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REPORT
OF THE MORTGAGE FUNDING EXPERT GROUP

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The views expressed in this report are the views of the Expert Group and its members, and not of the European Commission.

Commission européenne, BE-1049 Bruxelles / Europese Commissie, BE-1049 Brussel - Belgium. Telephone: (32-2) 299 11 11.
Office: C107 00/07. Telephone: direct line (32-2) 296 20 91. Fax: (32-2) 295 07 50.

http://ec.europa.eu/internal_market/
E-mail: markt-h3@ec.europa.eu

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1. INTRODUCTION

1.1. Mortgage Funding's Contribution to Market Integration

European primary and secondary mortgage markets are intrinsically linked.[1] The supply of mortgage credit products and the price at which they are offered relies heavily on an individual institution's funding strategies. Initiatives focused on achieving primary market integration may have consequences for the funding of mortgage credit products, thus for the supply of and price at which mortgage products are offered. Initiatives focused on secondary market integration are likely to affect the availability of products on offer on primary markets.

This close relationship means that the integration of European mortgage funding markets can facilitate mortgage integration by increasing efficiency, improving product diversity and fostering competition.

The integration of mortgage funding markets, in particular for capital markets based funding products, has the potential to improve the **efficiency** of mortgage markets. Efficient mortgage funding markets can be achieved through cost reductions and improved capital management.

Integration of European mortgage funding markets will enable mortgage lenders to create larger and more diversified pools of European assets that can be funded away from local deposit markets at the lowest cost of funding. Lower costs in turn are likely to lead to lower mortgage costs for consumers.

The creation of larger and/or diversified pools by either pooling of loan portfolios from different countries or from several issuers has an economic rationale as well as benefits. Small to medium sized lenders that may struggle to achieve a critical mass on their own, would be able to access capital market funding more easily. Mortgage lenders who operate in several countries would also be able to pool similar loans together without needing several issuances. Investors would be able to directly purchase risk diverse portfolios.

The integration of mortgage funding markets can also significantly improve the **product diversity** of European mortgage markets.

The diversity of financing techniques in Europe has already enabled the provision of a range of products to consumers. The increasing use of capital market based funding mechanisms has enabled mortgage lenders to develop and fund new risk-based products, such as those provided to consumers who are currently excluded from the mortgage market because of low income levels or poor credit histories, thereby improving consumer choice and extending access to homeownership to those previously excluded. New products, such as Islamic mortgages, high loan-to-value mortgages and equity release mortgages have also emerged. Much of the growth in product innovation has been derived from heightened competition from non-traditional lending sources, many of whom finance mortgage lending through capital markets.

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[1] For the purpose of this report, "primary markets" refer to the origination and servicing of mortgage loans. "Secondary markets" refer to the funding of mortgage loans via capital markets.

The integration of EU mortgage funding markets is also instrumental in further promoting **competition**. This can be done in a variety of ways. As discussed above, by providing access to new products thus improving consumer choice and by improving the efficiency of markets thus lowering funding costs as well as the eventual price offered to consumers, the competitiveness of EU mortgage markets can be further enhanced.

1.2. Mortgage Funding Expert Group (MFEG)

In the Green Paper on Mortgage Credit in the EU of 19 July 2005 (COM (2005) 327), the Commission announced its intention to create an ad hoc mortgage funding working group. This idea was unanimously supported in the responses to the Green Paper consultation.

The Mortgage Funding Expert Group (MFEG) was established in April 2006 to:

- identify the barriers to integration for each of the funding models outlined in the Mortgage Forum Group Report from December 2004;
- prioritise the barriers identified in terms of their significance to the market;
- consider and justify possible solutions for each of the barriers identified and make concrete recommendations to the Commission.

MFEG met eight times during 2006. This report summarises the discussions held and presents the recommendations of the experts participating in the Expert Group (See Annex 1 for list of experts).

1.3. European Mortgage Funding Markets

European mortgage markets are facing significant changes. With view to rising pressures to increase margins and reduce costs, European mortgage lenders sought new techniques to increase market share and profitability, reduce the overall risk exposure and increase performance and effectiveness. Although the focus of this report is on residential loans secured by property, some of the issues discussed may also be of relevance for commercial mortgage lenders.

Housing finance has traditionally been based on retail deposits. Retail deposits can be a relatively cheap form of funding, but have typically relied heavily on large branch networks. The use of deposits for financing mortgage loans also creates issues in terms of asset and liability management, as deposits typically have short to medium periods of notice, whereas mortgage loans are typically medium to long-term products.[2]

In recent years, most countries have experienced a decline in the level of deposits, as consumers look for alternative and more profitable ways to place their savings. In addition, a relatively low interest rate environment as well as house price rises has meant that the demand for mortgage credit has been growing constantly. Consequently, with the demand for mortgage credit increasingly outstripping the supply of deposits, mortgage lenders have looked more and more towards capital markets to finance the funding gap (See Graph 1).

