money orders. These assets qualify for a 0% risk weighting. The SFSA has the discretion to extend the universe to eligible substitute assets (CBIA: Chapter 3, Section 2).

**IV. VALUATION AND LTV CRITERIA**

The CBIA defines valuation principles for properties that act as collateral for mortgages in the cover pool (CBIA: Chapter 3, Section 4). The valuation relating to residential properties may be based on general price levels. The valuation of any other eligible property class must be based on the market price, which must be determined by individual appraisal by qualified professionals. The market value should reflect the price achievable through a commercial sale, without time pressure and excluding any speculative or temporary elements. Issuers must monitor the market value of the property regularly, and in the case of serious decline must review the valuation, and ensure that the loan to value (LTV) of the related

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3 Countries belonging to the European Economic Area are the 27 EU countries plus Norway, Iceland, Liechtenstein.

4 The law does not provide for any explicit geographic restriction.
mortality loan remains within the defined maximum limit (CBR: Chapter 3, 7§, Chapter 5, 4§). The valuer is normally an employee of the issuer, but independent valuers are also used.

For the various mortgage types eligible as cover, the following maximum LTV ratios apply (CBIA: Chapter 3, Section 3):

- 75% of the value for real estate, site-leasehold rights and tenant-owner rights where the property is intended for residential use;
- 70% of the value for real estate intended for agricultural use;
- 60% of the value for real estate, site-leasehold rights and tenant-owner rights where the property is intended for office or commercial use.

These LTV limits are relative, not absolute, limits. A loan with a higher LTV ratio can be included in the cover pool up to the legal threshold. The balance must be refinanced with other funding instruments (e.g., senior unsecured funding) (CBR: Chapter 5, 3§).

V. ASSET - LIABILITY MANAGEMENT

The CBIA requires that the nominal value of the cover assets all times exceeds at the aggregate nominal value of claims arising from outstanding Covered Bonds against the issuer (CBIA: Chapter 3, Section 8). In addition, the law requires that on a net present value (NPV) basis, cover assets, including derivatives, always exceed the corresponding value of the interest and principal of outstanding Covered Bonds, taking into account the effects of stress-test scenarios on interest and currency risk set by the SFSA. The SFSA defines the stress test for interest-rate risk as a sudden and sustained parallel shift in the reference swap curve by 100bps up and down, and a twist in the swap curve. Likewise, it defines currency risk as a 10% sudden and sustained change in the relevant foreign exchange rate between the currency of Covered Bonds and the currency of cover assets (CBR: Chapter 4, 2§, 3§). The CBIA does not require a mandatory level of minimum overcollateralisation (OC). However, the issuer can adhere to a self-imposed OC level for structural enhancement, as the CBIA protects any OC in the cover pool in the event of issuer insolvency.

Finally, the issuing institution shall ensure that the cash flow with respect to the assets in the cover pool, derivatives agreements and the Covered Bonds are such that the institution is always able to meet its payment obligations towards holders of Covered Bonds and counterparties in derivatives agreements (CBIA: Chapter 3, Section 9). The issuer should be able to account for these funds separately.

VI. COVER POOL MONITORING AND BANKING SUPERVISION

The Covered Bond issuers fall under the special supervision of the SFSA. The financial regulator monitors the institutions’ compliance with the CBIA and other related regulatory provisions (e.g., CBR). If the Covered Bond issuer is in material breach of its obligations under the legal framework, the SFSA can issue a warning or revoke the issue license altogether. The SFSA may also revoke a license if the institution has declared that it waives the license or if the institution has not made use of the license within a year from the date of receiving the license. The revocation may be combined with an injunction against continuing the operations and with the imposition of a conditional fine. In any case, the SFSA must determine how the operations should be wound up (CBIA: Chapter 5, Sections 2 to 6).
For each issuing institution, the SFSA must appoint an independent and suitably qualified cover pool inspector (cover pool trustee), who is paid by the Covered Bond issuer. The duties of the cover pool inspector are to monitor the register and verify that Covered Bonds, derivatives agreements and the cover assets are correctly recorded. The inspector also ensures compliance with matching and market risk limits in accordance with the CBIA. The institution is obliged to provide the Covered Bond inspector with any information requested relating to its Covered Bond operations. The cover pool monitor must submit a report of the inspection to the SFSA on an annual basis, and must notify the SFSA as soon as he/she learns about an event deemed to be significant to the supervisory authority (CBIA: Chapter 3, Section 12 to 14, and CBR: Chapter 6, 2§ to 5§).

**VII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY PROCEEDINGS**

**Cover register**
The issuer must keep a register of eligible cover assets, substitute assets, derivative contracts, and outstanding Covered Bonds (CBIA: Chapter 3, Section 10). The law specifies the form and content of such a register, which must be easily accessible for the SFSA and the cover pool inspector. The registration legally secures Covered Bondholders and derivative counterparties a priority claim on the cover pool in the event of issuer insolvency (CBIA: Chapter 4, Section 4). Prior to an issuer being declared insolvent, cash flows accruing from the cover assets must be accounted for separately by the issuer. In the event of issuer default, Covered Bond investors and derivative counterparties have the same priority claim on these funds as they have on the cover pool. Moreover, cash flows accruing from the cover assets after issuer insolvency must be registered in the cover pool register.

**Issuer is a subsidiary**
Under the Swedish bankruptcy code, the mere insolvency of the parent company does not automatically trigger the insolvency of a subsidiary.

**Issuer insolvency**
In the event of issuer insolvency, the registered cover assets and the respective Covered Bonds are segregated from the general insolvency estate. Covered Bonds are not accelerated as long as the cover pool fulfils the requirements set out in the CBIA, notwithstanding the existence of ‘only temporary, minor deviations’ (CBIA: Chapter 4, Section 2).\(^1\) Also, mere issuer default does not trigger the premature termination of registered derivative contracts. Covered Bond holders and registered derivative counterparties have a priority claim on the cover pool and cash that derives from the pool, ensuring timely repayment to original agreed terms, as long as the pool complies with the CBIA. However, the cover pool does not constitute a separate legal estate. According to legal opinion, the bankruptcy of the issuer should not lead to a debt moratorium on Covered Bonds.\(^2\)

**Cover pool insolvency and preferential treatment**
In the event that the cover pool breached eligibility criteria, Covered Bonds would be accelerated. Covered Bond investors and derivative counterparties would have a priority claim on the proceeds from the sale of the cover assets, ranking pari passu among themselves but prior to any tax claims and salary payments (pursuant to Section 3a of the Rights of Priority Act [SFS 1970:979]). If the proceeds are

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1. According to preparatory works to the Act, this would be, for example, “temporary liquidity constraints”.
2. There are no means in the Act that could disrupt or delay payment to Covered Bondholders. However, the Act does not explicitly derogate from the general provision of the Code of Procedures 1948 or the Bankruptcy Act 1987, of which neither explicitly ensures the integrity of payments on Covered Bonds.
insufficient to repay all liabilities on outstanding Covered Bonds, Covered Bond investors and derivative counterparties would have an ultimate recourse to the insolvency estate of the issuer, ranking pari passu with senior unsecured investors.

**Survival of OC**

Any OC present in the cover pool at the time of issuer insolvency is bankruptcy-remote provided it is identified in the cover pool register. Indeed, the CBIA requires full repayment of outstanding claims on Covered Bonds, and registered derivatives, before cover assets would be available to satisfy claims on unsecured creditors.

The law does not provide for the appointment of a special cover pool administrator. The receiver-in-bankruptcy represents the interests of both the Covered Bond investors and the unsecured investors. The receiver has the right to use OC to pay advance dividends to other creditors of the bankrupt issuer, if the pool contains more assets than necessary.3 If the cover assets later prove to be insufficient, these advance dividend payments can be reclaimed.

**Access to liquidity in case of insolvency**

In the cases of issuer insolvency, the law does not enable the receiver-in-bankruptcy to refinance maturing Covered Bonds of the issuing institution by issuing new Covered Bonds against the cover pool, as the latter does not constitute a legal entity. Likewise, the receiver is not able to substitute ordinary cover assets for alternative assets; nor is the receiver allowed to take out bridge financing against the cover pool to ensure timely payment, which would rank pari passu with Covered Bond investors. However, the receiver can use available liquid substitute assets included in the pool. In addition, the receiver can sell part of the cover pool in the market to create the necessary liquidity without raising debt.

The Swedish Ministry of Finance is considering amending the CBIA in order to address the situation described in the preceding paragraph. A memorandum was circulated for comments to stakeholders during the summer 2009. The memorandum sets forth a proposal for a clarifying amendment to the CBIA. The clarification aims at the insolvency of the issuing institution and is intended to give the receiver-in-bankruptcy an express mandate, on behalf of the bankruptcy estate, to take out liquidity loans and enter into other agreements for the purpose of maintaining matching between the cover pool, covered bonds and derivative contracts. The proposal involves a new section being added at the end of Chapter 4 of the Covered Bonds Issuance Act. A draft bill is expected to be presented to the Parliament before the end of 2009.

**VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION**

Swedish Covered Bonds comply with the criteria of UCITS 22 (4) and with the Covered Bond criteria defined in the EU CRD Directive, Annex VI, Part 1, Paragraph 68 a) to f). The CBIA explicitly lists mortgages against property for agricultural purposes, and mortgages against the pledging of tenant-owner rights as eligible cover assets, while the EU CRD does not. However, general opinion of the parties involved is that the EU CRD’s term “commercial real estate” should be interpreted in a broader sense, including agricultural property. In addition, issuers can impose self restrictions to ensure that their Covered Bond issues comply with EU CRD.

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3 According to legal opinion, the receiver-in-bankruptcy would have take into account a substantial safety margin to ensure that the cover pool’s integrity and compliance with the Act is not jeopardized, which would be difficult to prove unless outstanding Covered Bonds were due to mature imminently.
Swedish Covered Bonds are eligible for repo transactions with the Riksbank (the Swedish Central Bank). The Riksbank decided on 8 October 2008 to change the requirements for collateral in the RIX payment system. The decision means that the earlier limit of 75 per cent, applying to the share of covered bonds issued by the borrower or by an institution with close links to the borrower that can be used as collateral in the payment system is removed. The Riksbank also decided to lower the minimum credit rating requirement for longer-term securities pledged as collateral. The decision entails a harmonisation of the Riksbank’s collateral requirements with those applied within the Eurosystem. Moreover, Swedish Covered Bonds denominated in euros are likely to qualify as Tier 1 assets with the ECB.4

Derivatives that are part of the cover pool do not benefit from any special capital treatment. They currently carry the same risk weighting as the credit institution counterparty. The implementation of EU CRD into Swedish law grant derivative contracts included in the cover pool the same capital treatment as Covered Bonds.

Foreign Covered Bonds enjoy the same preferential capital treatment in Sweden if the foreign supervisory authority of that Covered Bond issuing institution has also assigned those Covered Bonds preferential risk weightings (principle of mutual recognition).

The law regulating insurance companies in Sweden (Försäkringsrörelselagen 1982:713) makes no distinction between mortgage bonds and Covered Bonds. Swedish insurance companies can invest up to a maximum of 25 % in the Covered Bonds of a single issuer (before 1 April 2008 the maximum was 10 %).

Swedish legislation on investment funds (Lag 2004:64 om investeringsfonder) allows mutual funds to invest up to 25% of their assets in Swedish Covered Bonds, instead of the 10% generally applicable to other asset classes.

**IX. ISSUING AND TRADING OF SWEDISH DOMESTIC COVERED BONDS**

In order to issue covered bonds mortgage companies and banks need an authorisation by the Swedish Financial Supervisory Authority (SFSA). Normally the bonds are registered at the Nordic Exchange Stockholm (NASDAQ OMX Group), although no actual bond trading takes place there. Offering circulars with the detailed issue conditions are following a standard based on the Prospectus Directive with acceptance from the SFSA, OMX and the market participants. The normally used technique for issues is “on tap”.

The Swedish bond market investors appreciate liquidity. Because of these “requirements” the large issuers issue their bonds as benchmarks which mean that large amounts (SEK 3 billion and more) are issued and that a number of dealers, under normal circumstances, show both bid and offer prices. Also, only benchmarks are deliverable in the future contracts. When a new benchmark-loan is issued, the issuers make sure that the amount issued meets the requirements for a benchmark sized deal. After the initial day of issuance the issuer can, without further notice, issue “on tap” the size he requires to match the lending.

The bonds are sold into the primary market through banks acting as agents for the issuer. These banks also act as market makers in the secondary market. Currently, there are seven banks and securities firms that act as market makers in treasury bonds and bills on the secondary market. A majority of the market makers in government bonds are also market makers in covered bonds. The market for government and

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4 In general, the ECB grants marketable debt instruments the status of Tier 1 assets, if the security is denominated in euros, compliant with UCITS Art. 22 (4) and issued by a credit institution situated in the EEA area (ECB: “Implementation of Monetary Policy in the Euro Area”, Feb, 2005).
domestic covered bonds, as well as treasury bills, is a telephone and screen-based over-the-counter market. Market makers display indicative two-way prices on an electronic information system (the PMI Information system) which is instantaneously relayed by Reuters and Telerate. Fixed prices are quoted on request and most deals are concluded via telephone. Trading in the secondary market takes place on all business days between 09.00 and 16.15 (local time). The number of loans to be quoted is regulated in an agreement between the issuer and the market-maker.

Bonds are quoted on a yield basis with bid and ask spread of (under normal market conditions) 2 bp for the liquid benchmark bonds. The settlement day for bonds is three business days after the trading date. T-bills are quoted on a simple yield basis and are settled two business days after the trading day. The normal trading lot in government securities and liquid mortgage bonds is SEK 100-200m. Of course, prices are given for other lots as well.

Sweden has a liquid and smoothly operating repo market with almost all banks and broker firms involved in the trading. The repo market in Sweden started in the late 1980s, and has developed fast over the last few years. The Swedish Debt Office offers a repo-facility in government bonds and treasury bills and mortgage companies offer their market makers a repo-facility in their own bonds. The repo transaction is viewed as a ‘sell-buy back’ or ‘buy-sell back’ deal and the ownership of the security has to be transferred. There are no standard conditions for a repo transaction and the counterparties have to agree on maturity, settlement day and delivery for each deal. Most often, though, repos are settled two banking days after the trading day. Repo rates lie within the spread between treasury bill yields and deposit rates. The spread between bid and ask prices are between 5 and 10 basis points depending on the maturity.

Almost all public listed securities in Sweden are registered at the Euroclear Sweden. In general, Swedish bonds are domestically settled via the Euroclear. Domestic settlement requires a custodian account with one of the Swedish banks or securities firms. Foreign investors can either have a custodian service with a Swedish bank or securities firm or settle via Euroclear or Cedel.

Accrued interest is calculated from the previous coupon date to the settlement day. The interest rate is calculated by using ISMA’s 30E/360 day count - “End-of-month” convention.

Swedish government and covered bonds have five ex-coupon days which means that there is negative interest when settlement occurs within five business days before the coupon date.

Most Swedish bonds pay coupon annually. There are, however, bonds that pay coupon semi-annually. All domestic banks act as paying agents.

Swedish krona bonds redeem at par upon maturity.

A special small bond Exchange called “SOX”, is a special part of NASDAQ OMX Nordic. All bonds registered at “SOX” must have low denominations in order to be suitable for private investors. The trade in the “SOX” market is held by the Swedish Commercial banks and some stock brokers.

The trade in the SOX market is fully computer based. A normal “trading amount” in the SOX market is SEK 100,000 per transaction.
APPENDIX

ESSENTIAL TERMS AND CONDITIONS OF A TYPICAL SWEDISH MARKET MAKER AGREEMENT

The market maker has a duty

- to help the issuer sell bonds under it’s benchmark-loans on tap into the market,
- to actively support trading of these bonds in the secondary market, and
- to continuously quote indicative rates in the PMI-system

These obligations apply to a limited number of the issuer’s loans – the benchmark-loans. Typically 5-6 loans of a big issuer have this status with respect to outstanding volume. Using the on-tap issuing technique a loan typically reaches bench-mark status when the outstanding loan amount is SEK 3-5 bn. (At the peak of the life of the bond it typically has a volume of SEK 20-30 bn. After that the volume falls due to active repurchase operations by the issuer. With one year to go to maturity a loan is no longer of benchmark status. This paves the way for a controlled redemption of the remaining part of the loan.)

The bid ask spread shall be in line with present market conditions and the trading lots shall typically exceed SEK 50 million.

The obligations of a market maker are conditional upon a number of things of which the following could be mentioned;

- that no change in the economic, financial or political conditions have occurred which in the reasonable opinion of the market maker would create a major obstacle to the fulfilment of the obligations;
- that the bonds, in the reasonable opinion of the market maker, can not be placed in the primary or secondary market on normal market conditions.

If so, the market marker shall notify the issuer and may withdraw from the duties wholly or in part for a shorter or longer time.

The market maker also has an obligation to trade two futures (2 and 5 year) of the issuer in a similar way as that of the benchmark bonds.

The issuer on his side has an obligation to (under normal market conditions) supply the market maker with a repo facility in the outstanding benchmark bonds. (This facility used to be unlimited. Today however the limit is set by the available cover in the cover pool of the issuer.)

With respect to transparency the issuer shall make public at the end of each week figures on outstanding benchmark loans as of the last day of the previous week.
Figure 1: Covered Bonds Outstanding 2003-2008, €M

Source: EMF/ECBC

Notes: The first covered bonds were issued in 2006 with the application of the Covered Bonds Issuance Act. Prior to 2006 only mortgage bonds were issued in Sweden and as they are not directly comparable to covered bonds they are not included in the figures. A large part of the mortgage bond stock has been converted into covered bonds. The figures include both the converted bonds and the new bonds issued during the year.

Figure 2: Covered Bonds Issuance 2003-2008, €M

Source: EMF/ECBC

Issuers: The Swedish covered bonds market in 2009 consists of seven issuers: Stadshypotek, Swedbank Mortgage, Nordea Hypotek, Swedish Covered Bond Corporation (SCBC), SEB, Länsförsäkringar Hypotek and Landshypotek. The market is dominated by the first five of them and the majority of their exposure is to domestic residential mortgages, with the remainder consisting of commercial property loans and public sector loans.
I. FRAMEWORK
The issuance of Swiss covered bonds - or ‘Pfandbriefe’, a term protected by law - is governed by the Pfandbriefgesetz (PfG) of 25 June 1930, in the version of 1st April 1996. The PfG is complemented by the Pfandbriefverordnung (PfV), which dates back to 23 January 1931. The PfV regulates in further detail the issuance and redemption of Pfandbriefe, the form and content of the cover register (‘Pfandregister’), as well as the content and periodicity of the issuers’ financial reporting. The PfG supersedes general bankruptcy regulations and is complemented by the Law on Banks and Savings Banks (BankG) and the Swiss Liability Law (’Obligationenrecht’, OR).

II. STRUCTURE OF THE ISSUER
The PfG grants only two institutions the right to issue Pfandbriefe. One institution is the central covered bond issuing vehicle of the Swiss cantonal banks, called ‘Pfandbriefzentrale der schweizerischen Kantonalbanken’ hereinafter PBZ. Cantonal banks are public-sector banks majority-owned by the canton (Swiss region) in which they are incorporated. Moreover, the majority of cantonal banks benefit from a deficiency guarantee extended by their canton. The other institution is called ‘Pfandbriefbank schweizerischer Hypothekarinstitute’ (hereinafter PBB) and operates as the Pfandbrief-issuing vehicle for Swiss banks other than cantonal banks. The PfG grants these two institutions the right to merge (PfG Art. 1).

The two institutions need to be authorised by the government (‘Bundesrat’) to issue Pfandbriefe (PfG Art 2) and are supervised by the Swiss banking regulator (‘Eidgenössische Finanzmarktaufsicht’ hereinafter Finma). The authorisation is subject to the following requirements:

> The institution must be established as a joint-stock company or cooperative.
> The institution must have at least five members.
> The institution must have at least a minimum paid-in capital of CHF 5 million.
> The government (’Bundesrat’) must approve the institution’s Articles of Association or by-laws.

PBZ was founded as a joint-stock company in 1931. Only cantonal banks have the right to be members of the PBZ (PfG Art.3). PBZ does not have its own staff but has fully outsourced its operations to Zürcher Kantonalbank, which manages PBZ under a management contract.

PBB was also established as a joint-stock company in 1931. Any Swiss bank can become a member of PBB, provided that it is headquartered in Switzerland and that Swiss mortgages account for at least 60% of the bank’s balance sheet. The PfG allows PBB to waive the second condition. PBB has amended its by-laws accordingly (PBB-BL Art. 4) and accepts as members Swiss banks whose mortgage loans account for at least 10% of their balance sheet. The supervisory board has the power to grant further exceptions.

5 Two of PBZ’s member banks do not benefit from a cantonal guarantee, namely Banque Cantonale de Genève (BCG) and Banque Cantonale Vaudoise.
Neither institution has a general banking licence, and the PfG strictly limits their business activities to the following areas (‘specialised banking principle’) (PfG Art. 5):

> to the issuance of Pfandbriefe;

> to use the proceeds and grant loans to their member banks at a stable and low interest rate. These loans must be backed by eligible mortgage collateral on real estate situated in Switzerland. PBB and PBZ are also entitled to grant loans to non-member banks. In this case, more conservative collateral requirements apply than for member banks;

> to manage and invest its own funds in asset classes deemed to be safe, such as loans secured by liens on real property up to 2/3 of the fair market value (‘Verkehrswert’), securities eligible for repo transactions with the Swiss central bank, own Pfandbriefe, and in office buildings for own use;

> to conduct any short-term banking activity to support the activities listed above.

Pfandbriefe issued by PBB and PBZ are direct unconditional obligations of the respective institution. PBB and PBZ use the proceeds raised through Pfandbrief issuance and pass them on by extending loans to their member banks (and non-member banks). In return, PBB and PBZ receive a lien on eligible cover assets – equivalent to mortgages on real estate originated in Switzerland – which remain on the balance sheet of the member banks. In turn, the mortgage loan granted by the member banks to the mortgagee is secured by property collateral (Chart 3).\(^6\)

\(^6\) The mortgage extended to the mortgagee by a member bank generally does not reflect the same terms and conditions as the loans extended to the member bank by PBB or PBZ. Likewise, the PBB and PBZ define the maximum loan to value ratio for eligible mortgage loans that can be refinanced with Pfandbriefe. These LTVs are not required to match the LTVs granted by the member bank to the mortgagee.
There is a direct link between the loans extended to the member banks and the Pfandbriefe issued by PBB and PBZ. First, Pfandbriefe are issued in series and must exhibit the same repayment and tenor profile as the particular loan series (PfG Art. 12 Abs. 1). Second, member banks can prepay a loan series to PBB or PBZ. They must buy back in the market and surrender to the issuer the underlying Pfandbriefe corresponding to the particular loan series and refund unamortized issue cost. However, in the unlikely event of issuer insolvency, Pfandbriefholders have a direct priority claim on the entire universe of registered cover assets ranking pari passu among themselves (PfG, Art. 29) (page 6).

Finally, the PfG restricts the total Pfandbrief issuance volume of each institution, in that the total amount of outstanding liabilities (including Pfandbriefe) cannot exceed 50x the issuer’s own funds (‘circulation limit’) (PfG, Art. 10).

### III. COVER ASSETS

The PfG defines as eligible cover assets mortgages on any kind of real property and land, excluding property whose value would diminish with exploitation (e.g., mines, quarries). Pfandbriefe secured on such eligible assets also qualify as cover (PfG Art. 19, Art. 36). Asset-backed or mortgage-backed securities do not qualify as cover assets, nor do public sector assets. Hence, public sector Pfandbriefe do not exist in Switzerland.

The organisational rules of the issuers require that member banks replace nonperforming cover assets with performing ones (PBB-REG, Art. 15, PBZ-REG, Art. 25).

### Derivative contracts

The law does not provide for the use of derivatives in the cover pool to hedge interest and/or currency risk, but this is not required in any case. Pfandbriefe are issued in individual series that must match

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7 According to the organisational rules of PBZ and PBB, member banks can only prepay their loans at a coupon date and must give the issuers three months’ prior notice.
the tenor and repayment profile of the loans to member banks they refinance, eliminating interest rate risk for PBB and PBZ. Currency risk does not exist either, as both the loans to member banks and the Pfandbriefe are issued in CHF.

**Substitute assets**

The PfG allows the use of substitute assets, which are defined as cash or marketable securities of the Swiss central government (‘Eidgenossen’), regional governments (cantons) or municipalities. Marketable securities must be valued at 95% of their actual quoted price (PfG, Art. 25). There is no explicit limit with regard to the use of substitute assets, though the organisational rules of both issuers stipulate that they can be used only temporarily.

**IV. VALUATION AND LTV CRITERIA**

The PfG defines valuation principles for real estate that acts as mortgage collateral (PfG, Art. 32 to 36), which must be implemented as valuation regulations by the issuers and be approved by the ‘Bundesrat’. The valuation must assess the fair market value (‘Verkehrswert’), taking into account only permanent features of the real estate. In the case of real estate for agricultural or forestry use, the valuation must be based on the average profitability of the property (‘durchschnittlicher Ertragswert’) (PfG, Art 33). The Swiss valuation concepts are conservative in a European context; valuation must be carried out by the member banks systematically and periodically, applying uniformly the respective valuation principles of the PBB or PBZ. The valuation is monitored by an independent legal auditor approved by the Finma. The Finma can ask for a reassessment of the collateral if its market value or other economic conditions have deteriorated substantially (PfG, Art. 32).

> The PfG defines the following maximum loan-to-value ratios for different mortgage types (PfG, Art. 34, 35): 5/6 of the average profitability value or, if lower, 2/3 of the fair market value on real estate for agricultural or forestry purposes;  
> 2/3 of the fair market value for all other real estate;  
> less than 2/3 of the fair market value for land ready for construction, and industrial and commercial real estate. LTVs for each asset class are defined in the valuation principles of the issuers (PfG Art. 32).

Table 1 lists in detail the LTV criteria defined by the valuation regulations of the two issuers.

<table>
<thead>
<tr>
<th>Maximum LTV limits</th>
<th>PBB/ PBZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/3</td>
<td>of the fair market value for single-family homes, apartment houses, and real estate with share of trade less than 30%</td>
</tr>
<tr>
<td>50%</td>
<td>of the fair market value for weekend and holiday houses, real estate with a trade share above 30%, and land ready for construction</td>
</tr>
<tr>
<td>1/3</td>
<td>of the fair market value for apartments in holiday resorts, apartments in trade real estate, hotels and restaurants, and other commercial real estate.</td>
</tr>
</tbody>
</table>

Source: Valuation regulations of the PBB and PBZ.
V. ASSET - LIABILITY MANAGEMENT

Cover principles
The PfG stipulates that the principal amount and interest payments of outstanding Pfandbriefe be covered at all times by an equivalent amount of loans to the respective member banks (PfG Art.14). Likewise, the loans granted by PBB or PBZ to their member banks must be collateralised by equivalent liens on eligible real property (PfG Art.19). The issuers must confirm prior to any Pfandbrief issuance that the legal cover exists (PfG Art. 9). PBB and PBZ are also entitled to grant loans to non-member banks. In this case, the law requires that non-member banks pledge eligible cover assets of at least 105% of the nominal loan value to the issuers (PfG Art. 11, Art. 26).

If the issuers or the member banks are in breach of these cover principles, they must remedy the situation by increasing the cover accordingly (PfG Art. 15, Art. 20). If eligible cover assets are not immediately available or insufficient to meet the cover principles, eligible substitute assets must be used (PfG Art. 25) on a temporary basis and replaced with ordinary cover at a later stage.8

Interest and currency risk
PfG Art. 12 eliminates interest rate risk by demanding that a particular loan series extended by PBB or PBZ to their member banks exhibit the same repayment profile (coupon and tenor) as the respective Pfandbriefe series issued to fund these loans.9 Member banks have the option to prepay their loans to PBB or PBZ on a coupon date, giving three months’ notice. The risk of negative carry for PBB or PBZ is passed on to the member banks. They must buy back an equivalent amount of the corresponding Pfandbrief series in the market, surrender the Pfandbriefe to the issuer, and refund any unamortized issue cost.

Cover assets and Pfandbriefe can be issued only in CHF, eliminating any currency risk.

Overcollateralisation
Apart from the nominal cover principles between the outstanding Pfandbriefe and member loans, both issuers have committed themselves to maintain a certain level of overcollateralisation (OC) (Table 2).

<table>
<thead>
<tr>
<th>The PfG</th>
<th>PBB</th>
<th>PBZ</th>
</tr>
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<tbody>
<tr>
<td>The principal amount and interest payments of outstanding Pfandbriefe must be covered at all times by an equivalent amount of loans to the respective member banks. Likewise, the loans granted by the institutions to their member banks must be collateralised by equivalent liens on eligible real property by the member banks against the mortgagor. Non-member banks must pledge eligible cover assets of at least 105% of the amount of member loans to the issuers.</td>
<td>Eligible cover mortgages must exceed the amount of member loans granted by PBB by 3%. The interest on cover mortgages must exceed the interest charged on member loans by 3%.</td>
<td>Eligible cover mortgages must exceed the amount of member loans granted by PBZ by 10%. The interest rate on cover mortgages must exceed the interest charged on member loans by 10%. At present, a temporary adjustment to PBZ’s OC guidelines is in place, reducing the minimum OC to 5% from 10%. This amendment must be re-approved at the end of 2010. For non-member banks, a minimum OC level of 10% applies. The OC requirement can be raised to 20% if warranted.</td>
</tr>
</tbody>
</table>

Source: PBB and PBZ-REG

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8 PBZ allows the use of substitute assets for only six months (PBZ-REG Art. 22), while the PBB requires a “possible early exchange” of substitute assets with ordinary assets (PBB-REG Art. 20).

9 PBZ-REG allows the application of an interest margin to loans extended to the member banks to cover administrative costs (PBZ-REG, Art. 16 Abs. 1). In general, non-member banks must pay an administrative fee that is higher than that for member banks.
VI. COVER POOL MONITOR AND BANKING SUPERVISION

PBB and PBZ require the authorisation of the Swiss government (‘Bundesrat’) to issue Pfandbriefe, which is linked to certain criteria (PfG Art. 2 Abs.1, Art. 2 Abs.2). The operations of PBB and PBZ fall under the supervision of the Swiss banking regulator (‘Finma’), which audits the issuers’ annual reports and the compliance of their cover registers with the PfG (PfG Art. 39 Abs.1, Art. 42). If PBB and PBZ are in breach with the PfG, and resist or oppose corrective directives of the Finma, the latter has the power to withdraw the institutions’ right to issue Pfandbriefe (PfG Art. 41).

The PfG requires that cover pools maintained by the member institutions be audited regularly, but at least once a year by external auditors approved by the Finma (PfG Art.43). The auditors must report their findings to the Finma and the respective issuers (PBB or PBZ). Moreover, PBB and PBZ receive a cover pool report by the member banks at least once a year, and have access to the details of member banks’ cover pool at any time if required (PfG Art. 24).

VII. SEGREGATION OF COVER ASSETS & INSOLVENCY

Cover register

PBB and PBZ must register eligible mortgage loans, substitute assets and related real estate collateral in a cover register (PfG Art. 16), which must be kept (physically) separate from other assets (PfG Art. 17). Likewise, the member banks are required to keep a register of eligible mortgage loans and real estate collateral pledged against these loans, and substitute assets (PfG Art. 21). The registered assets must also be kept (physically) separate from the bank’s other assets (PfG Art. 22). The PfV sets out further regulations with regard to the form and the content for the cover registers (PfV Art. 11 – 14).

In this context, PBB and PBZ are not required to register the loans granted to the member banks, as their normal balance sheet accounting is sufficient to form part of the cover pool (PfV Art. 13). PBB maintains its register electronically. This allows the issuer to monitor the pool on a daily basis and to decide proactively whether it accepts the collateral registered by the member banks.

The legal result of the registration is that outstanding claims of Pfandbriefe and loans to member banks have a direct lien on the eligible real estate collateral registered in the cover pool of the issuers (PBB/PBZ) or the member banks in the event of insolvency of the issuers or one of the member banks (PfG Art. 18, 23).

Insolvency scenarios

In the event of the insolvency of a member bank, Pfandbrief investors and the Pfandbrief issuers would have a direct priority claim on the interest and principal of the registered collateral (PfG Art. 23) (including registered overcollateralisation). The mere opening of bankruptcy proceedings cannot delay payments on mortgaged-backed claims in the cover pool (whether interest or principal) backing Pfandbriefe (BankG Art. 26, Abs. 1, h). Moreover, the Swiss banking regulator can demand the transfer of the collateral pool under its control, whereupon it would then act as fiduciary (‘Treuhänder’) (PfG Art. 40) or arrange for a sale of the cover assets to other banks. Furthermore, PBB/PBZ have a certain amount of flexibility with regard to ensuring timely payment on Pfandbriefe, even if one or several member banks default. First, the issuers collect the interest on the member loans on a semi-annual basis, while coupon payments on Pfandbriefe are annual. Second, both PBB and PBZ dispose of own funds and maintain a portfolio of

10 In the early 1990s, Spar- und Leihkasse Thun, a member bank of PBB, no longer met regulatory capital requirements and was closed by the FINMA. Cover pool mortgages were sold to other banks and the proceeds were used to amortise the loans granted by PBB.
liquid investments, providing an equity buffer for investors and ensuring sufficient liquidity to cover for the next coupon and principal of maturing Pfandbrief series.

Should a non-member bank became insolvent or ignore late-payment reminders, the PBB/ PBZ can sell the pledged collateral to amortise outstanding claims (PfG Art. 31).

The insolvency of PBB/PBZ is highly unlikely, as it would occur only if several member banks defaulted at the same time, combined with a severe deterioration of the respective registered mortgage collateral on the member bank’s balance sheet. However, in theory, the insolvency of PBB/PBZ would not trigger the acceleration of outstanding Pfandbriefe as long as the cover principles between the Pfandbriefe and mortgage collateral are met. Again, the Finma has the power to assume control of the respective cover pool and to act as fiduciary. If the cover pool were insufficient to meet all outstanding obligations, Pfandbriefe would accelerate and Pfandbrief investors would rank pari passu among themselves on the proceeds of the asset sale (PfG Art. 29).

VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The Swiss Pfandbrief law meets the requirements of UCITS Art. 22 (4). However, under the current capital regulations the Finma assigns Swiss Pfandbriefe a risk weighting of 25% (BankV Art. 12a Abs.2.5).

- Covered bonds issued by foreign OECD banks enjoy the same risk weighting as senior unsecured debt securities or interest receivables of such counterparties in Switzerland. Hence, covered bonds have a risk weighting of: 25%, with a residual maturity is ≤ 1 year
- 50% with a residual maturity > 1 year ≤ 3 years
- 75% with a residual maturity > 3 years.

Switzerland will implement Basel II into national law and modify it to account for national specifics (Basel II Finma). Switzerland will not implement the special regulatory treatment for covered bonds of the European Capital Requirement Directive (EU CRD, Annex VI Art. 65 to 68). Basel II Finma has three approaches: the Swiss standard approach, the international standard approach and the internal ratings-based approach. Under the Swiss standard approach, domestic Pfandbriefe continue to enjoy a 25% risk weighting, while under the international one they have a risk weighting of 20%. Taking into account the multiplier of 1.1, the final risk weighting will be 22% under the international approach. Basel II Finma will treat covered bonds issued by foreign banks as senior debt securities and interest receivables of bank counterparties.

The Swiss Pfandbriefe are eligible for repo transactions with the Swiss National Bank.
> **FIGURE 1: COVERED BONDS OUTSTANDING 2003-2008, €M**

![Bar chart showing covered bonds outstanding 2003-2008, €M](image)

Source: EMF/ECBC

> **FIGURE 2: COVERED BONDS ISSUANCE, 2003-2008, €M**

![Bar chart showing covered bonds issuance 2003-2008, €M](image)

Source: EMF/ECBC

**Issuers:** There are 2 active issuers in Switzerland: Pfandbriefzentrale der Schweizerischen Kantonalbanken and Pfandbriefbank Schweizerischer Hypothekarinstitute.
I. FRAMEWORK
In Turkey, the legal basis for Turkish Covered Bonds is the by-law published by the Capital Markets Board (CMB) on 4 August 2007 (Serial: III, No: 33, Mortgage Covered Bonds).

Turkish Covered Bonds are defined as “İpotek Teminatlı Menkul Kıymetler (İTMK)” or “Turkish mortgage covered bonds” and are trademarked by the legislation.

The İTMK by-law is part of a series of legislations, which follow the enactment of “The Housing Finance Law (No: 5582)” by the Parliament, which includes basic definitions and amendments to certain laws, aimed at establishing a healthy and functioning housing finance system on 6 March 2007.

II. STRUCTURE OF THE ISSUER
Banks defined in Article 3 of the Banking Law (No: 5411 dated 19/10/2005) as well as mortgage finance companies are allowed to issue İTMK. The authorisation to issue İTMK is subject to the issuance of a licence by the Capital Markets Board, which can only be achievable following the fulfilment of certain conditions. Banks and mortgage finance companies who wish to issue İTMK must provide “the office, technical facilities and organisational structure” in addition to “a risk management system that will monitor the risk that may rise due to the issuance of İTMK”.

Further, if the issuer is a bank issuer, the consent of the Banking Regulatory and Supervision Agency (BRSA) is also a pre-requisite.

Provided the above conditions are met together with supporting evidence, a licence to issue İTMK may be granted.

İTMK bonds are debt securities, which are general obligations of the issuer and secured by cover assets. The cover assets are held on the balance sheet of the issuer and a subsequent transfer of assets to another legal entity does not take place.

The issuer must apply to the CMB for registration of the İTMK before any issuance, public or private placement, can take place. Before such application, a cover monitor must have been appointed by the issuer.

III. COVER ASSETS
Eligible assets are residential and commercial mortgage loans. Assets originated or purchased by the issuers can be registered in the cover register if they meet the below criteria:

a) Granted after the Housing Finance Law (No: 5582). If originated before, should meet the criteria defined by Article 11 of the Housing Finance Law. (Assets acquired from Housing Development Administration of Turkey are excluded from this criteria)

b) All interest and principal payments have been secured by a mortgage and all obligations have been met on time.

c) The property must be located in Turkey and must possess a certificate of occupancy.
d) For the entire life of the loan, the real estate has to be fully insured against earthquakes, fire and any kind of natural hazard.

e) The value of the property must be appraised by an officially listed real estate appraisal company and be in accordance with the by-law (Serial: VIII, No: 35, Principles Regarding Appraisal Companies).

Loans that meet the above criteria may be recorded in the cover pool up to 75% of their appraised value for residential mortgage loans and up to 50% of their appraised value for commercial mortgages.

Up to 15% of the net present value of the cover pool may comprise of substitute collateral which are cash, short term debt instruments issued by the Central Bank of Turkey, public debt instruments (domestic and foreign), securities issued under treasury reimbursement guarantee (as defined in Law No: 4749 dated 28 March 2002), securities issued or guaranteed by governments or central banks of OECD countries, or any other assets that may be approved by CMB.

Derivative instruments that are publicly traded or transacted with a bank, an insurance company or central clearing agency which are rated at least investment grade by rating agencies, can be included in the cover pool up to 15% of its net present value.

IV. ASSET & LIABILITY MANAGEMENT

The issuer is expected to perform a risk management system that will measure, analyse and devise risk policies against risks such as credit risk, interest rate risk, exchange rate risk, liquidity risk, market risk as well as operational risk and counterparty risk. Further, it has to involve certain written guidelines to reduce the before mentioned risks and adapt to changing market dynamics. It should be revisited at least once a year.

In addition to the risk management system, the cover pool must also comply with certain cover matching principles. The matching principles involve:

a) Nominal Value Matching: The total volume of the İTMK must be covered at all times by assets of at least the same amount. Derivative instruments are excluded from this calculation and debt instruments are included with their face value.

b) Interest Revenue Matching: The interest revenue of the cover assets for one year following the calculation date must not be less than the interest expenditures of the İTMK.

c) Net Present Value Matching: The net present value of the cover assets must at all times be at least 2% more than the net present value of all obligations of the İTMK.

The issuer has to monitor the matching of the above criteria daily and has to carry out weekly stress tests that include the parallel shifting of yield curves of matching maturity and foreign currency values. The interest rate shifts for YTL denominated bonds is determined as 300 bps, whereas the same value is 150 bps for foreign currency denominated bonds. Further, to measure the effect of exchange rate risks on cash flows a 30% parallel shift is performed on the purchase rate of the relevant currency published by Central Bank of Turkey.

V. COVER MONITOR AND BANKING SUPERVISION

A cover monitor supervises the cover pool. The cover monitor is appointed by the issuer and must posses the expertise and experience necessary to fulfil all duties. A qualification as a certified auditor by the CMB suggests that the necessary expertise is provided.
The monitor has to ensure that the prescribed cover for the İTMK exists at all times and that the cover assets are recorded correctly in the cover register. Without the cover monitor’s approval no assets may be added to or removed from the cover pool. The monitor also ensures that the cover matching principles are met once every 15 days and submits a summary report to the issuer.

The cover monitor is required to report any inconsistencies in the cover register or failures in matching principles directly to the CMB.

S/he is also authorised to conduct a discretionary review of the cover assets, including substitute assets as well as the derivative instruments in place. Further, the cover monitor can also check the land registries of the mortgages and request any other information that may be necessary for the cover monitor’s review.

VI. HOW ARE SEGREGATION AND BANKRUPTCY REMOTENESS OF COVERED BONDS REGULATED?

A cover register held by the issuer permits the identification and segregation of the cover assets. The collateral backing the İTMK is to be registered in book and/or in electronic form.

In case the issuer fails to meet the standards to be an issuer, the CMB simultaneously appoints another authorised bank or mortgage finance corporation, cover monitor or another audit firm as the manager to pursue the best interests of the İTMK holders. Following the loss of the issuer status, the right to actively manage the cover assets, including selling and buying of assets, is transferred to the manager automatically.

Until the İTMK are completely redeemed, cover assets cannot be sequestered, including collection of public receivables, cannot be subject to injunctive decisions of courts and cannot be included in the bankruptcy estate of the issuer.

The manager may transfer all or a part of the assets recorded in the cover register to another issuer that meets the İTMK issuer criteria. Following such transfer, the ownership of the cover assets is also passed on to the new issuer who can merge the newly acquired assets with its existing cover assets. The new issuer also automatically becomes the beneficiary of any excess cash flows from the cover assets.

If the cover assets cannot be transferred to another issuer or if the cash flows from the cover assets do not suffice, the manager can allocate the residual cash to İTMK holders according to their respective shares and further request from the CMB that the İTMK be early redeemed. Should the collateral not suffice to cover all outstanding İTMK plus interest, the İTMK holders rank pari-passu with unsecured debtors of the issuer.

VII. RISK WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

İTMK comply with the requirements of Art. 22 par. 4 UCITS Directive as well as with those of the Capital Requirements Directive (CRD), Annex VI, Part 1, Paragraph 68 a) to f). Therefore, they may qualify for a beneficial treatment under the CRD.

The EU opened accession negotiations with Turkey on 3 October 2005. As a candidate for EU membership, Turkey will be obliged to be compliant with EU Directives in case of full membership. Thus, in recent years Turkish authorities were strongly aligning banking regulations to EU standards. The revised Accession Partnership of the EU with the Republic of Turkey from 18 February 2008 foresees that Turkey adapts its regulations to the CRD. The EU progress report on Turkey, published in November 2008, states that
“further efforts are needed to continue alignment with the new capital requirements for credit institutions and investment firms”.
3.27 UKRAINE

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I. FRAMEWORK
In Ukraine the legal basis for Covered Bond issuance is the Law on Mortgage Bonds, adopted on December 22nd, 2005. It supersedes certain provisions of general bankruptcy legislation (Art. 8 par. 4, art. 15 par. 1 no. 8 and other provisions of the Law on Mortgage Bonds).

In 2006 the legal basis for Covered Bonds has been complemented by several supervisory regulations of the State Securities and Capital Markets Commission. The most important is the Regulation No. 774 “On the mortgage coverage of common mortgage bonds, administration of the mortgage coverage register and the management of mortgage coverage of Covered Bonds” (the Mortgage Coverage Regulation) which was passed on 1st September 2006.

II. STRUCTURE OF THE ISSUER
The issuer may be any bank or a non-bank financial institution which is entitled to grant loans secured by mortgages or to which mortgage loan claims were transferred from another entity. Non-bank financial institutions under Ukrainian law are: credit unions, pawnshops, leasing companies, trust companies, insurance companies, pension funds, and investment funds. The issuer does not need to be a specialized bank or financial institution.

Banks and non-bank financial institutions issuing Covered Bonds may pursue all business activities which are permitted for their respective types of financial institutions. Insurers, pension funds and investment funds are restricted to granting loans (secured by mortgage), although they might acquire loans from other entities.

The only specific legal rule in relation to bank employees is set out in general banking licensing guidelines (art. 19 par. 3 Law on Banks and Banking Activities). Indirectly, the National Bank Directive (from 29.01.2004 “Methodical Directives Concerning Organization and Functioning of a Risk Management System at the Banks of Ukraine”) sets stricter rules concerning bank officials who are responsible for risk management functions. Ukrainian law does not prescribe any specific limitations for outsourcing.

The issuer holds cover assets on its balance sheet. Cover assets are not transferred to a different legal entity acting as a guarantor of Covered Bonds.

III. COVER ASSETS
Cover assets are ex lege pledged to secure performance of the issuer’s obligations to the Covered Bondholders. Other creditors of the issuer are not allowed to extend claims against covered assets, to impose seizures or otherwise encumber covered assets, unless the claims of mortgage bond holders have been satisfied in full. The issuer may not alienate cover assets as long as there are no legal grounds for replacement of cover assets (such grounds are: revealed nonconformity of individual assets with the quality requirements of the law; initiation of the foreclosure on mortgage property or early termination of the mortgage; more than a three-month payment delay by the debtor; and bankruptcy of the debtor). In case of insolvency of the issuer the cover pool is excluded from the general insolvency estate of the issuer and continues to serve as a pledge for the performance of the issuer’s obligations to the bond holders.
For every issue of Covered Bonds a separate cover pool must be formed.

In accordance with the Law on Mortgage Bonds, mortgage assets may be included in the mortgage coverage under the following conditions:

1) Mortgage assets are owned by the issuer and can be alienated in case of non-performance of obligations under mortgage bonds;

2) Debtor obligations secured by mortgages are subject to performance in monetary form;

3) Data that the issuer is a mortgagee under a corresponding mortgage agreement and is duly registered in respective state register in the manner prescribed by legislation;

4) Mortgage assets are not pledged or encumbered in any other manner to secure issuer’s obligations other than its obligations under mortgage bonds;

5) There was no decision of foreclosure or bankruptcy procedure regarding the debtor of the respective mortgage or credit agreement;

6) Respective mortgage agreement does not provide for possibility to replace or alienate mortgaged property by a mortgagor without consent of a mortgagee;

7) Mortgaged property is located on the territory of Ukraine and is insured for its overall value against risks of accidental destruction, accidental damage or spoiling;

8) Mortgage assets are not included in the composition of mortgage coverage of another issue of mortgage securities, unless otherwise provided by this Law;

9) The ratio of the initial principal obligation secured by mortgage does not exceed 75 percent of the appraised value of the subject of mortgage;

10) The debtor obligation is not secured by a subsequent mortgage;

11) Mortgage assets comply with the other requirements provided by the Law.

Derivatives may not be included into the cover pool. However the Law on Mortgage Bonds provides for use of the agreements on preservation of real value (now derivative contracts) – agreements intended to reduce credit, currency and interest rate risks associated with the bonds, or to management of the flow of receivables of the mortgage coverage, including without limitation swaps, options, future and forward contracts and equivalent financial instruments. Use of derivative contracts is a complex issue which may be further regulated by the National Bank and Securities Commission to assure the safety of the bonds.

The issuer forms a separate cover pool for each issue. Only in certain cases new mortgage assets may be added to the cover. In accordance with the article 13 of the Mortgage Bonds Act, if during the period of maturity of common mortgage bonds the mortgage coverage correlation exceeds figures prescribed herein, the issuer shall be obliged to include new mortgage assets in composition of mortgage coverage in order to comply with mortgage coverage correlation provided by law.

Due to article 14 of the mentioned Act, individual mortgage assets shall be excluded from the composition of mortgage coverage of common mortgage bonds only in connection with their replacement. Replacement of individual or inclusion of new mortgage assets in the composition of mortgage coverage shall be carried out in the following cases:

1) nonconformity of individual mortgage assets in the composition of mortgage coverage to requirements set by the law or in prospectus;
2) initiation of foreclosure on mortgaged property or early termination of mortgage for any other reasons;
3) more than a three-month delay of payments by a debtor under an obligation secured by mortgage;
4) bankruptcy proceedings are taken against a debtor under a mortgage asset;
5) exceeding of mortgage coverage correlation prescribed by Article 13 herein;
6) addition of mortgage assets to the mortgage coverage in connection with issuance of new bonds secured by a common mortgage coverage or as required to observe the balance principles.

The explicit transparency requirements regarding cover assets are provided by article 28 of the Law on Mortgage Bonds “Publication and Disclosure of Mortgage Bond Information”. Issuers, who have placed mortgage bonds, shall be obliged to publish and disclose complete information on the financial and economic position and results of their activity; any legal facts (deeds and/or events) that may affect performance of obligations under mortgage bonds; correspondence of the state of mortgage coverage to requirements of the Law. Time limits, manner and form of such disclosure is prescribed by the Regulation of the State Securities and Capital Markets Commission No. 1591 “On disclosure of information by the issuers of securities” adopted on 19th December 2006. This Regulation provides for the duty of Covered Bond issuers to disclose the ad-hoc information (e. g. changes in the cover pool, replacement of the cover pool manager, acceleration of the Covered Bonds) as well as regular information on the cover pool on the quarter-year basis.

IV. VALUATION AND LTV CRITERIA

Property valuation shall be conducted by the certified natural persons or legal entities under the Property Evaluation Act. The National standards of valuation of immovable property approved by the Cabinet of Ministers provides for a valuation of immovable property based on market value.

In the meantime no regular property value monitoring is provided by the legislation of Ukraine.

In accordance with the Article 8 of the Mortgage Bonds Act the ratio of the nominal principal amount of the mortgage asset to the appraised market value of the mortgaged property, determined by the certified valuer is 75%, while article 13 of the said Act establish this ratio in amount of 60% for nonresidential property.

V. ASSET - LIABILITY MANAGEMENT

Art. 13 par. 3 no. 2 Law on Common Bonds stipulates, that the average weighted interest of the Covered Bonds must exceed the average weighted interest of the mortgage assets. No. 3 of this paragraph prescribes, that the size of the periodical payments against interest receivables from the cover assets must be identical to the size of the issuer’s payments against interest receivables on Covered Bonds. The Mortgage Coverage Regulation on the cover pool of Covered Bonds specifies these rules as follows:

> The average weighted interest rate of the cover assets must exceed the average weighted interest rate of the Covered Bonds. This criterion may, however, be disregarded, if the market situation after the issue of Covered Bonds does not allow to comply with it, always provided that the interest yield of the cover assets exceeds the interest yield of the Covered Bonds;
> The interest yield of the cover assets must exceed the interest yield of the Covered Bonds.
Additionally, the Law provides for a duration test: the average weighted duration of the cover assets must exceed the duration of the Covered Bonds. According to the Mortgage Coverage Regulation, only the contractual (and not the factual) duration of the assets must be taken into account.

VI. COVER POOL MONITOR AND BANKING SUPERVISION

During the period of maturity of mortgage bonds, the issuer shall be obliged to ensure audits of the mortgage coverage at his own cost.

The external audits shall be conducted annually. Unscheduled audits may be conducted on demand of the manager or the Securities and Stock Market State Commission.

VII. HOW ARE SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS REGULATED?

In accordance with the Article 10 of Law on Mortgage bonds the cover assets are identified by the cover register. A register of mortgage coverage is defined as information on each mortgage asset in mortgage coverage. The register of mortgage coverage must contain information on the initial and current value of mortgage coverage, its composition, as well as the following data on each mortgage asset:

1) details of the mortgage and credit agreement and name of the borrower;
2) original principal amount and interest rate on the debt;
3) outstanding principal amount;
4) maturity;
5) description of mortgaged property sufficient for identification of the latter, information on state registration of mortgage (date and number);
6) appraised value of mortgaged property under the mortgage agreement;
7) LTV as of the date of mortgage agreement conclusion;
8) other data according to prospectus.

The register of mortgage coverage shall include a description of substitute assets, included in the mortgage cover and the derivative contracts.

According to art. 8 of the Law on Mortgage Bonds, mortgage coverage of mortgage bonds shall be deemed to be pledged to secure performance of obligations of an issuer/pledger to holders of mortgage bonds/pledge. Pledge of mortgage and other assets entered into the register of mortgage coverage arises according to the Law from the moment of inclusion of mortgage assets into the register.

Each issue of a Covered Bonds has to be registered with the Securities and Stock Market State Commission. In order to register an issue of mortgage bonds, a mortgage coverage register shall be submitted. Extracts from the register of mortgage coverage shall be submitted to the Securities and Stock Market State Commission within the time limit and according to the form prescribed by the Securities and Stock Market State Commission. Thus without the register, an issue would not be valid.

Asset segregation

Segregation of the assets is accomplished by separate accounting for the mortgage coverage. For issuers-banks, mortgage coverage and transactions with it shall be recorded by the issuer separately in the
manner prescribed by the National Bank of Ukraine, and for issuers that are non-banks – by a specially authorized executive body in the area of regulation of financial services markets.

Mortgage coverage shall not be included in insolvency’s estate of the issuer. The issuer shall not be entitled to alienate, pledge, or otherwise encumber mortgage and other assets included in the composition mortgage coverage unless a decision on replacement of respective mortgage assets is taken pursuing to this Law. The issuer shall not be entitled to dispose of mortgage coverage otherwise than to perform obligations under respective issue of mortgage bonds.

**Impact of insolvency proceedings on Covered Bonds and derivatives**

According to the provisions of the Law and the Mortgage Coverage Regulation there are two possible scenarios in case of insolvency of the issuer:

1) the mortgage coverage manager assumes the servicing of the mortgage coverage or transfers it to another servicer of its choice. In this case the bondholders continue to receive payments according to the terms of the Covered Bonds;

2) the mortgage coverage manager alienates the mortgage coverage and prepays the Covered Bonds. This leads to an acceleration of the Covered Bonds.

Further details may be regulated in the prospectus (terms of the Covered Bonds). It may be stipulated in the terms of the Covered Bonds that the general assembly of the bondholders shall decide which of the scenarios is to be chosen.

**Preferential treatment of Covered Bond holders**

The Covered Bond holders have the right to demand early repayment of the Covered Bonds in case of the insolvency of the issuer (art. 17 par. 1 no. 2, par. 2 Law on Covered Bonds). They may exercise this right only through the monitor, who is also competent to decide whether to sell the cover pool or to leave it on the balance sheet of the issuer.

Cover assets are legally separated from the insolvency estate of the issuer. First of all, Covered Bond holders shall be fully satisfied out of the cover assets. Only the remaining assets may be returned to the issuer (art. 11 par. 3 Law on Covered Bonds).

The Covered Bond holders may seek satisfaction not only from the cover assets, but also from the other assets of the issuer, if the cover assets are not sufficient to satisfy them (art. 17 par. 2 no. 4 Law on Covered Bonds).

**Access to liquidity in case of insolvency**

There are no specific regulations in the Law concerning access to liquidity in case of insolvency. Generally, a certain level of liquidity is guaranteed by the relatively high mandatory over-collateralization (10%) which may be held in liquid assets (cash, state securities).

**Sale and transfer of mortgage assets to other issuers**

Art. 11 Law on Covered Bonds stipulates that the execution into the cover pool may be levied through selling of the cover pool or in another way not prohibited by the law. The monitor gains the right to sell the cover assets in case of insolvency or an essential violation of the duties of the issuer; then, the monitor has to satisfy the cover bond holders out of the proceeds. It is important to note, that the selling of the cover assets to another bank or financial institution does not transfer the issuer’s liabilities out
of the Covered Bonds. The selling of the cover pool is effected in accordance with the general civil law rules (cession or transfer of collateral note).

VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION

The National Bank of Ukraine ruling on risk-weighting does not contain any specific provisions concerning Covered Bonds so far. According to a general provision debt securities of other credit institutions are 100%-risk-weighted.

The Ukrainian Covered Bonds fulfill the criteria of Paragraph 68 (d) and (e) of the Annex VI, Part 1, of the Capital Requirements Directive (CRD). The criteria of UCITS 22 (4) are fulfilled with the exception of the creation by the Ukrainian Banks of their registered office in a Member State of the European Union.
Figure 1: Covered Bonds Outstanding 2003-2008, €m

Figure 2: Covered Bonds Issuance, 2003-2008, €m

Source: EMF/ECBC

Note: The €6.83m covered bonds issued in 2008 were subsequently withdrawn in February 2009.

Issuers: There are two issuers in Ukraine: Bank Khrestschatyk and Ukrgazbank.
As of 30 June 2009, there were 26 covered bond programmes in the United Kingdom. Of these, eight were subject to the Regulated Covered Bonds Regulations 2008 (the Regulations). All Regulated Covered Bonds are backed by prime UK residential mortgages.

Unregulated UK covered bonds are structurally similar to Regulated Covered Bonds, but are governed entirely by general law and contract and are not subject to special public supervision. Of the 18 unregulated programmes, 16 are backed by UK residential mortgages.

This chapter summarises the principal features of Regulated Covered Bonds (covered bonds issued under the UK legislation), together with the two unregulated programmes which are not backed by residential mortgages: the BOS Social Housing programme and the Anglo Irish Bank Corporation plc programme.

A. REGULATED COVERED BONDS

I. FRAMEWORK

The UK Regulations came into force on 6 March 2008. Under the Regulations, in order to attain “regulated status” there are two broad sets of requirements, those relating to issuers and those relating to the covered bonds. Issuers are permitted (but are not required) to submit their covered bond programmes to the UK Financial Services Authority (the FSA) for recognition. The application process is comprehensive, as described in Section VI below. Those issuers and covered bonds that meet all of the criteria set out in the Regulations are added to the register of Regulated Covered Bonds maintained by the FSA. The Regulations only apply to those covered bonds which have been admitted to the register, the issuers of which as at 30 June 2009 are: Abbey National Treasury Services plc, Alliance & Leicester plc, Barclays Bank plc, Bank of Scotland plc (residential mortgage programme), HSBC Bank plc, Leeds Building Society, Nationwide Building Society and Yorkshire Building Society.

Regulated Covered Bonds are subject to special public supervision by the FSA. The FSA is required to have regard to “the need to preserve investor confidence in, and the desirability of maintaining the good reputation of, the Regulated Covered Bond sector in the United Kingdom ...” in the exercise of its functions under the Regulations. Regulated Covered Bonds comply with the requirements of Article 22(4) of the EU Directive on Undertakings for Collective Investment in Transferable Securities (the UCITS Directive). At time of writing, all Regulated Covered Bonds also comply with the definition of covered bonds set out in the EU Capital Requirements Directive (Directive 2006/48/EC, referred to as the CRD).

Certain elements of the Regulated Covered Bond structure are governed by contract: for example, the cover assets are ring-fenced by means of a “true sale” to a special purpose entity and several cover pool collateral sufficiency tests are set out in the programme documents. However, the FSA has a veto over material amendments to the contracts and broad powers to enforce their provisions. In addition, the priority of claims against the cover pool in a winding up scenario is as set out in the Regulations—no counterparty may have any claim against the cover pool in priority to bondholders, regardless of what is set out in the contracts.

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1 The register may be found at http://www.fsa.gov.uk/Pages/Register/rcb_register/index.shtml
II. STRUCTURE OF THE ISSUER

The Regulations require the issuer to be a credit institution authorised in the UK to carry out regulated activities, such as deposit-taking. It must also have a registered office in the UK and meet certain additional requirements set by the FSA. The Regulations do not place any additional restrictions on the business activities of the issuer beyond those set out in existing financial institution regulations.

Regulated Covered Bonds are direct, unconditional obligations of the issuer; however investors also have a priority claim over a pool of cover assets in the event of the insolvency or default by the issuer. The Regulations require all cover assets (including any substitution assets) to be segregated from the insolvency estate of the issuer by being sold to a special purpose entity (referred to in the Regulations as the “owner”) which guarantees the issuer’s obligations under the bonds. All transactions to date have used a limited liability partnership (LLP) for this purpose. The purchase price paid by the LLP for the cover assets is either cash (funded by an inter-company loan from the issuer) or a partnership interest in the LLP. The transfer of mortgages to the LLP is by way of ‘silent’ assignment; however, the mortgage borrowers must be notified of the assignment (which perfects legal title in favour of the LLP) following the occurrence of certain trigger events, such as the downgrade of the issuer below investment grade (if the issuer is a bank) or an issuer insolvency event (if the issuer is a building society).

The LLP guarantees the issuer’s obligations in respect of the covered bonds and provides security over the cover assets to a security trustee on behalf of the investors. If there is a call on the guarantee (see Section VII below), the LLP will use the natural cash flows from the cover pool (e.g. payments of interest and principal from the mortgage borrowers, after taking account of any swap payments) to service the covered bonds. If these cashflows are insufficient, the LLP is permitted to sell cover assets, subject to meeting certain tests to ensure equality of treatment of bondholders. There is no direct legal link between the mortgages and the covered bonds.

III. COVER ASSETS

The Regulations allow those assets which are listed in Annex VI, Part 1, Section 12, Paragraph 68 a) to f) of the CRD to be permitted in the cover pool, subject to the following restrictions:

- deposits and other exposures to credit institutions with ratings below Credit Quality Step 1 (AA-) are not permitted; and
- in order to ensure transparency to the end investor, RMBS and CMBS are only allowed in the cover pool if (i) the underlying mortgages were originated or acquired by the issuer or one of its affiliates, (ii) they are rated AAA, and (iii) in the case of mortgages originated by an affiliate, the affiliate is a credit institution with a registered office in the UK.

The Regulations also allow certain assets which are not permitted under the CRD: loans to registered social landlords and loans to public-private partnerships (subject in each case to certain restrictions).

The Regulations require cover assets to be of high quality, and the FSA is permitted to reject any application for Regulated status if it believes that the quality of the proposed assets will be detrimental.
to the interests of investors in Regulated Covered Bonds or the good reputation of the Regulated Covered Bonds sector in the United Kingdom.

Cover assets must be situated in EEA states, Switzerland, the US, Japan, Canada, Australia, New Zealand, the Channel Islands or the Isle of Man. If an issuer includes non-UK assets in its cover pool, it must get confirmation that the laws of the relevant jurisdiction would not adversely affect the rights of the LLP or the security trustee.

In all of the programmes that have to date been registered, the cover pools consist of assets with narrower eligibility criteria than those allowed required under the Regulations, and comprise only UK residential mortgages and the substitution assets described below. Mortgage LTV criteria are as described in Section IV below.

Substitution assets can be included in the cover pool. In most programmes their aggregate value can make up to 10% of cover assets, although HSBC has explicitly linked its substitution asset limits to those set out in the CRD and the Regulations (whichever is more strict). In all programmes, substitution assets are limited to short-term investments in sterling, namely bank deposits and debt securities with a minimum rating of double-A minus or P-1/A-1+/F1+, triple-A rated RMBS and government debt, in each case subject to the restrictions described above.

IV. VALUATION AND LTV CRITERIA

The properties securing the mortgage loans are valued using UK mortgage market accepted practice. A surveyor is often used, although other methods (such as desktop valuations) are also accepted depending on the issuer’s underwriting criteria. Residential property values are indexed to either the Halifax or Nationwide real estate price index, each of which reports quarterly on a region-by-region basis. Price decreases are fully reflected in the revaluation, while in the case of price increases a haircut (15% in all programmes) is applied.

The LTV limit for mortgages varies across the different programmes (see Figure 1), but in all existing programmes it is below the 80% level for residential mortgages stipulated by the CRD and the Regulations. It is important to note that loans above the LTV limit are included in the pool, but the amount of the loan which exceeds the LTV limit is excluded from the Asset Coverage Test (see Section V below). Loans which are in arrears are either repurchased by the issuer or subject to specific haircuts (see Figure 1).

V. ASSET - LIABILITY MANAGEMENT

The Regulations do not prescribe a minimum level of overcollateralisation (OC). Instead, they require the cover pool to be capable of covering all claims attaching to the bonds at all relevant times. The minimum OC level for any programme is considered by the FSA on a case by case basis, taking into account the quality of the cover assets, risk-mitigation measures such as swaps and downgrade triggers, asset-liability mismatches, and so on. The FSA has the power to order the issuer to transfer additional assets to its cover pool if it believes the collateral in the pool is insufficient.

Issuers must also carry out a dynamic Asset Coverage Test (ACT) on a monthly basis to ensure that minimum OC requirements are satisfied. The ACT requires the principal balance of the mortgages in the cover pool (after applying the haircuts listed below) to equal or exceed the principal amount of covered bonds then outstanding. The following haircuts are applied:
The issuer only gets credit for mortgages up to the indexed LTV limit specified in the programme documents (see Section IV above) or the asset percentage of the mortgages, whichever is lower. The LTV limit for performing mortgages is between 60-75%; for non-performing mortgages (i.e., >three months in arrears) it is between 0% and 40%, depending on the programme. The asset percentage is determined from time to time by the rating agencies in accordance with a quarterly WAFF / WALS test, subject to a ‘base’, or maximum, asset percentage set out in the programme documents. Figure 1 below sets out the LTV limits, maximum asset percentage and current asset percentage (and the minimum levels of OC that these imply) for each Regulated Covered Bond programme.

Additional haircuts are applied to mitigate set-off risk, redraw risk on flexible mortgages, and potential negative carry.

The issuer is required to rectify any breach of the ACT by the next calculation date by transferring additional cover assets to the LLP. If the breach is not rectified by the following calculation date, the trustee will serve a notice to pay on the LLP. This will require the LLP to pay interest and principal on the covered bonds as originally scheduled under the guarantee, as described further in Section VII below. The issuer may also become liable to enforcement action by the FSA.

An amortisation test is run on each calculation date after the delivery of a notice to pay (see Section VII below). It is designed to ensure that the cover pool will be sufficient to enable the LLP to make payments under the covered bonds on their originally scheduled payment dates as required under the guarantee. The amortisation test is similar to the ACT, but requires a lower level of OC to reflect the fact that the cover pool is being wound down. If the test is failed, the covered bonds will accelerate against the LLP, as described further in Section VII below.

The LLP is required under the programme documents to enter into swaps with suitably-rated counterparties (in public deals, typically A-1+/P-1 for currency swaps and A-1/P-1 for interest swaps) at the time each covered bond is issued to fully hedge any mismatches between the currencies and interest rates of the bonds and the cover assets. In addition, downgrade triggers for swap counterparties, the pre-maturity test, the ACT, maturity extension rules and the amortisation test all ensure cash-flow adequacy.

Most UK covered bond transactions have a soft-bullet maturity. Following the service of a notice to pay, the legal final maturity may be extended, typically by 12 months, in order to allow the realisation of the cover assets. It is important to note that the issuer does not have the option to extend the bond’s maturity; failure by the issuer to repay the bond in full on the originally-scheduled maturity date is an event of default.

In some programmes, a pre-maturity test is designed to ensure that the LLP has sufficient cash available to repay the bonds, in full, on the original maturity date in the event of the issuer’s insolvency. If, in a specified period before a maturity date (6-12 months, depending on the issuer and the rating agency),

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2 For example: Let us assume a cover pool which contains two loans. Each loan has a principal balance of £80 and is secured by a property worth £100. If the ACT applies an LTV cap of 75% and an asset percentage of 90%, the issuer will get credit for £144 of loans: applying the LTV cap would allow £150 (maximum 75% LTV for each loan); but the asset percentage allows a lower amount (£160 x 90% = £144) and therefore governs.

3 WAFF = weighted average frequency of foreclosure; WALS = weighted average loss severity

4 Some programmes also allow the issue of bonds which become pass-through (i.e., principal repayments by mortgage borrowers are passed along to the covered bondholders) if the issuer fails to repay the bond on its scheduled maturity date, however no bonds in this format have been publicly issued.

5 Within the HSBC and Nationwide programmes, only covered bonds which are issued as “hard bullet Covered Bonds” are subject to the pre-maturity test. The programme also allows for the issue of bonds with a 12 month maturity extension.

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the issuer’s ratings fall below certain specified triggers (typically A-1+ / P-1 / F1+), the pre-maturity test requires the LLP to cash-collateralise its potential obligations under the guarantee. The LLP can raise this cash through contributions from the issuer or by selling randomly-selected loans.

All Regulated Covered Bond programmes include a number of other safeguards. In particular, there are minimum rating requirements for the various third parties that support the transaction, including the swap counterparties and cash managers, and independent audits of the cash manager’s calculations are undertaken on a regular basis.

If the issuer’s short-term ratings are downgraded below A-1+ (S&P), P-1 (Moody’s) or F1+ (Fitch), the LLP is required to establish and maintain, from the income it receives from the cover assets, a reserve fund in an amount sufficient to meet the next interest payment on each series of covered bonds. This amount is retained in a GIC account. If a notice to pay is delivered, the LLP can use the reserve fund to meet its obligations under the guarantee.

VI. COVER POOL MONITOR AND BANKING SUPERVISION

An applicant under the Regulations must be a credit institution authorised in the UK to carry out regulated activities, such as deposit-taking. Issuers must satisfy the FSA that their programmes comply with the criteria set out in the Regulations and provide, amongst other things:

- details concerning the programme structure, such as the cover pool eligibility criteria, the formulae used to calculate compliance with minimum OC requirements and ratings triggers;
- details concerning asset and liability management, audit and controls;
- arrangements for the replacement of key counterparties;
- cover pool data; and
- legal and audit opinions.

The issuer is responsible for monthly cover pool monitoring, however the ACT calculation is checked by an independent auditor on an annual basis. The FSA must be notified by the issuer of any breaches of the ACT, and may also require the issuer to provide such additional information about the cover pool as it considers fit. Finally, rating agencies are heavily involved in the programme and need to re-affirm the ratings of the programme as a condition to each issuance.

VII. HOW ARE SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS REGULATED?

The Regulations require all cover assets (including any substitution assets) to be segregated from the insolvency estate of the issuer by being transferred to a special purpose entity (referred to as the “owner” in the Regulations) which guarantees the issuer’s obligations under the bonds. All transactions to date have used an LLP for this purpose. All cover pool hedges are entered into directly by the LLP.

The Regulations require that the cover assets be recorded on a register maintained by or on behalf of the issuer and the LLP. The register must be available for inspection by the FSA. The issuer is responsible for ensuring that all cover assets meet the relevant eligibility criteria set out in the Regulations and, if applicable, any additional criteria set out in the programme documents.
The LLP becomes obligated to pay the covered bondholders under the guarantee upon delivery by the bond trustee of a **notice to pay** following the occurrence of an issuer event of default or other trigger event. The events which can trigger a notice to pay include:

- Failure by the issuer or any group guarantors to pay any interest or principal on the covered bonds when due;
- Bankruptcy or similar proceedings involving the issuer or any group guarantors;
- Failure to rectify any breach of the asset coverage test; and
- Failure to rectify any breach of the pre-maturity test (if applicable).

The delivery of a notice to pay does not accelerate payments by the LLP. To the extent that an issuer event of default has occurred, the bond trustee may commence proceedings against the issuer and any group guarantors on an unsecured basis on behalf of the covered bondholders. Nevertheless, for so long as an LLP acceleration event has not occurred (as described below), the LLP will only be required to make the originally scheduled payments of interest and principal on the covered bonds.

**LLP acceleration events** include:

- The LLP fails to pay any interest or principal when due under the guarantee;
- Bankruptcy or similar proceedings are commenced involving the LLP; and
- After delivery of a notice to pay, the LLP breaches the “amortisation test”.

The occurrence of an LLP acceleration event causes the acceleration of payments by the LLP to covered bondholders and the redemption of the bonds at the relevant early redemption amount.

The LLP is reliant on the proceeds derived from the cover assets to make payments under the guarantee. Under the Regulations, in a winding up scenario, no claims against the cover assets can rank ahead of the Regulated Covered Bondholders. If the proceeds from the cover pool are insufficient to meet the obligations to bondholders in full, investors will continue to have an unsecured claim against the issuer and any group guarantors for the shortfall.

**VIII. RISK-WEIGHTING & COMPLIANCE WITH EUROPEAN LEGISLATION**

The list of eligible assets under the Regulations is in some respects narrower than that set out in the CRD. Residential mortgage backed securities, for example, are severely restricted. However, certain assets which are excluded from the CRD – such as loans to UK housing associations – are permitted in the cover pool under the Regulations. Therefore, some Regulated Covered Bonds may not qualify for preferential risk weightings in the hands of regulated investors. To date, however, all Regulated Covered Bonds are CRD compliant and therefore benefit from the same preferential treatment as covered bonds from other EU jurisdictions.
**Figure 1: Overview – UK Regulated Covered Bond Programmes (as at 30 June 2009)**

<table>
<thead>
<tr>
<th>Programme Size</th>
<th>Abbey National</th>
<th>Alliance &amp; Leicester</th>
<th>Barclays</th>
<th>BOS</th>
<th>HSBC</th>
<th>Leeds</th>
<th>Nationwide</th>
<th>Yorkshire</th>
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</thead>
<tbody>
<tr>
<td>€25bn</td>
<td>€10bn</td>
<td>€35bn</td>
<td>€60bn</td>
<td>€25bn</td>
<td>€7bn</td>
<td>€45bn</td>
<td>€7.5bn</td>
<td></td>
</tr>
<tr>
<td>LTV cap for performing mortgages</td>
<td>75%</td>
<td>75%</td>
<td>75%</td>
<td>60%</td>
<td>75%</td>
<td>75%</td>
<td>75%</td>
<td>75%</td>
</tr>
<tr>
<td>LTV cap for non-performing mortgages</td>
<td>25% or 40%*</td>
<td>25% or 40%*</td>
<td>25% or 40%*</td>
<td>0%</td>
<td>25% or 40%*</td>
<td>25% or 40%*</td>
<td>25% or 40%*</td>
<td>25% or 40%*</td>
</tr>
<tr>
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<td>Halifax</td>
<td>Halifax</td>
<td>Halifax</td>
<td>Halifax</td>
<td>Halifax</td>
<td>Nationwide</td>
<td>Avg. of Halifax &amp; Nationwide</td>
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<tr>
<td>Contractual maximum asset percentage</td>
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<td>91.0%</td>
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<td>92.5%</td>
<td>93.5%</td>
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<td>93.5%</td>
</tr>
<tr>
<td>Contractual minimum OC**</td>
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<td>109.9%</td>
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<td>108.1%</td>
<td>108.1%</td>
<td>107%</td>
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<tr>
<td>Current asset percentage</td>
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</tr>
<tr>
<td>Current minimum OC**</td>
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<td>109.3%</td>
<td>111.1%</td>
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<td>121.5%</td>
<td>107.5%</td>
<td>119.5%</td>
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<td>Hard bullet</td>
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<td>No; 12 month maturity extension</td>
<td>Yes; pre-maturity test</td>
<td>Yes; pre-maturity test</td>
<td>Yes; pre-maturity test***</td>
<td>No; 12 month maturity extension</td>
<td>Yes; pre-maturity test***</td>
<td>No; 12 month maturity extension</td>
</tr>
<tr>
<td>Asset monitor</td>
<td>D &amp; T</td>
<td>D &amp; T</td>
<td>PWC</td>
<td>KPMG</td>
<td>KPMG</td>
<td>D &amp; T</td>
<td>PWC</td>
<td>KPMG</td>
</tr>
</tbody>
</table>

Notes: *25% for mortgages above 75% LTV; 40% for those below 75% LTV. **Contractual minimum OC = 1 ÷ contractual maximum asset percentage; current minimum OC = 1 ÷ current asset percentage. Further OC must also be held to address set-off, negative carry and other risks. ***For designated series only. Other series are subject to a 12 month maturity extension.

**B. BOS Social Housing Covered Bond Programme**

In 2004, BOS established a £3 billion equivalent Covered Bond programme backed by loans to multiple UK housing associations (registered social landlords). All loans are secured by mortgages on residential properties. The cashflows that housing associations use to service the loans largely derive from the payments of housing benefit that they receive from the central government, as well as capital grants. This programme is eligible for recognition under the Regulations, although it would not qualify for preferential risk weights under the CRD.

The cover assets are transferred to the LLP by way of “silent assignment”. Each new loan sold to the LLP is subject to a minimum loan asset cover covenant of 100% (subject to the weighted average loan asset cover covenant in the cover pool being no lower than 110%). Property values are calculated assuming either sale of the portfolio to another social landlord or the sale of the portfolio to a commercial landlord.
The former basis of valuation is generally expected to be substantially lower than the open market value of the property, due to the voluntary control on rents imposed by the Tenant Services Authority as regulator.

The ACT gives zero credit to loans which are in arrears for more than two months. Maturities (for the bonds already issued) are extendable by up to two years in the event of the issuer’s insolvency to allow the LLP to liquidate the cover assets.

To date, £2.9bn of bonds have been issued off the programme, which is rated AAA/Aaa by S&P and Moody’s.

**C. ANGLO IRISH BANK CORPORATION LTD COVERED BOND PROGRAMME**

Anglo Irish Bank Corporation Ltd operates a covered bond issuance programme through its UK branch. This programme falls outside of the scope of the UK RCB legislation by virtue of the fact that Anglo Irish Bank does not have its registered office in the UK; the programme structure and collateral would otherwise have been eligible to be considered for recognition.

Collateral for the Anglo Irish UK Covered Bond Programme consists of a pool of UK commercial mortgage loans originated by Anglo Irish or a member of its group. The loans are transferred to the LLP by means of a declaration of trust. The legal title of the mortgage loans remains with the originator and the LLP is entitled to act in the name of the originator to enforce the mortgage loans in a stress scenario.

The programme limits loans to 60% LTV for the purposes of the ACT and there is an additional requirement that the weighted average original LTV of the portfolio must not exceed 80%. Property values are not indexed, however if Anglo Irish’s ratings fall below A3 (Moody’s) they must be revalued annually or semi-annually. The minimum level of overcollateralisation is 117%. The maximum loan size is £150m and the maximum single tenant exposure must not exceed 5% of the total cover pool. Substitution assets are permitted, subject to a cap of 15% of the cover pool. There is no reserve fund requirement. Maturities are extendable by up to 18 months in the event of the issuer’s insolvency to allow the LLP to liquidate the cover assets.

The programme is rated ‘Aaa’ by Moodys Investor Services and ‘AAA’ by Fitch Ratings and currently has approximately €7bn of covered bonds outstanding.

**D. DEVELOPMENT OF THE MARKET**

The volume of outstanding UK covered bonds increased from £17bn at YE-05 to £165bn at YE-08. Figure 2 below shows that the majority of outstanding UK covered bonds consists of Regulated Covered Bonds. As of YE-08, £110bn (about two thirds of all outstanding UK covered bonds) of Regulated Covered Bonds were outstanding.
> Figure 2: Covered Bonds outstanding in £bn

Source: Monthly Programme Reports, Barclays Capital

* indicates the issuer is regulated. An updated list of regulated issuers is available from the FSA: http://www.fsa.gov.uk/Pages/Register/rcb_register/index.shtml
I. FRAMEWORK

Unique US (qualifying) covered bond regime

The issuance of covered bonds in the US is not governed by dedicated legislation outlining clearly and unambiguously covered bond investor interests in the event of insolvency of an insured depository institution (‘IDI’, ‘sponsor bank’). In the absence of specific covered bond legislation, Bank of America and Washington Mutual Bank have employed structured finance elements to replicate recognised covered bond characteristics to set up their covered bond programmes. In September 2008, subsequent to Washington Mutual Bank’s closure, JPMorgan Chase assumed the WM Covered Bond Program from the Federal Deposit Insurance Corporation (‘FDIC’) as receiver for Washington Mutual Bank. The two established tailor-made covered bond programmes are governed by, and construed in accordance with, the laws of the State of New York and the State of Delaware. Other US federal laws and regulations are implemented, including the Uniform Commercial Code (‘UCC’), Rule 144A under the Securities Act, Regulation S under the Securities Act and the US Federal Deposit Insurance Act (‘FDIA’).

The UCC provides, in particular, the legal basis to pledge collateral through creation of a first priority perfected security interest. Such security interest is obtained via the use of a ‘contractual grant’ by an institution that clearly identifies pledged collateral in its books and records. For example, an IDI grants to a Mortgage Bond Indenture Trustee (‘MBIT’) a first priority perfected security interest in the cover pool for the benefit of the mortgage (collateralised) bondholders, and a special purpose vehicle (‘SPV’) grants a first priority perfected security interest in the covered bond collateral to a Covered Bond Indenture Trustee (‘CBIT’) for the benefit of the covered bondholders. Since there is no sale or conveyance of ownership, pledged collateral remains on the balance sheet of the institution granting the first priority perfected security interest.

The FDIC approved the final Covered Bond Policy Statement, clarifying the FDIC’s position on qualifying covered bond transactions and their treatment in a conservatorship or receivership of an IDI on 9 July 2008, and, on 29 July 2008, the US Treasury released ‘Best Practices for Residential Covered Bonds’ (‘Best Practices Guide’) with the support of the FDIC, the Federal Reserve, the Office of Thrift Supervision (‘OTS’), the Office of the Comptroller of the Currency (‘OCC’), and the Securities and Exchange Commission (‘SEC’). The Best Practices Guide represents a second major step in that it provides a common template to promote the development of a standardised covered bond market in the US.

In July 2008, Bank of America, Citigroup, JPMorgan Chase and Wells Fargo announced their support for the two key statements addressing important US policies regarding covered bonds and have shown interest in setting up programmes using the guidelines or in aligning existing covered bond programmes to the standards under the final Covered Bond Policy Statement and the Best Practices Guide. Note that the existing programmes are not yet aligned to these standards.

While US regulatory authorities have shown reluctance to establish dedicated covered bond legislation, in January 2009, the US Treasury Secretary said that it should be considered in the context of broader housing finance reforms. A dedicated legislation outlining clearly and unambiguously investor interests in the event of insolvency of an IDI would help, in our view, to instill confidence in the product.
The FDIC’s final Covered Bond Policy Statement

The sole focus of the final Covered Bond Policy Statement is to seek a way around the temporary automatic stay of execution rule enforced in October 2006 under Section 11(e)(13)(C) of the FDIA. Under the FDIA, the FDIC can request a stay of up to 45 days (as conservator) or 90 days (as receiver). Such a stay adds additional costs to the US covered bond structure. For covered bond deals structured in accordance with the final Covered Bond Policy Statement the stay can be reduced to a period of 10 days. A shorter stay period and thus expedited access to collateral pledged for qualifying covered bonds may support their use, because it makes them a more cost-effective funding alternative. However, to be accorded the shorter stay, covered bond transactions have to meet the following requirements.

- **Characteristics**: They must be a non-deposit, recourse debt obligation of an IDI with a term greater than one year, but no more than 30 years, that is secured directly or indirectly by perfected security interests under applicable state and federal law on assets held and owned by the IDI.

- **Collateral**: The collateral can be eligible mortgages, triple-A rated mortgage-backed securities secured by eligible mortgages, and substitute collateral. Eligible mortgages are performing first-lien mortgages on one-to-four family residential properties, underwritten at the fully indexed rate and with documented income. They must be in line with the existing supervisory guidance on the underwriting of residential mortgages. The final Covered Bond Policy Statement does not suggest a loan-to-value (‘LTV’) limit. The share of eligible mortgage-backed securities must not exceed 10% of the collateral for any issue or series. Substitute collateral, such as US Treasury and agency securities, and cash, can only be used as necessary to prudently manage the cover pool.

- **Issuance limit**: Covered bonds must be issued with the consent of the IDI’s primary federal regulator and only if, after the issuance, the IDI’s total obligation under the bonds accounts for not more than 4% of total liabilities and only so long as the collateral backing the bond obligation is eligible. The 4% issuance threshold may be subject to upward revision. This restriction reflects the FDIC’s concerns about the encumbrance of prime assets of an IDI resulting in structural subordination of the unsecured creditors, including depositors, and reducing the ability of the FDIC to fully recover potential depositor losses.

- **Disclosure**: Issuers of bonds structured in accordance with the final Covered Bond Policy Statement have to disclose LTV ratios for the loans included in the cover pool.

The final Covered Bond Policy Statement must not be construed as waiving, limiting or otherwise affecting the rights and powers of the FDIC. Neither does it impose new obligations on the FDIC as conservator or receiver, or affect the FDIC’s main responsibility to protect the interests of the insured depositors; nor is it designed to protect the interests of the investors in covered bonds structured in accordance with the final Covered Bond Policy Statement from the risk of insolvency of an IDI. The FDIC can revise the final Covered Bond Policy Statement as the covered bond market in the US develops. It can also repeal the final Covered Bond Policy Statement following 30 days notice in the Federal Register. In this event, bonds issued before repeal, but in compliance with the final Covered Bond Policy Statement, will be grandfathered.

The US Treasury’s Best Practices for Residential Covered Bonds

The Best Practices Guide specifies that only well-capitalised institutions should issue covered bonds. It outlines two issuance structures: a) the ‘SPV Structure’ (the covered bond issuer is a bankruptcy-remote
SPV), and b) the 'Direct Issuance Structure' (the covered bond issuer is an IDI and / or a wholly-owned subsidiary of an IDI). The first refers to the structure currently used by Bank of America and JPMorgan Chase, as we discuss later.

**Chart 1: Simplified US Covered Bond Structure Currently Used by US Banks (‘SPV Structure’)**

![Chart 1: Simplified US Covered Bond Structure Currently Used by US Banks (‘SPV Structure’)](image)


**Chart 2: Potential Direct Issuance Structure**

![Chart 2: Potential Direct Issuance Structure](image)

According to the Best Practices Guide, obligations under the bonds must be secured by a first priority perfected security interest on the specific collateral for the benefit of the bondholders. Multiple covered bond issuances of an issuer can be backed by a common cover pool. Covered bonds must be launched with the consent of the primary federal regulator of an IDI and only if, after issuance, the institution’s total obligation under the bonds accounts for not more than 4% of total liabilities.

- **No uniform structure, but compliance with Best Practices Guide:** The US Treasury does not impose a uniform template for the issuance of covered bonds. It is left to the discretion of an IDI to develop other issuance structures consistent with the Best Practices Guide. In the future, structures may thus deviate from the current structure.

- **Joint-funding opportunities:** US banks lacking the necessary volume to issue a covered bond can have access to this market since the US Treasury has not ruled out joint funding opportunities, as multiple IDI can use a joint SPV to pool collateral. In this case, each IDI would be responsible for meeting the principles set out in the Best Practices Guide and the final Covered Bond Policy Statement.

- **Dynamic cover pool on an IDI’s balance sheet:** Irrespective of the used issuance structure, the IDI needs to own and hold the collateral included in the cover pool. Thus, the cover pool must remain on the IDI’s balance sheet. The IDI has to clearly identify the collateral assigned to a cover pool in its books and records and must actively manage the cover pool to meet certain requirements.

- **Fixed or floating, registered or non-registered, maturity profile:** Fixed-rate and floating-rate covered bonds registered or non-registered with the SEC can be launched in any currency, according to the Best Practices Guide. The maturity for covered bonds has to be greater than one year, but no more than 30 years.

The Best Practices Guide not only defines qualifying covered bond transactions, but also repeats and expands on the standards for those transactions prescribed by the FDIC under the final Covered Bond Policy Statement. In addition, it introduces new standards relating to a number of key areas, including collateral, asset-liability matching, disclosure, supervision, monitoring and insolvency procedures.

- **Collateral:** The cover pool may consist of performing loans secured by first-lien mortgages over one-to-four family residential properties, underwritten at the fully-indexed rate and with documented income. These loans must be in line with the existing supervisory guidance on the underwriting of residential mortgages. The loans must not be burdened by other liens. Negative amortisation loans and loans over 60 days in arrears are not eligible for a cover pool. Non-performing and prepaid mortgage loans must be replaced. At the time a loan is to be included in a cover pool, the LTV must not exceed 80%. Quarterly, loan-to-values must be updated by adjusting the original property valuation with the nationally-recognised, regional housing price index or other comparable measurement. There is a concentration limit on the cover pool in terms of regions: a single Metro Statistical Area cannot account for over 20% of the cover pool. Substitute collateral, such as US Treasury and agency securities, and cash, can only be used as necessary to prudently manage the cover pool. In the future, the eligibility criteria can be adjusted with the growth of the covered bond market in the US.

- **Derivatives:** At the time of issuance of a series, an IDI has to enter swaps or similar agreements for each series to hedge interest and currency risks and risks related to timing discrepancies between the dates on which proceeds from the relevant collateral are received and the date on which
interest and principal is payable on the covered bond series. Swap providers have to temporarily cover limited amounts of interest in the event of IDI insolvency. Swap agreements must be with financially sound counterparties and their identity must be disclosed to investors.

- **Specified investment**: At the time of issuance of a series, an IDI must enter into a specified investment for this covered bond series with financially sound specified instrument provider/s. In the event of IDI insolvency, proceeds from the collateral in the cover pool need to be invested in the specified investment. Upon a payment default by the IDI or if the FDIC as conservator or receiver for the IDI repudiates the bonds, ongoing scheduled interest and principal payments are paid out of the specified investment as long as the specified investment provider/s receive/s proceeds from the collateral in the cover pool in an amount at least equal to the due amount under the covered bonds. If such proceeds are insufficient to meet the payments due under the outstanding covered bonds, the bonds would become immediately due and payable (‘payment acceleration’).

- **Asset liability matching**: An IDI has to conduct a monthly Asset Coverage Test (‘ACT’). At all times, an IDI must ensure a minimum over-collateralisation of at least 5% of the outstanding principal balance of the covered bonds. Loans can be funded via covered bonds up to an 80% limit of their outstanding balance. If an IDI fails the ACT, no further covered bond series can be launched while such a breach exists. If an IDI fails the ACT, and the breach is not remedied by the following monthly calculation date, a trustee can terminate the covered bond programme. In this case, principal and accrued interest must be paid to investors.

- **Disclosure**: The outcomes of the ACT and of any reviews by the asset monitor must be made available to investors. If more than 10% or 20% of the collateral in a cover pool is substituted in any month or quarter, respectively, an IDI must disclose updated information in relation to the collateral in the cover pool to investors. An IDI and an SPV (if applicable) must disclose information relating to their financial profile and other material information. At the time an investment decision is made, and monthly after issuance, descriptive information on the cover pool must be disclosed to investors no later than 30 days after the end of every month.

- **Supervision**: An IDI’s controls and risk management processes are supervised by the specific primary federal regulator. This regulator is also charged with reviewing covered bond programmes using its standard method of evaluating the IDI’s business activities as part of its ongoing supervisory efforts. The review may include an analysis of the steps taken by an IDI to conform to the principles imposed under the final Covered Bond Policy Statement and the Best Practices Guide.

- **Monitoring**: An IDI must designate an independent asset monitor and an independent trustee. The trustee has to act on behalf of, and represent the interests of, the covered bondholders and enforce their rights in the collateral in the event of IDI insolvency. The asset monitor needs to frequently determine compliance with the ACT.

- **Insolvency procedures**: The FDIC as an IDI’s receiver or conservator can affirm an IDI’s (qualifying) covered bond transactions and continue to meet payments under the bonds when due, or repudiate those transactions. If the FDIC repudiates transactions, the bonds become due and payable (‘payment acceleration’). In this event the FDIC can either pay off the bonds, or provide access to the collateral to the specific first priority perfected security interest holder to enforce its security interest and exercise self-help remedies including liquidation of the collateral included in the cover pool to pay off the bonds outstanding. An amount equal to actual direct compensatory damages
must be paid in full up to the value of the collateral in the cover pool. Under the final Covered Bond Policy Statement, actual direct compensatory damages are defined as the par value of the covered bonds plus interest accrued up to the date of appointment of the FDIC as receiver or conservator. If the value of the collateral in the cover pool exceeds the actual direct compensatory damages, the excess amount must be returned to the FDIC as conservator or receiver for the IDI. Thus, the cash flow to the bondholders is limited to the actual direct compensatory damages. If insufficient collateral is pledged to cover the actual direct compensatory damages, the bondholders would have an unsecured claim in the receivership for any amounts remaining outstanding after the collateral in the cover pool has been depleted. In the event of default, the holders of covered bonds with a common cover pool share losses pro rata. If the funds derived from the collateral in the cover pool are insufficient to meet their claims and the shortfall is not covered by their unsecured claim in the receivership, the bondholders may experience a loss.

The Best Practices Guide must not be construed to be dedicated covered bond legislation. Neither does it provide or imply any government guarantee, or attempt to address the requirements imposed on institutions under other applicable US legislation and regulations, such as the UCC, the FDIA, and the Securities Act. The US Treasury expects the structure and collateral in the cover pool and other key terms of qualifying covered bond transactions to evolve with the growth of this market in the US.

II. EXISTING US COVERED BONDS PROGRAMMES

Two-tier approach
To date, just the SPV Structure is used. This structure operates a two-tier approach: the covered bonds are not launched by an IDI, but by an SPV. They are collateralised by a related series of mortgage (collateralised) bonds launched by an IDI. The mortgage (collateralised) bonds are, in turn, backed by a cover pool that remains on the IDI’s balance sheet.

- Insured depository institution (‘IDI’, ‘sponsor bank’), ie, Bank of America or JPMorgan Chase Bank: A sponsor bank issues US$-denominated floating-rate mortgage (collateralised) bonds. Such bonds are issued in series. Each series is a direct, unconditional, and senior secured obligation of the sponsor bank ranking pari passu, pro rata, and without priority among themselves. The mortgage (collateralised) bonds are secured by a pool of qualifying collateral (‘cover pool’) that remains on the balance sheet of the sponsor bank. The cover pool is dynamic meaning that the sponsor bank can add and remove collateral at all times from the cover pool subject to its continued compliance with the Asset Coverage Test and the approval from rating agencies. To secure its obligations under all mortgage (collateralised) bonds at any time outstanding on a pro rata and pari passu basis, the sponsor bank grants a first priority perfected security interest in the cover pool to a Mortgage Bond Indenture Trustee (‘MBIT’) for the benefit of the mortgage (collateralised) bond investor/s, which in this case is the US covered bond issuer or the SPV.

- Special purpose vehicle (‘SPV’): The SPV (for example, in the form of a Delaware statutory trust) has to be a ‘separate’ entity that is neither controlled by nor affiliated to a sponsor bank. Only a ‘separate’ entity is not consolidated for bankruptcy purposes in respect of the specific sponsor bank’s assets. If an SPV is not ‘separate’ there is the risk that the FDIC seeks to consolidate assets and liabilities of the SPV with those of the sponsor bank. The sole purpose of an SPV is to launch a corresponding series of covered bonds and to use the proceeds to purchase the related mortgage (collateralised) bond series. Covered bonds are thus backed by a related series of mortgage
(collateralised) bonds issued by a sponsor bank. The SPV grants a first priority perfected security interest in the covered bond collateral to a CBIT for the benefit of the covered bondholders. Each series of mortgage (collateralised) bonds is held by the CBIT on behalf of the SPV as collateral for a separate, related covered bond series and secures only that series of covered bonds. The covered bonds are limited recourse obligations of the SPV ranking pro rata and without priority among themselves. The covered bondholders have thus no further claim against the SPV or the sponsor bank if the proceeds from the enforcement of the first priority perfected security interest in the covered bond collateral are insufficient to meet their claims. To date, the two statutory trusts organised under the laws of the State of Delaware with covered bonds outstanding are BA Covered Bond Issuer and WM Covered Bond Program.

- **Mortgage Bond Indenture Trustee (MBIT):** A MBIT holds a first priority perfected security interest in the cover pool for the benefit of the mortgage (collateralised) bondholder/s.
- **Covered Bond Indenture Trustee (CBIT):** A CBIT holds a first priority perfected security interest in the covered bond collateral for the benefit of the secured creditors, including the covered bond investors. Upon a mortgage (collateralised) bond acceleration and prior to an SPV Event of Default, the CBIT performs the Proceeds Compliance Test (PCT).
- **Asset monitor:** Under an Asset Monitor Agreement, the asset monitor has to verify the arithmetic accuracy of the ACT calculation once a year. If the sponsor bank was downgraded to or below BBB- (S&P), Baa3 (Moody’s) or BBB- (Fitch) the asset monitor has to test the ACT calculation monthly until the required credit ratings have been reinstated.

**ELIGIBILITY OF COLLATERAL FOR THE COVER POOL**

The tailor-made covered bond programmes provide the current sponsor banks with considerable flexibility with regard to the composition of the cover pool as the eligibility criteria are relatively broad; the eligibility criteria can also be changed in the future subject to approval of the rating agency then rating the covered bonds outstanding. To date, according to the respective terms of the Mortgage Bond Indenture, the collateral has to meet the following eligibility criteria to be included in the cover pool.

- **BA Covered Bond Issuer:** First-lien residential mortgage loans originated or acquired by the sponsor bank. Loans in arrears for more than 60 days are no longer eligible as collateral. They must be excluded from the ACT calculation and be removed from the cover pool.
- **WM Covered Bond Program:** First-lien or second-lien residential mortgage loans or home equity lines of credit or a combination thereof originated or acquired by the sponsor bank. Loans must not be delinquent.

The mortgaged property has to be a single-family or multi-family residence. Of each mortgage loan only an amount equal to a maximum LTV of 75% of the mortgaged property’s value can be funded via mortgage (collateralised) bonds. The real estate value is the most recent value given to a mortgaged property by the specific sponsor bank adjusted by changes of the Office of Federal Housing Enterprise Oversight House Price Index (‘OFHEO HPI’). The Office of Federal Housing Enterprise Oversight is an independent office within the Department of Housing and Urban Development. The OFHEO HPI is a broad measure of the movement of single-family house prices and updated quarterly. A decrease in the OFHEO HPI is fully reflected in the reassessment of a mortgaged property’s value, but only 85% of an OFHEO HPI increase can be taken into account.
Under the individual programme terms, substitute collateral is eligible to be included in the cover pool. Substitute collateral can be, inter alia: a) debt issued by, or guaranteed by, 0% risk-weighted central governments, regional governments, central banks, public entities, local authorities and international organisations, b) exposures to 10% or 20% risk-weighted institutions, and c) triple-A rated, liquid RMBS (‘residential mortgage-backed securities’) that are US$-denominated. Such RMBS must not account for more than 10% of the total principal amount of the outstanding covered bonds. Substitute collateral is limited to a maximum of 10% of the cover pool.

**ASSET-LIABILITY MATCHING**

An SPV enters into swap agreements with qualifying swap provider/s in order to address risks arising from interest rate and currency mismatches between the mortgage (collateralised) bond series and the related covered bond series, and risks related to timing discrepancies between the dates on which proceeds from the mortgage (collateralised) bond series are received by an SPV and the date on which interest and principal is payable on the covered bond series. The swap provider/s must make swap payments to the SPV if and to the extent they receive due payments from the SPV. If an SPV fails to pay any amounts due to the swap providers if the FDIC as receiver or conservator for a sponsor bank does not authorise continued interest payments on the mortgage (collateralised) bonds issued by this sponsor bank, the swap providers have to cover limited amounts of interest for up to 90 days. Deferred amounts of the swap provider/s are subordinated to interest and principal payments on covered bonds.

A mismatch between the yield on the collateral in the cover pool and the coupon on the mortgage (collateralised) bonds outstanding is unhedged. The individual programme terms require nominal, interest and currency matching between the covered bonds outstanding and their corresponding mortgage (collateralised) bonds. Any covered bond series needs to match the principal amount and core issuance terms of the related mortgage (collateralised) bond series. Depending on the final terms of a series, the respective bonds are repaid in full on their maturity date or, in the event that the SPV fails to redeem the final amount in full on the maturity date, the payment of the final redemption amount can be deferred. According to the specific programme terms, such deferral can be up to 60 days. A deferral of payments does not constitute an SPV Event of Default, but it increases the likelihood that payments will be settled at the extended due for payment date. The extended due for payment date is designed to give an MBIT additional time to enforce its first priority perfected security interest in the cover pool.

The individual programme terms provide for an Asset Coverage Test and a Proceeds Compliance Test.

- **Asset Coverage Test (ACT):** As long as mortgage (collateralised) bonds are outstanding, the sponsor bank performs the ACT and ensures that the adjusted aggregate loan amount is at least equal to the aggregate unpaid principal amount of all mortgage (collateralised) bonds outstanding. The adjusted aggregate loan amount (excluding the principal balance of any substitute collateral and any collections of principal of the collateral in the cover pool throughout a predetermined period of time) is multiplied by an asset percentage. The asset percentage is at least 96% for BA Covered Bond Issuer and 93% for WM Covered Bond Program and refers to a contractually-committed minimum over-collateralisation (‘OC’) of 4.2% and 7.5%, respectively. However, to assign a certain rating, the rating agencies ask for an OC that is not necessarily the same as the contractually-committed minimum OC. The ACT has to be carried out monthly on each determination date. An ACT must also be carried out when collateral is removed from the cover pool or prior to the issuance of a new covered bond series. The asset monitor has to test the arithmetic accuracy of
the calculation annually and, under certain circumstances, monthly. If the ACT is failed, a sponsor bank must add further collateral to the cover pool to ensure that the ACT is passed again at the next determination date. At the same time, a sponsor bank cannot remove collateral from the cover pool. Consecutive failure of the ACT results in a Sponsor Bank Event of Default.

- **Proceeds Compliance Test (‘PCT’):** Upon the occurrence of a Sponsor Bank Event of Default and declaration of acceleration of the mortgage (collateralised) bonds by the MBIT but prior to an SPV Event of Default, the CBIT performs a monthly PCT. The CBIT assesses whether the sum of the total amounts deposited in, or credited to, the specified instrument for each covered bond series less any accrued interest, and the total unpaid principal amounts of each mortgage (collateralised) bond series is at least equal to the total principal amount of all covered bonds outstanding. A failure of the PCT constitutes an SPV Event of Default.

**ASSET MONITOR AND BANKING SUPERVISION**

Bank of America and JPMorgan Chase are supervised by the Office of the Comptroller of the Currency (‘OCC’). The OCC is a bureau of the US Department of Treasury and charters, regulates and supervises national banks. According to the terms of the respective Asset Monitor Agreement, The Bank of New York was appointed independent asset monitor to assess the arithmetic accuracy of ACT calculations of Bank of America and Deutsche Bank Trust Company Americas to test the calculations of JPMorgan Chase Bank. In addition, rating agencies analyse the cover pool quarterly. Upon review of a cover pool, rating agencies confirm or adjust the relevant asset percentage to maintain a certain rating.

**UPON A SPONSOR BANK EVENT OF DEFAULT**

In the event a sponsor bank becomes insolvent, is in an unsound condition, engages in certain violations of law or regulations, or if other similar circumstances occur, the specific bureau of the US Department of Treasury can appoint the FDIC as conservator or receiver for the sponsor bank. Upon the occurrence of a Sponsor Bank Event of Default, the sponsor bank can no longer remove collateral from the cover pool. At the same time, the MBIT can declare the principal of all mortgage (collateralised) bond series outstanding, together with accrued and unpaid interest thereon through the date of acceleration, to be immediately due and payable (‘Mortgage Bond Acceleration’). If one series defaults, all series default (‘cross default’). Upon the occurrence of a Sponsor Bank Event of Default and Mortgage Bond Acceleration, the MBIT enforces its first priority perfected security interest in the cover pool against the FDIC as receiver or conservator for the sponsor bank on behalf of the SPV. The cover pool backing the mortgage (collateralised) bond series outstanding is not segregated from the insolvency estate of the sponsor bank. Following the occurrence of a Sponsor Bank Event of Default all outstanding mortgage (collateralised) bond series are secured pari passu and without priority as regards the collateral in the cover pool and each covered bond series shares pro rata any collections on, and proceeds of, the collateral in the cover pool based on their entitlements to proceeds from the related mortgage (collateralised) bond series. Upon a mortgage (collateralised) bond acceleration but prior to an SPV Event of Default, the CBIT performs the monthly PCT.

Under the FDIA, the FDIC as receiver or conservator for the sponsor bank has the right to: a) affirm the covered bond transactions and continue to meet the scheduled payments under the mortgage (collateralised) bonds when due and / or seek to transfer any of the sponsor bank’s assets and liabilities, including the mortgage (collateralised) bonds, to a new obligor; or b) repudiate the covered bond transactions. If the
FDIC repudiates the transactions, the mortgage (collateralised) bonds become immediately due and payable. If at any time after appointment the conservator or receiver for the sponsor bank remains in default for a defined period (‘stay period’), or if the FDIC as conservator or receiver for the sponsor bank repudiates the transactions, but does not pay the actual direct compensatory damages to the MBIT as first priority perfected security interest holder within the stay, the MBIT may exercise self-help remedies and enforce its security interest over the collateral in the cover pool. The exercise of such self-help remedies is subject to approval by the FDIC.

Under the FDIA, the FDIC can request a stay of up to 45 days (as conservator) or 90 days (as receiver). For covered bond deals structured in accordance with the final Covered Bond Policy Statement the stay can be reduced to a period of 10 days. The FDIC also retains the discretion to provide access to the collateral pledged for mortgage (collateralised) bonds that are not structured in accordance with the final Covered Bond Policy Statement, prior to the expiry of the 45-day (as conservator) or 90-day (as receiver) period on a case-by-case basis. Within the respective stay period the FDIC must either: a) pay off the mortgage (collateralised) bonds; or b) provide access to the collateral in the cover pool to the respective first priority perfected security interest holder to enforce its security interest and exercise self-help remedies to pay off the mortgage (collateralised) bonds. An amount equal to actual direct compensatory damages has to be paid in full up to the value of the collateral in the cover pool. Actual direct compensatory damages are not defined under the FDIA, but are defined under the final Covered Bond Policy Statement as the par value of the mortgage (collateralised) bonds, together with unpaid interest accrued up to the date of appointment of the FDIC as conservator or receiver for the sponsor bank.

Following a Sponsor Bank Event of Default, the CBIT on behalf of the SPV has to deposit the cash from liquidation of or the proceeds from the collateral in the cover pool into a specified instrument – for example, a guaranteed investment contract (‘GIC’) account, forward contract, or deposit account with a qualifying bank – for each covered bond series. Reserves on each specified instrument have to be swapped to provide the funds necessary to meet payments due under the respective covered bond series. Any funds standing to the credit of each specified instrument must not be commingled with a sponsor bank’s other funds and assets. As long as the reserves on the respective specified instrument are sufficient to meet payments due under the related covered bond series, the covered bonds do not accelerate.

If the value of the collateral in the cover pool exceeds the actual direct compensatory damages, the excess amount needs to be returned to the FDIC as conservator or receiver for the sponsor bank. If insufficient collateral is pledged to cover the actual direct compensatory damages, the mortgage (collateralised) bondholders will have an unsecured claim in the receivership for any amounts remaining outstanding after the collateral in the cover pool has been depleted. In other words, if the cover pool is insufficient to fully back any recognised claim of the MBIT (and thus the SPV) under the mortgage (collateralised) bonds, the MBIT (and thus the SPV) will be an unsecured general creditor of the sponsor bank as regards the portion of such claim that is unsecured.

**UPON AN SPV EVENT OF DEFAULT**

Following the occurrence of an SPV Event of Default, the CBIT can declare all covered bond series then outstanding to be immediately due and payable against the SPV at their early redemption amount plus accrued interest (‘Covered Bond Acceleration’). Upon the occurrence of an SPV Event of Default and Covered Bond Acceleration, the CBIT can enforce its first priority perfected security interest over the
covered bond collateral, liquidate it and exchange the proceeds with the covered bond swap provider/s to
prepay the accelerating covered bond series. The CBIT acts on behalf of the secured creditors, including
the covered bondholders. No covered bondholder can proceed directly against an SPV unless the CBIT
fails to take such action. If the proceeds from the enforcement of the first priority perfected security
interest in the covered bond collateral are not sufficient to meet the claims of the covered bond creditors
in full, no other collateral will be available for the payment of the deficiency. The rights of the holders
of such covered bond series will be extinguished.

III. RISK WEIGHTING & ECB ELIGIBILITY
Since none of the current sponsor banks is a credit institution that has its registered office in a EU member
state and is subject by legislation to special public supervision designed to protect the covered bondholders,
US (qualifying) covered bonds are not UCITS 22(4)-compliant and do not benefit from the higher
investment limits. The bonds cannot be CRD-compliant without meeting the UCITS 22(4)-requirements;
hence, they cannot benefit from special treatment in terms of risk weighting.

Within the scope of its liquidity-providing operations, the European Central Bank (‘ECB’) accepts certain
assets as collateral for lending operations. The ECB follows the definition of covered bonds as set out in
UCITS 22(4). As US (qualifying) covered bonds fall outside the UCITS definition, they are not classed
as covered bank bonds, but as credit institution debt instruments (liquidity category IV) by the ECB for
repo purposes and not as asset-backed securities (liquidity category V).
**Issuers**: There are two issuers in the United States: WM Covered Bond Program and BA Covered Bond Issuer.
CHAPTER 4 - RATING AGENCIES & METHODOLOGY
4.1 COVERED BOND RATINGS: A PIVOTAL MOMENT

By Alain Carron
Crédit Foncier

The first half of 2009 has seen all three main rating agencies take stock of the impact of the financial crisis, and make or propose changes to their methodologies, ranging from the minor (Moody’s) to a complete rethinking of their approach (Standard & Poor’s).

At time of writing, things are still in flux, with Standard & Poor’s still undertaking its internal review of the merits of comments they have received from the market on their proposed methodology changes until at least September while Fitch is in the process of updating its ratings following the publication earlier in July of their revised criteria and Moody’s ironically being criticised in some quarters for having made their changes without requesting input.

So what has changed?

On the diagnosis, all three rating agencies seem to agree: apart from a few exceptions, most covered bonds are structurally subject to cash flow mismatches between assets and liabilities, for example at time of redemption of a bullet issuance. As a result, covered bond issuers need to be able to access liquidity when needed. Depending on the jurisdiction and also whether the covered bonds follow a legal or contractual format, that access to liquidity can take different forms. In most cases however, one avenue that does work is to create liquidity by selling a sufficient amount of assets forming part of the cover pool. In the rating agencies’ view, the crisis has reduced the number of entities willing and able to provide that liquidity, and has increased the discount that would be incurred by the covered bond issuer upon such a sale.

The ramifications of this change on the existing rating approaches however differ significantly. By order of increased magnitude of changes:

Moody’s has increased on 8 April 2009 the refinancing margins it uses to model the maturity mismatch risk. While the impact may be severe on an issuer-by-issuer basis depending on the structure of their mismatches over time, the conceptual adjustment is very small.

Fitch on 7 July 2009 has published revised criteria (i) increasing the weight given to liquidity risk in its D-Factor, which constrains the uplift that can be given to a covered bond rating as compared to that of its sponsor, and (ii) increasing the refinancing margins and valuation haircuts on cover assets used in their stress tests.

Standard & Poor’s on 4 February 2009 asked the market for feedback on a proposal that would mark a fundamental change, since it does away with the agency’s previously held view that covered bonds were to be rated primarily on the strength of the collateral pool, and largely independent of the sponsor’s credit quality. The previous approach included an implicit assumption that liquidity would be available, as long as the credit strength of the pool (as enhanced by overcollateralisation, hedging and other devices) could be viewed as sufficient to repay in full any bridge lender. In light of the crisis, this assumption appears no longer justified to the agency, and as a result a link has to be introduced in its view to the sponsor’s credit quality. S&P’s request for comment includes new criteria proposals that stem from this change, including how to categorise issuers qualitatively and quantitatively with respect to this maturity...
mismatch risk. Unsurprisingly, market feedback has been correspondingly abundant and at times the outcry has been vehement.

To complete this already rather busy picture, Fitch has also requested market input on a paper addressing how it proposes to assess counterparty risk given the lessons learnt during the crisis. Due to the generic nature of counterparty risk criteria, these changes, which are very wide ranging if the agency were to adopt them fully, could have significant side effects on its ratings of covered bonds.

Given this context, it is no surprise that investors in particular feel that they have little visibility at the moment on how the final methodologies will pan out, and there is concern in the industry about the damage that could be wrought by the agencies if those reviews swing too far into one direction and end up too pro-cyclical in nature.

While it is totally understandable that criteria may have to be looked at in light of the depth of the financial crisis, the process should not be allowed to linger on indefinitely. The market needs to regain a stable compass, and that is well understood by the rating agencies. One also has to keep things in perspective and indeed no covered bond has missed a payment so far despite the crisis, which is more than can be said of other types of previously highly-rated securities.

Characteristically, investors have not succumbed to doom and gloom, as shown by their very positive reaction to the announcement by the ECB on May 7 of its EUR 60 bn purchase program of covered bonds. Confidence is returning to the market with issuance volumes running at about EUR 15 bn a month since the announcement, a fourfold increase compared to the early part of the year. Another testimony is that since May, issuance of covered bonds has outstripped that of government guaranteed bonds. As a result, the spectre of a credit crunch is fast receding for the sectors of the economy such as home loans or public sector lending, for which issuance of covered bonds is a significant funding tool.
4.2 FITCH COVERED BONDS RATING METHODOLOGY

By Helene M. Heberlein and Alessandro Settipani, Fitch Ratings

INTRODUCTION

Under Fitch’s methodology, the covered bond ratings rating process involves the following steps:

1. Discontinuity analysis which determines how far the covered bonds probability of default can differ from that of the financial institution acting as main debtor of recourse – in general the covered bond issuer; the relationship is expressed through Fitch Discontinuity Factor. The institution’s probability of default is evidenced through its Issuer Default Rating (IDR).

2. Analysis of the collateral and cash-flow modelling which will determine whether, post issuer default and considering over-collateralisation between the cover assets and all outstanding covered bonds, cash-flows generated by the cover pool are enough to ensure full repayment of investors under Fitch’s stress scenarios corresponding to the covered bonds’ maximum achievable rating on a PD basis.

3. Recovery analysis: even if the combination of the IDR and the programme’s Discontinuity Factor limits the achievable rating on a probability-of-default basis, the assigned covered bonds rating can be notched up above this rating on a probability-of-default basis (by a maximum of 2 or 3 notches depending on whether the probability-of-default rating is in the investment or non investment grade range) provided that over-collateralisation taken into consideration is sufficient to guarantee enough recoveries under Fitch’s stress scenarios, run in the corresponding stress scenario.

Fitch covered bonds rating therefore mainly address their probability of default, but also incorporate an element of loss given default.

Fitch introduced its covered bond rating criteria in July 2006. Recent financial turmoil and radical shift in the capacity and pricing of wholesale funding market have led the agency to significantly review parts of its methodology. The updated criteria, published in July 2009, has led, ceteris paribus, to a generalised worsening of Discontinuity Factors and to an increase in over-collateralisation levels supporting a given stress scenario.

1. DISCONTINUITY ANALYSIS

Fitch Discontinuity Factors express the risk of an interruption of payments caused by the transition from the issuer to its cover pool as the source of payment on the covered bonds. The Discontinuity Factor takes systemic and cover pool as well as issuer-specific aspects into account.

The fact that covered bond holders have full recourse against a financial institution justifies using the IDR of this institution as a rating floor from a probability-of-default perspective. At one extreme, the covered bonds’ probability of default will be equal to that of the institution, and in this case the Discontinuity Factor would be 100%. At the other extreme, with a Discontinuity Factor of 0%, the probability of default of the covered bonds could be completely independent of the issuer’s creditworthiness, although this would be hard to achieve in practice: the institution benefiting from the covered bond funding is bound to influence the composition of the cover pool and take decisions about asset and liability management that will be dictated by its strategic choices.
Fitch Discontinuity Factors represent a weighted average of the scores for each of the four sub-sections as follows:

> **Asset Segregation**: Fitch investigates the strength of the asset segregation mechanism, notably to see whether it also places overcollateralisation beyond the reach of other creditors until all covered bonds have been repaid in full. Identified risks relate, for example, to the potential claw back of assets set aside for covered bonds investors, commingling with the issuer’s other cash flows, borrowers’ set-off rights or the bankruptcy remoteness of any foreign assets included in the cover pool. This section initially accounted for 50% of the Discontinuity Factor and has now been brought down to 45% in order to put more relative weight on the liquidity gap section.

> **Liquidity Gap**: in most cases, incoming cash flows from the cover pool do not exactly match payments on the privileged liabilities in a given period. The liquidity gap component of the Fitch Discontinuity Factors compares the time needed to monetise regular cover assets in a stress situation to the length of time granted by the programme’s protection mechanism. The agency classifies the cover assets in different categories depending on their tradability. Apart from pass-through programmes, where there is no need for asset liquidation post issuer default, temporary liquidity gaps arising in the aftermath of an issuer default can be mitigated by extendible maturity of the covered bonds, pre-maturity tests and mandatory liquidity requirement or the voluntary posting of liquid assets. Programmes without any specific protection mechanism are viewed particularly negatively. In its recent methodological update, Fitch has worsened its assessment of the time necessary to sell a portfolio of assets which in turns lead to a worse liquidity gap score for an unchanged liquidity mechanism. In addition, the weight of this section has been increased from 30% to 35% of the Discontinuity Factor to reflect the critical impact of a solid asset and liability management in times of crisis.

> **Alternative Management**: the agency studies the legal or contractual provisions for replacing an insolvent institution in its capacity as manager of the covered bonds and servicer of the cover assets. It is crucial that upon insolvency of the issuing bank a substitute manager of the cover pool is appointed as soon as possible and that he has all powers and tools to take the necessary actions, such as liquidation of the pool, if necessary to repay the covered bond holders. In addition, the Fitch analysts carry out operational review to identify the obstacles any such alternative manager might face when taking over the cover pool and the covered bond administration, which, ultimately, could also prevent timely payments to covered bond holders. This component accounts for 15% of the Discontinuity Factor.

> **Covered Bonds Oversight**: finally, the attitude of the domestic banking authorities towards the instrument plays a role in Fitch’s Discontinuity Factors. Indeed, the agency recognises that regulators may exercise a positive influence on covered bonds if they monitor their risk profile through specific guidelines, especially if the covered bond market accounts for a substantial part of domestic banks’ funding. The score attributed to the preventive action of supervisory authorities represents 5% of Fitch Discontinuity Factor for any given covered bonds programme.

The combination of the likelihood of default associated with the relevant IDR and the Discontinuity Factor indicates the maximum rating that can be assigned to the covered bonds on the basis of their probability of default, provided over-collateralisation between the cover assets and the covered bonds
is sufficient to withstand Fitch stresses commensurate with this targeted rating. The table below shows these achievable ratings for a few Discontinuity Factors.

> FIGURE 1: MAXIMUM ACHIEVABLE COVERED BONDS RATING ON A PROBABILITY OF DEFAULT BASIS

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<thead>
<tr>
<th>Issuer Default Rating</th>
<th>100%</th>
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<th>60%</th>
<th>50%</th>
<th>40%</th>
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Source: Fitch

2. ASSET ANALYSIS AND CASH-FLOW MODELLING

In order to reach a conclusion about the covered bonds’ probability of default, Fitch simulates a wind-down scenario under the management of a third party, and verifies whether over-collateralisation accounted for by the agency is sufficient to withstand the stress scenario corresponding to the rating indicated in the above matrix and to enable the cover assets to meet payments to privileged creditors on their due date. The stress scenario includes assumptions about the behaviour of the cover pool assets in terms of delinquencies, defaults, losses and prepayments. It also factors in the cost of bridging maturity mismatches, and incorporates Fitch’s standard interest and currency stresses to the extent there are open positions between the cover pool and the related covered bonds, after taking into account privileged swaps. Finally, the assumed costs of a third-party manager are deducted from the stressed asset cash flows.

The revised criteria for the analysis of liquidity gap has introduced relevant changes in Fitch cash-flow modelling. Given the generalised increase in the cost of funding, Fitch has increased its refinancing cost assumptions, therefore increasing the cost of bearing mismatched positions. For public sector assets, Fitch adjusted refinancing costs assumptions are derived from observable sale prices. For mortgage assets, Fitch assumes that the most likely buyers will be other covered bond issuers, who in turn will take into account their incremental refinancing cost when placing an offer. Therefore, Fitch now uses average covered bonds secondary market spreads as a starting point to calculate the corresponding refinancing costs.
An additional margin that is dependent on the asset class and respective regional market is added to reflect the profit that a potential buyer would like to gain from the trade. Fitch also applies price caps on the first sale after the default of the issuer. This is because the market will be aware of the pressure to refinance/sell assets that the administrator of the pool is facing and therefore potential buyers will try to take advantage from this situation.

Applying the revised refinancing spreads determines a level of over-collateralisation supporting a given stress scenario generally higher than prior the criteria update.

In performing its analysis, Fitch will not always give full credit to over-collateralisation available at the last reporting date: in the absence of any contractual commitment or public statement, the agency considers the lowest over-collateralisation observed in the preceding 12 months if the issuer is rated ‘F2’ or above. Below this rating threshold, it considers only the legal minimum over-collateralisation.

If over-collateralisation is insufficient to withstand credit risk, maturity, interest rate and currency mismatches, the cash flow model will fail, indicating that the tested rating scenario is too severe, and hence a less stressful scenario will be tested until the model passes. Through a reiterative process, the covered bonds’ probability-of-default rating is set at the level corresponding to the highest rating scenario that, if applied to the cash flows, can be compensated through over-collateralisation without leading to a covered bond default.

3. RECOVERIES GIVEN DEFAULT

Fitch’s covered bond ratings do not fully reflect expected loss: indeed, the benefit given to recoveries from the cover pool in the event of a default under the covered bonds is limited to a two-notch uplift from the rating corresponding to the covered bonds’ probability of default if it is in the investment-grade range, and to three notches if it is in the speculative grade. In its recovery analysis, Fitch disregards any potential recourse to the bankruptcy estate of the issuer. Covered bond investors often have an additional unsecured claim, ranking pari passu with the senior unsecured creditors of a bankrupt institution, to the extent that the proceeds from the cover pool liquidation are insufficient to repay their debt in full. However, it may be impracticable for them to enforce their right if the two bankruptcy procedures do not start at the same time; moreover, the outcome is subject to several uncertain parameters, such as the quality of the non-cover-pool assets, and the capital structure prevailing at the time of the issuing institution’s bankruptcy.

When giving credit to recoveries from the cover pool in a stress scenario, Fitch expressly incorporates payments owed to privileged swap counterparties. To the extent they rank equally with covered bond investors, they would share any recovery proceeds should the incoming cash flows from the cover pool and from privileged swaps be insufficient to meet the secured liabilities in timely fashion. Therefore, Fitch obtains the recovery percentage by dividing the net present value of stressed future cash flows, including payments expected from swap counterparties, by the net present value of the residual liabilities, including payments owed to swap counterparties. This recovery percentage then translates into a given number of notches as per the table below.
Recovery Ratings | Recovery Prospects | Recovery Range (%) | Maximum Notching
--- | --- | --- | ---
| | | | Investment Grade | Non Investment Grade
RR1 | Outstanding | 91 -100 | 2 | 3
RR2 | Superior | 71 - 90 | 1 | 2
RR3 | Good | 51 - 70 | 1 | 1
RR4 | Average | 31 - 50 | - | -
RR5 | Below Average | 10 - 30 | -1 | -1
RR6 | Poor | 0 - 10 | -1/-2 | -2/-3

Source: Fitch Ratings

In some jurisdictions, however, notching up for recovery may only be justifiable if stressed recovery on covered bonds assumed to be in default reach 100%. This is because there might be some form of time subordination among outstanding issues of covered bonds such as when there is no cross-default between different covered bonds and therefore an administrator may liquidate most of the assets in the pool in order to repay earlier maturing issues at the detriment of later maturing issues.

**CONCLUSION**

The IDR, Discontinuity Factor, and over-collateralisation compared to credit risk of the cover pool and maturity, interest rate and currency mismatches are driving the covered bond ratings assigned by Fitch. Overall, 71% of mortgage covered bonds and 45% of the public sector covered bonds rated by Fitch incorporate an uplift for recovery. The Discontinuity Factors currently range from 4.7% to 100%. Their distribution by asset types supports the conclusion that public sector cover pools can lead to a wider gap between the rating of the covered bonds and that of the issuer. This holds true, in particular, if the cover pool consists mainly of large exposures in the form of bonds, or if the assets were purchased on the secondary market – in itself a sign of their marketability. Equally, a small number of assets in the cover pool will ease the transition to an alternative manager in case of need. Finally, the Discontinuity Factors of contractual covered bonds programmes do not incorporate any benefit for covered bonds oversight, even though the issuer generally is a regulated institution, a fact already taken into account in the institution’s default rating.

**Covered Bonds SMART**

In March 2008, Fitch launched a monitoring tool for covered bonds programmes rated by the agency. It is the first single, comprehensive source of periodic information on key covered bonds credit characteristics. It gives an overview of the IDR, the Discontinuity Factors and the covered bonds ratings. It shows the amount of outstanding covered bonds and corresponding cover pools, highlighting available nominal overcollateralisation as of each reporting date. It graphically compares the redemption profile of the cover assets to the covered bonds’. It also displays indicators of maturity, interest rate and currency mismatches between the cover pool and the covered bonds. Furthermore, it enables users to follow the composition of cover pools, such as geographical distribution for public sector assets, or loan-to-value ratios for mortgage loans. Covered Bonds SMART is a subscription service accessible from the surveillance menu of www.fitchresearch.com.
4.3 Moody’s Covered Bond Rating Method

By Juan Pablo Soriano, Nicholas Lindstrom and Jörg Homey, Moody’s

SUMMARY

Moody’s rating approach for covered bonds is based on the so-called ‘joint-default analysis’ method. This takes into account not only the credit strength of the issuer but also, upon “Issuer Default” (i.e. the removal of support from the issuer group), the value of the cover pool.

A Moody’s covered bond rating is primarily determined by its expected loss. Moody’s Expected Loss Covered Bond Rating Model (“Moody’s EL Model”) first assesses whether the issuer is still performing. If the issuer is performing, there should be no loss to covered bondholders. It is only following Issuer Default that Moody’s EL Model switches to the analysis of the value of the cover pool, which is typically the more important driver of a final covered bond rating. The key factors affecting the value of the cover pool include:

> The credit quality of the collateral in the cover pool;
> Refinancing risk in the event that funds need to be raised to finance the cover pool at the time of Issuer Default; and
> Any interest or currency rate risks to which the cover pool is exposed.

Each of these factors should be taken into account in the stressful environment that is expected to follow an Issuer Default.

ROLE OF THE ISSUER

During the life of the covered bond, Moody’s EL Model calculates the probability of Issuer Default based on the senior unsecured rating of the issuer. If the issuer is performing, there should be no loss to covered bondholders. In addition, while the issuer performs, it will also typically manage the cover pool – for example, by replacing defaulted assets with performing assets if required. For this reason, Moody’s sees the role of the issuer as more important than that of a simple guarantor – in most cases, the issuer is actively managing the cover pool to the benefit of the covered bondholders.

CREDIT QUALITY OF THE COVER POOL

The credit quality of the cover pool is measured by its “Collateral Score”. In Moody’s EL Model, the Collateral Score determines the loss due to the credit deterioration on the assets in the cover pool that would be expected to be incurred following Issuer Default. The higher the credit quality of the cover pool, the lower the collateral score and hence the lower the level of losses that will impact the cover pool at the time of Issuer Default.

REFINANCING THE COVER POOL

Following Issuer Default, the timely payment of principal under the covered bonds may rely on funds being raised against the cover pool. This is because the “natural amortisation” of the assets in the cover pool is unlikely to be sufficient to repay the bullet principal payments that are due under most covered bonds. The question to ask is: at what discount to the notional value of the cover pool will these funds be raised? Recent events have highlighted the potential volatility of this risk.
In April 2009, Moody’s updated the refinance stresses it applies to European covered bond deals (an update of a similar exercise done in February 2008).

MARKET (INTEREST AND CURRENCY) RISKS IN THE COVER POOL

The value of the cover pool may also be impacted by interest and currency rate risks. For example, Moody’s EL Model looks separately at the impact of increasing and decreasing interest rates on the expected loss of the covered bonds, and takes the path of interest rates that leads to the more severe result on the expected loss on the covered bonds. Furthermore, Moody’s EL Model can make the following assumptions: (i) that these risks are largely unhedged at the point of Issuer Default; (ii) that if suitable hedges are in place that survive Issuer Default, low levels of risk will be attributed to any such hedged risks/mismatches; or (iii) that some other level of hedging is in place.

TIMELY PAYMENT INDICATORS ("TPIs")

As explained above, a Moody’s covered bond rating is primarily determined by its expected loss. However, the timeliness of payment on a covered bond – or “linkage” to the underlying issuer – may constrain a rating outcome where the risk of a late payment following Issuer Default is considered to be too high. To date Moody’s has not assessed any structure as being fully delinked from the issuer, and reasons for this include:

- Refinancing risk where covered bonds are structured as bullets. The potential problems of raising funding from a pool of assets in an environment following an Issuer Default are being seen in the current market.
- Discretion enjoyed by issuers – for example, assets in the cover pool may revolve and new (in particular, hedging) contracts may be entered into that change the refinancing and hedging profile of a programme.
- Operational and legal risks faced by an administrator, in particular where an administrator is servicing multiple pari-passu bullet bonds with different maturities after an Issuer Default.

To add transparency to its approach, Moody’s publishes timely payment indicators (TPIs) for all covered bond programmes in which the issuer is publicly rated. These TPIs are Moody’s assessment of the likelihood that a timely payment would be made to covered bondholders following Issuer Default. The TPI determines the maximum rating that a covered bond programme can achieve with its current structure while allowing for the addition of a reasonable amount of over-collateralisation.

References:

- Moody’s: Special Report: Moody’s Rating Approach to European Covered Bonds; 13 June 2005
- Moody’s: Special Report: European Covered Bond Legal Frameworks: Moody’s Legal Checklist; 9 December 2005
- Moody’s: Timely Payment in Covered Bonds following Sponsor Bank Default; 13 March 2008
- Moody’s: Rating Methodology: Assessing Swaps as Hedges in the Covered Bond Market; 17 September 2008
- Moody’s: Announcement: Moody’s increases refinancing margins for European covered bonds; 8 April 2009
- Moody’s: Announcement: Moody’s: Covered bond issuer ratings important for accuracy and stability of covered bond ratings; 30 April 2009
- Moody’s: Rating Action: Moody’s concludes refinancing review; negative rating action on two Covered Bond programmes; 12 June 2009
On Feb. 4, 2009, Standard & Poor’s Ratings Services published a “Request for Comment” (RFC) on changes to its current covered bond rating methodology. The proposed changes would “soft-link” the covered bond ratings to the counterparty rating on the issuer and increase the market value stresses when cover assets need to be monetized. In the RFC we proposed that the degree of uplift for the covered bond rating should be determined by the extent of the program’s exposure to asset and liability mismatch risk. We have not published updated covered bond rating criteria and existing covered bond ratings continue to be based on the current approach described below. Please check www.standardandpoors.com/coveredbonds for updates to our covered bond rating criteria.

When evaluating mortgage and public sector covered bonds, we base our current analytical approach on a regular review of the quality and structure of the individual cover pools and the adequacy of the cash flows under a stressed scenario to determine whether they are sufficient in our opinion to service the outstanding covered bonds in a timely manner. In addition, our ratings reflect our opinion of an issuer’s willingness and ability to maintain an overcollateralization level that is sufficient (typically over and above the regulatory minimum requirement) to cover prevailing risks we have identified for the target rating (usually ‘AAA’) on the covered bonds.

A dedicated team of our covered bond analysts across Europe analyzes and monitors the outstanding covered bond ratings. Through our ongoing monitoring of the issuer and the covered bond markets, we aim to incorporate relevant developments into our covered bond rating assumptions on which our ratings are premised.

To increase transparency regarding our covered bond rating analysis, we provide jurisdiction- and asset-specific assumptions for our credit and cash flow risk analysis. Further, we provide investors with our view of the respective covered bond structures and their development in our Presale and Transaction Update reports.

In our current covered bond rating analysis we focus on four core areas:

1. We review the legal framework to assess whether covered bond investors would likely in our view, receive timely payment of interest and repayment of principal in accordance with the original terms and conditions of the covered bond upon a default of the issuing bank. Only if we believe that uninterrupted payments could be made to the covered bondholders should the issuing bank became insolvent, would we assign covered bond ratings that are predominantly based on the strength of the structure and the cover pool, rather than predominantly linked to the creditworthiness of the issuing bank.

2. We conduct an ongoing analysis of the quality and structure of the collateral in the cover pools to assess the probability and the expected loss if the cover pool assets were to default in the payment of interest and principal. Based on a review of the cover pool and of the operational features of the issuer’s credit management, we apply stress scenarios that are calibrated to the rating being sought (e.g., ‘AAA’) for an individual portfolio.
3. We analyze the effect on the **cash flows** resulting from credit losses, maturity and currency mismatches, liquidity, and interest rate risks, as well as payment delays and servicing costs. Using models, we evaluate the cash flow structures of the assets and the covered bonds to assess whether, under stress scenarios tailored to the desired rating level (e.g., ‘AAA’), the cash flows generated by the assets would be sufficient in our opinion to meet the debt service payments on the covered bonds in a timely manner.

4. We review the ongoing adequacy of **covenants** provided by the issuing bank, particularly those covenants regarding the commitment to maintain overcollateralization and/or liquidity to the cover pool. In order to assess whether we believe the covenants provide adequate protection at the targeted rating level, we will evaluate both the quantity and quality of the assets which the issuer has agreed to maintain in the covered pool. We will also analyze whether in our view, this commitment is an ongoing, legally binding obligation of the issuer. In addition to the form of commitment undertaken by an issuer, the comfort we derive from these covenants will vary amongst issuers -- the issuer’s counterparty credit rating and its business strategy will also impact our assessment of the value we can attribute to these covenants.

We believe the absence of a clearly communicated obligation to maintain overcollateralization and liquidity levels over and above what is required by the banking regulators could expose covered bond ratings for a particular issuer to lower long-term rating stability than rating migration matrices suggest for other asset classes. In our opinion, regulatory required risk mitigants such as the interest and foreign exchange risk stresses for covered bonds and static minimum regulatory overcollateralization levels typically would not, in and of themselves, sufficiently mitigate the risks we view as commensurate with the current ratings assigned (typically ‘AAA’).

However, certain factors can in our opinion reduce potential rating volatility, such as a clearly communicated strategy regarding expected credit risks and diversification of the cover pool, tolerance levels for interest rates, currency rate risks, and liquidity risks, as well as the willingness to provide a cushion over and above the minimum regulatory requirements. Although we believe contractually agreed, legally binding covenants provide the strongest comfort to mitigate these risks, we may be able to give some credit in our rating analysis, to an undertaking to provide support to a covered bond programme which is given by an issuer.

In addition to the quantitative and qualitative assessment of the covered bond structure, regular and issuer specific monitoring further enable us to evaluate the issuing bank’s willingness and ability to maintain levels of overcollateralization which we would view as commensurate with the prevailing rating levels. All covered bond issuers we rate undergo a rating review process by Standard & Poor’s Financial Services Group. The extent of the monitoring we conduct and the covenants we look for from an issuer is impacted by the creditworthiness of that issuer; for example, we would generally expect to monitor more frequently a lower rated issuer and would scrutinize more closely its covenant package than we would do so for a higher rated issuer.
CHAPTER 5 - COVERED BOND STATISTICS
5.1 INTRODUCTION

By Johannes Rudolph, HSBC Trinkaus and Sabine Winkler, BofA Merrill Lynch Securities

I. DESCRIPTIVE REVIEW OF THE COVERED BOND STATISTICS

The ECBC Statistics and Data Working Group collects and provides information on the annual gross supply and outstanding volume of covered bonds at year-end. Its aim is to provide complete and up-to-date statistics on all covered bond markets.

The statistics covered 25 jurisdictions at the end of 2008. The collection of these statistics is possible thanks to the cooperation of the Working Group members and covered bond issuers.

Even though there is a significant amount of covered bond data readily available, it is often difficult to evaluate its coverage and completeness. This should be taken into account when reading the statistics.

For certain countries, national specifics need to be considered.

> **Austria**: Consistent statistics are no longer available since the Österreichische Nationalbank stopped the publication of Pfandbrief-related data in 2004. Due to the inconsistent disclosure of cover pool data and information on outstanding covered bonds, there is uncertainty around the bonds’ classification as mortgage or public covered bonds.

> **Canada**: The Canadian Imperial Bank of Commerce’s general-law-based covered bonds collateralised by mortgage loans insured against borrower default by Canada Mortgage and Housing Corporation are classed as mortgage covered bonds.

> **Denmark**: At year-end, new bonds launched to refinance particular bullet bonds and the refinanced bullet bonds are in *ultimo figures*. Thus, the reported total outstanding amount exceeds the actual total outstanding amount.

> **France**: Compagnie de Financement Foncier runs a mixed pool of assets, using mortgage loans, public sector assets and senior tranches of RMBS as collateral. In addition, Crédit Foncier et Communal d’Alsace et Lorraine – Société de Crédit Foncier’s cover pool consists of mortgage loans and loans to public sector entities. The covered bonds of both issuers are not classed as mortgage or public covered bonds, but are grouped together into one category.


> **Slovakia**: On 1 January 2009, amendments to Act No. 552/2008 came into force. Slovakian mortgage bond investors have since held a privileged position in the event of issuer insolvency as seizure and foreclosure of the mortgage bond collateral may only occur to meet their claims. The 2008 statistics include Slovakia for the first time. Slovakia adopted the euro on 1 January 2009. Thus, Slovakia’s

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1 These were Austria, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Luxembourg, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Ukraine, the Netherlands, the UK and the US. Cyprus introduced a specific covered bond law in 2009, Romania in 2007, Slovenia in 2006, and Turkey in 2007. But, so far no Cyprian, Romanian, Slovenian or Turkish covered bonds have been issued.

2 In accordance with applicable reporting standards, several issuers disclosed outstanding covered bonds at their market value, but not at their par value. The International Financial Reporting Standards (IFRS) do not require issuers to disclose outstanding covered bonds and their corresponding collateral.
2009 covered bond statistics will not distinguish between domestic currency denominated and €-denominated covered bonds.

> **Spain**: Spain’s covered bond statistics only consider cédulas with an official listing in Spain’s AIAF (Asociación de Intermediarios de Activos Financieros).

> **Sweden**: Sweden’s covered bond statistics include only converted bostadsobligationer (mortgage bonds) and säkerställda obligationer (covered bonds).³

The statistics distinguish between covered bonds backed by public debt, mortgage loans, ship loans and a mix thereof. In contrast to the non-Jumbos, Jumbos usually have a minimum volume of €1bn, a fixed coupon payable once a year in arrears and bullet redemption. Additionally, they are supported by the commitment of at least five market makers to quote continuous two-way prices throughout normal trading hours as long as there is sufficient liquidity in the respective Jumbo.

In addition, covered bonds are divided into those distributed via private or public placement,⁴ those denominated in euro, those in domestic currency (if this is not the euro), and those in a foreign currency other than the euro and the domestic currency. The exchange rate used to convert non-euro-denominated covered bonds is the end-of-year rate published by the ECB. Iceland’s 2008 covered bond statistics are based on an exchange rate of 250 EUR/ISK.

Note that the statistics are skewed by country specifics (see above), exchange rate fluctuations and some banks’ refinancing and repurchase activities. A distinction is also made between fixed-rate and floating-rate covered bonds and covered bonds with another coupon structure. The maturity of bonds refers to the weighted average time to maturity of the covered bonds outstanding from one country.

The statistics are divided into five broad categories: 1) covered bonds backed by mortgage loans, public debt, ship loans or a mix thereof; 2) privately placed or publicly placed covered bonds; 3) non-Jumbos or Jumbos; 4) those denominated in euro, those in domestic currency (if not the euro), or those in a foreign currency other than the euro and the domestic currency; and 5) fixed-rate and floating-rate covered bonds, or covered bonds with another coupon structure. Owing to the inconsistent disclosure of cover pool data and information on outstanding covered bonds, and on covered bond issuance or the unavailability of information, there may be uncertainty around a number of bonds’ classification or, in some cases, bonds cannot be classified at all. Consequently, the total of each category at year-end may differ.

### II. COVERED BOND MARKET DEVELOPMENTS

At the end of 2008, the total outstanding volume of covered bonds was €2,385bn compared with €2,113bn at the end of 2007. This represents 13% growth after 10% and 12% growth in 2007 and 2006, respectively. In 2008, the Jumbo segment accounted for 47% of the annual gross supply and 57% of the total outstanding volume of the overall covered bond market. The total outstanding volume of €-denominated Jumbos was €859bn at the end of 2008 compared with €852bn at the end of 2007. This represents stagnation after the double-digit growth in €-denominated Jumbos experienced in the past three years.

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³ The first säkerställda obligationer were issued in 2006. Prior to this, bostadsobligationer were launched. At the end of 2005, the outstanding bostadsobligationer volume exceeded €90bn. To qualify for a licence to engage in säkerställda obligationer business, mortgage bond issuers were forced by the Swedish banking supervisor either to convert outstanding mortgage bonds or to treat their holders in the same way as covered bondholders. One issuer converted outstanding bostadsobligationer into säkerställda obligationer in 2005, two in 2006, three in 2007 and one in 2008.

⁴ The statistics consider covered bonds listed with an exchange as publicly placed covered bonds.
Greek and Italian institutions started to issue special-law-based covered bonds in 2008. At the same time, Danish banks started to launch covered bonds (under the new legislation) after new laws came into effect in 2007. No country exited the covered bond market in 2008. Based on the rising number of markets and issuers and the increased use of the product by existing issuers in recent years, the covered bond market is likely to continue to grow.

In 2008, 43 entities joined the covered bond market and 10 left, mainly due to mergers or the repayment of last outstanding covered bonds. At the end of 2008, 272 issuers were competing for investor attention. As at the end of 1H09, the number of issuers had increased further to reach 289 (19 institutions joined the market, two merged and one exited the market after the last outstanding covered bond was repaid). With 69 Spanish, 60 German, 24 Austrian and 24 UK covered bond issuers, the four jurisdictions together represented over 60% of the issuers in the overall covered bond market at the end of 1H09.

In 2008, total gross supply of covered bonds set a new record with a total volume of around €647bn. Approximately 22% (€533bn)\(^5\) of the total outstanding volume of covered bonds at the end of 2008 was placed privately, compared with about 25% (€519bn)\(^6\) in 2007. Entities incorporated in the euro area launched €352bn covered bonds, of which €337bn were €-denominated. In May 2009, the ECB surprised the market by announcing outright purchases of €-denominated covered bonds launched by entities incorporated in the euro area. Between July 2009 and June 2010, Eurosystem central banks can directly buy eligible covered bonds in the primary and secondary markets of up to €60bn – 18% of the 2008 eligible covered bond gross supply (€337bn) and 4% of the total outstanding volume of covered bonds eligible to the purchase programme (€1,497bn).

With a total outstanding volume of €806bn at the end of 2008, Germany remains by far the largest covered bond market, followed by Denmark (€373bn), Spain (€332bn), France (€264bn), the UK (€187bn) and Sweden (€126bn). These six captured 88% of the overall covered bond market. The total outstanding volume of Canadian, Norwegian and UK covered bonds experienced triple-digit growth in 2008, while that of Czech, German, Icelandic and Polish covered bonds decreased by 2%, 9%, 37% and 14%, respectively.

Mortgage covered bonds continued to dominate the market, accounting for 78% of the gross supply and 64% of the overall outstanding volume of covered bonds at the end of 2008. While all 25 countries included in the 2008 statistics were mortgage covered bond markets, only ten were also public covered bond markets. Germany and Denmark were the only ship mortgage covered bond markets. Even though some covered bond laws allow for a mixed cover pool, only Compagnie de Financement Foncier and Crédit Foncier et Communal d’Alsace et Lorraine – Société de Crédit Foncier run a mixed pool of assets. Last year’s gross supply of covered bonds secured by a mixed pool of assets was €9bn.

At the end of 2008, of the total volume of outstanding covered bonds, 30% (26% at the end of 2007) were not €-denominated and 20% (11% at the end of 2007) were floating rate notes. The floating rate covered bond market nearly doubled, while the fixed-rate covered bond market increased by only 3%. Many covered bond issuers use their domestic currency. Apart from the euro, important currencies are DKK, followed by GBP, SEK, USD, CHF and NOK. Until 2007, the majority of UK covered bonds were €-denominated. This, however, changed dramatically in 2008. As 93% (6% in 2007) of the 2008 UK covered bond issuance was £-denominated, the share of £-denominated UK covered bonds grew to 54% (6% in 2007) of the overall UK covered bond market.

\(^5\) The figure includes assumptions for privately placed Austrian covered bonds.

\(^6\) The figure includes assumptions for privately placed French obligations foncières.
At the end of 2008, around €284bn (12%) of the total outstanding volume of covered bonds was denominated in a non-domestic currency, a slight rise compared with 11% in 2007. Of the 25 countries considered in the statistics, the issuers out of 17 countries had outstanding covered bonds denominated in both a domestic and non-domestic currency, while those out of seven countries (Finland, Greece, Iceland, Portugal, Spain, Switzerland and Ukraine) had only domestic-currency-denominated covered bonds outstanding. Issuers incorporated in Canada have not yet launched domestic-currency-denominated covered bonds. They only had €-denominated covered bonds outstanding at the end of 2008.

The market distinguishes between special-law-based covered bonds and general-law-based covered bonds. The first are governed by a special covered bond law outlining unambiguously investor interests in the event of issuer insolvency. Up to 2006, general-law-based covered bonds were issued only out of countries where no special covered bond law existed. However, in the past three years several French banks and one German bank have established covered bond programmes outside the national special covered bond law. At the end of 2008, general-law-based covered bonds existed in Canada, France, Germany, Iceland, the Netherlands, the UK and the US. Their total outstanding volume was €165bn (7% of the overall covered bond market) compared with €127bn in 2007.

The UK and Dutch covered bond markets started as general-law-based covered bond markets. After the implementation of special covered bond laws in 2008, issuers started to exchange general-law-based covered bonds for special-law-based covered bonds. As at the end of 2008, seven UK issuers and one Dutch issuer had become special-law-based covered bond issuers. If there had been no exchange of general-law-based covered bonds for their special-law-based counterparts, the share of the former would be over 12% (€296bn) of the overall market. In 2008, total general-law-based covered bond gross supply was €86bn (13% of the overall 2008 gross supply) compared with €94bn (18% of the overall 2007 gross supply) in 2007. Without the introduction of special covered bond laws in the UK and the Netherlands, total general-law based covered bond gross supply would be €164bn (25% of the overall 2008 gross supply).

### III. COVERED BOND MARKET OUTLOOK

While relatively resilient to the financial market turmoil initially, the covered bond market finally succumbed and public issuance of €-denominated Jumbos ceased in 4Q08. In the course of the crisis, the market making mechanism was severely strained. Investors took fright and spreads widened beyond historical precedents. While the overall covered bond market experienced double-digit growth in 2008, there was stagnation in the €-denominated Jumbo market.

With over €60bn maturing, €-denominated Jumbo net supply in 1H09 was negative (-€13bn). At the same time, the total covered bond net supply was positive (estimated €45bn). The Jumbo market is reviving, as Jumbos are being issued sporadically. Jumbo issuance enjoyed a rally after the ECB’s announcement that it was to buy outright up to €60bn in covered bonds. While we consider this to be a welcome sign that the covered bond market is picking up, there is some way to go. Issuers still have to overcome considerable challenges.

The financial market turmoil has given rise to a home-country bias. Compared with foreign investors, domestic investors appear to be less concerned about local banks. To raise larger volumes via smaller deals requires a developed domestic investor base. Banks may thus aim to establish stronger ties with local investors. German, French and Scandinavian issuers benefit from a developed local investor base.
Newer market entrants lack this investor base, and thus rely on the Jumbo format to diversify and internationalise their investor base and to gain a market profile.

Current contractual terms give some issuers the right, but not the obligation, to exchange general-law-based covered bonds for special-law-based covered bonds if certain requirements are met. We expect the reduced risk weighting and higher investment limits and thus the potentially broader pool of investors for UCITS 22(4) and CRD-compliant covered bonds to be the main rationale for general-law based covered bond issuers to opt for special-law-based covered bonds or to lobby for a level playing field.

Banks are looking for a variety of funding instruments to optimise their cost of capital market financing. As they regard covered bonds as a viable funding alternative, several are working on, or have established, their covered bond programmes. While new players get ready to join the covered bond market, a few existing issuers have diversified their funding sources by establishing more than one programme. In terms of issuers, the expansion of the covered bond market has thus not yet run its course. However, taking into account the potential merger of existing issuers, the expansion may slow down.

Floating-rate covered bonds were in vogue in 2008, reflecting not only issuers’ expectations with regard to interest rates but also the beneficial valuation haircuts applied to floating-rate covered bonds, for example, in the Eurosystem refinancing operations. It remains to be seen if the floating-rate covered bond market will stand up to the fixed-rate covered bond market.

Investor demand was focused on the short to medium term in 2008 and dictated the issuers’ choice of maturity. While short- and medium-term covered bonds compete with government-guaranteed bank debt, there is scope for longer-term issues to escape this competition. Issuers exploring the public market in 2009 have used this opportunity and launched covered bonds with an initial time-to-maturity of five years or longer. Term funding has to gain importance over time. We consider covered bonds as a viable means by which to support the mortgage finance markets, particularly considering the banks’ need for a variety of funding instruments and matched financing.
## 5.2 STATISTICS

### 5.2.1 TOTAL

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<thead>
<tr>
<th>Outstanding (in mln EUR)</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
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<table>
<thead>
<tr>
<th>Issuance (in mln euro)</th>
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### Issuance (in mln euro)

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<table>
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<td><strong>Total Issuance</strong></td>
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<td>495320</td>
<td>530277</td>
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## 5.2.2 TOTAL 2008 STATISTICS BY TYPE OF ASSETS

### COVERED BONDS OUTSTANDING 2008 in EUR million

<table>
<thead>
<tr>
<th>Country</th>
<th>Public Sector</th>
<th>Mortgage</th>
<th>Ships</th>
<th>Mixed Assets</th>
<th>TOTAL</th>
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<tbody>
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### COVERED BONDS ISSUANCE 2008 in EUR million

<table>
<thead>
<tr>
<th>Country</th>
<th>Public Sector</th>
<th>Mortgage</th>
<th>Ships</th>
<th>Mixed Assets</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
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#### Maturity of Bonds

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#### Notes
Data is tentative.
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### 5.2.5 CZECH REPUBLIC

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<td>1956</td>
<td>4452</td>
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<td>744</td>
<td>2558</td>
<td>956</td>
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5.2.6 DENMARK

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<th>2008</th>
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<td>286238</td>
<td>300267</td>
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**Maturity of Bonds**

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**Issuance (in mln euro)**

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<td>78190</td>
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<td>95009</td>
<td>149708</td>
<td>114014</td>
<td>139586</td>
<td>113484</td>
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<tr>
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<td>95009</td>
<td>149708</td>
<td>114014</td>
<td>141349</td>
<td>113484</td>
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<td>8850</td>
<td>8844</td>
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<td>149708</td>
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<td>113484</td>
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<td>94855</td>
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<td>114014</td>
<td>141349</td>
<td>113484</td>
</tr>
</tbody>
</table>

**Maturity of bonds**

|                    | 12      | 10      | 13      | 12      | 11      | 10      |

Note: For Denmark, due to the refinancing activity of interest reset loans based on bullet bonds at the end of the year, both the new bonds issued for refinancing and the bonds they are replacing are in ultimo figures. If one takes the figures as of 31.01.2009, the total outstanding for the Danish market would be EUR 48 bn. less.

Since most of the Danish Mortgage Covered Bonds are tapped issued over a period of typically 3 years, Jumbo issues and outstanding is defined as covered bond with more than 1 bn. euro in the year, where the bond reach 1 bn. euro. The whole outstanding amount will be reported as Jumbo the year the bond exceed 1 bn. euro. This definition covers both covered bonds denominated in Danish crowns and in euro. Most of the Danish Covered bonds denominated in euro are issued via VP Lux in Luxembourg. Theses bonds issued via VP Lux are included in the Danish data.
## 5.2.7 FINLAND

<table>
<thead>
<tr>
<th>Outstanding (in mln EUR)</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
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<tbody>
<tr>
<td>Total Covered Bonds Outstanding</td>
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<td>250</td>
<td>1500</td>
<td>3000</td>
<td>4500</td>
<td>5750</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Outstanding Covered Bonds backed by Mortgage</td>
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<td>1500</td>
<td>3000</td>
<td>4500</td>
<td>5750</td>
<td>5750</td>
</tr>
<tr>
<td>Outstanding Covered Bonds backed by Ships</td>
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### Maturity of Bonds

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### Maturity of bonds
### 5.2.8 FRANCE

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## 5.2.11 HUNGARY

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<td>808</td>
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Note: For 2008, the exchange rate is assumed to be 250 ISK/EUR
### 5.2.13 IRELAND

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<td>0</td>
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<tr>
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<td>29204</td>
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<td>8063</td>
<td>14563</td>
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### Issuance (in mln euro)

| **Total Covered Bonds Issuance** |      |      |      |      |      |      |
| New Issues of Covered Bonds backed by Public Sector | 4000 | 2063 |      |      |      |      |
| New Issues of Covered Bonds backed by Mortgage |      |      |      |      | 6500 |      |
| New Issues of Covered Bonds backed by Ships |      |      |      |      |      |      |
| New Issues of Covered Bonds by Mixed Assets |      |      |      |      |      |      |
| **Total Issuance** | 0    | 0    | 4000 | 2063 | 0    | 6500 |
| Issuance Jumbo | 4000 | 2000 | 1000 |      |      |      |
| Issuance non-Jumbo | 0    | 63   | 5500 |      |      |      |
| **Total Issuance** | 0    | 0    | 4000 | 2063 | 0    | 6500 |
| Total Issuance Public Placement | 4000 | 2000 |      | 6500 |      |      |
| Total Issuance Private Placement | 0    | 63   |      |      |      |      |
| **Total Issuance** | 0    | 0    | 4000 | 2063 | 0    | 6500 |
| Issuance denominated in EURO (stated in mln EUR) | 4000 | 2000 |      | 6500 |      |      |
| Issuance denominated in domestic currency (stated in mln EUR) |      |      |      |      |      |      |
| Issuance denominated in other currencies (stated in mln EUR) | 63   |      |      |      |      |      |
| **Total issuance** | 0    | 0    | 4000 | 2063 | 0    | 6500 |
| Issuance fixed coupon | 4000 | 2000 |      | 6500 |      |      |
| Issuance floating coupon | 0    | 0    |      |      |      |      |
| Issuance other | 0    | 63   |      |      |      |      |
| **Total issuance** | 0    | 0    | 4000 | 2063 | 0    | 6500 |
| **Maturity of bonds** | 6,0  | 4,0  |      |      |      |      |
### 5.2.15 LATVIA

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<th>2007</th>
<th>2008</th>
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<td>95</td>
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<td>0</td>
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<td>63</td>
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<td>60</td>
<td>63</td>
<td>90</td>
<td>95</td>
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<td>54</td>
<td>60</td>
<td>63</td>
<td>90</td>
<td>95</td>
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<tr>
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<td>54</td>
<td>60</td>
<td>63</td>
<td>90</td>
<td>95</td>
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<td>54</td>
<td>60</td>
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### Issuance (in mln euro)

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<td>4</td>
<td>20</td>
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<td>11</td>
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<td>0</td>
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<td>20</td>
<td>23</td>
<td>11</td>
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<tr>
<td><strong>Total Issuance</strong></td>
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<td>4</td>
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<td>11</td>
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<td>22</td>
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## 5.2.16 LUXEMBOURG

### Outstanding (in mln EUR)

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<th>2008</th>
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<td>24968</td>
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<td>33741</td>
<td>35467</td>
</tr>
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<td>35617</td>
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### Issuance (in mln euro)

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<td>9730</td>
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### 5.2.17 NETHERLANDS

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#### Maturity of Bonds

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#### Maturity of bonds
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### Maturity of Bonds

| Issuance (in mln euro) | | | | | | |
|------------------------| | | | | | |
| Total Covered Bonds Issuance | | | | | | |
| New Issues of Covered Bonds backed by Public Sector | 0 | | | | | |
| New Issues of Covered Bonds backed by Mortgage | 6009 | 16726 | | | | |
| New Issues of Covered Bonds backed by Ships | 0 | | | | | |
| New Issues of Covered Bonds by Mixed Assets | 0 | | | | | |
| Total Issuance | 0 | 0 | 0 | 0 | 6009 | 16726 |
| Issuance Jumbo | 4500 | | | | 7169 | |
| Issuance non-Jumbo | 1509 | | | | 9557 | |
| Total Issuance | 0 | 0 | 0 | 0 | 6009 | 16726 |
| Total Issuance Public Placement | | | | | 6009 | 13592 |
| Total Issuance Private Placement | | | | | 3134 | |
| Total Issuance | 0 | 0 | 0 | 0 | 4122 | 16726 |
| Issuance denominated in EURO (stated in mln EUR) | | | | | 4500 | 8346 |
| Issuance denominated in domestic currency (stated in mln EUR) | | | | | 1071 | 8108 |
| Issuance denominated in other currencies (stated in mln EUR) | | | | | 438 | 272 |
| Total issuance | 0 | 0 | 0 | 0 | 6009 | 16726 |
| Issuance fixed coupon | 5569 | | | | 9310 | |
| Issuance floating coupon | 440 | | | | 7419 | |
| Issuance other | 0 | | | | 0 | |
| Total issuance | 0 | 0 | 0 | 0 | 6009 | 16729 |
### 5.2.19 POLAND

#### Outstanding (in mln EUR)

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#### Issuance (in mln euro)

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### 5.2.20 Portugal

#### Outstanding (in mln EUR)

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#### Issuance (in mln euro)

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## 5.2.21 SLOVAKIA

### Outstanding (in mln EUR)

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### Maturity of Bonds

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### Maturity of bonds
### 5.2.22 SPAIN

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<td>101907</td>
<td>159853</td>
<td>226358</td>
<td>283334</td>
<td>332085</td>
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### Issuance (in mln euro)

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Source: AIAF
### 5.2.23 Sweden

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<td>0</td>
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<td>0</td>
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<td></td>
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<td>92254</td>
<td>126425</td>
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### Issuance (in mln euro)

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### 5.2.24 SWITZERLAND

**Outstanding (in mln EUR)**

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<td>29395</td>
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<td>36180</td>
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<tr>
<td>Outstanding Covered Bonds backed by Mixed Assets</td>
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<tr>
<td><strong>Total Outstanding</strong></td>
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<td>29941</td>
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**Maturity of Bonds**

**Issuance (in mln euro)**

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**Maturity of bonds**
5.2.25 UKRAINE

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Note: The €6.83m covered bonds issued in 2008 were subsequently withdrawn in February 2009.
### 5.2.26 UNITED KINGDOM

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<td>14959</td>
<td>26778</td>
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### Maturity of Bonds

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### Maturity of bonds
### 5.2.27 United States

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