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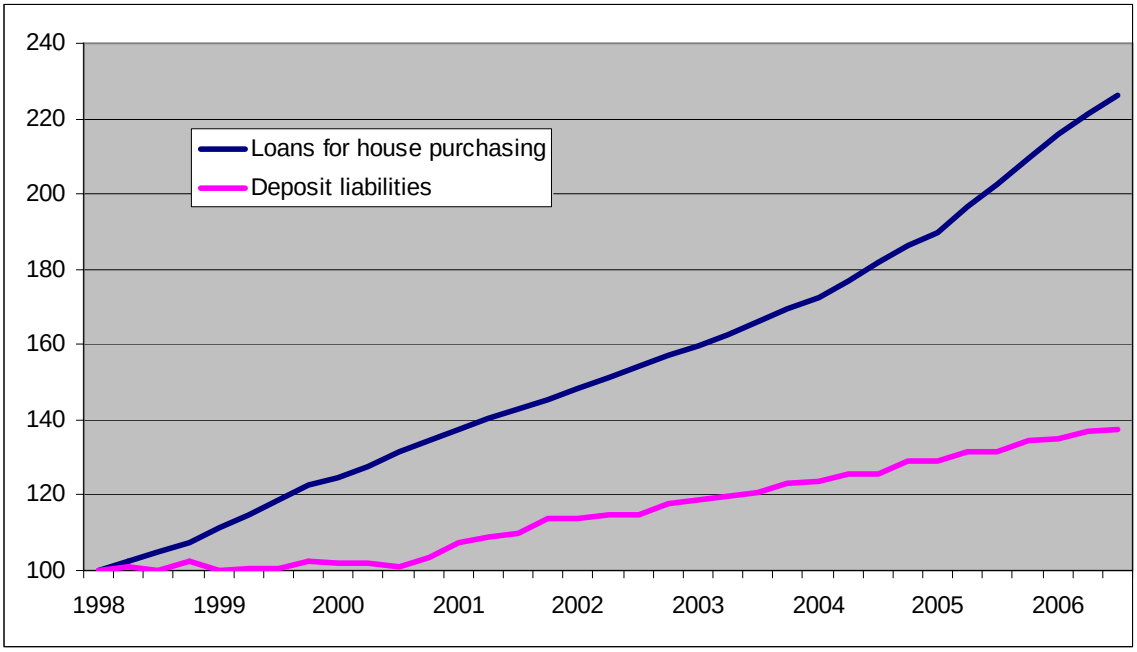
[2] "It's the funding, commissioner!", Deutsche Bank, October 2006.

Graph 1: Funding Gap – Quarterly Growth in Deposits versus Home Loans (1Q 1998 to 3Q 2006) (1Q 1998 = 100)



Source: European Central Bank

Despite a decline in deposit funding, according to the most recent statistics, retail deposits still make up approximately 60%[3] of mortgage funding and remain the predominant form of mortgage finance in the majority of EU Member States. The use of capital market products such as covered bonds and residential mortgage backed securities (RMBS) as well as newer products such as whole loan sales and temporary warehousing facilities is, however, rising. Although detailed statistics on the funding structure of EU mortgage funding markets are scarce, funding by residential and commercial covered bonds is estimated at about 17.5%, and funding by RMBS (excluding commercial mortgage backed securities) is approximately 10% of outstanding EU residential mortgage balances. The remainder of EU residential mortgages are assumed to be financed by unsecured lending.

The expansion of capital market products provides an alternative to retail deposits, giving lenders access to international capital markets and bringing benefits to lenders and consumers alike. The decision to use one type of funding technique over another depends on a variety of factors, such as the interest rate, term of interest rate fixing, accounting treatment, capital relief available, execution cost and funding costs. In many cases, these financing techniques are complementary to each other since they achieve different objectives and reach investors with different portfolio strategies (See Table 1 for an overview of the characteristics of mortgage funding products).

Taking these developments into account, as well as the fact that unsecured financing, including deposits, did not face as many barriers in terms of cross-border activity, MFEG decided to focus on barriers to capital market products such as covered bonds, RMBS, whole loan sales and temporary warehousing facilities.

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[3] "Funding of Mortgage Loans in the European Union and Norway (2002)", European Mortgage Federation.

While Third Party Credit Enhancements (TPCEs) are not funding mechanisms themselves, they facilitate funding and enable mortgage originators to achieve other objectives, like risk transfer and regulatory capital relief. Typical examples of TPCE are credit default swaps, financial guarantees, and mortgage insurance. As an external credit enhancement provider is improving the risk profile of the relevant pool, a mortgage lender can benefit from an increased volume of mortgages that can be funded or from lower funding spreads.

MFEG decided that TPCEs played a valuable role in developing an integrated secondary market for mortgage funding and warranted further analysis.

Table 1: Comparison of Mortgage Funding Product Characteristics

	Product Characteristics	**Eligible Assets**	**Funding**	**IAS Treatment**	**Regulatory Capital Relief**	**Investor Base**
Deposits	Bank deposits	Unlimited	100%	On balance sheet	No	Retail
Temporary Loan Warehousing Facilities	Securitisable assets	Securitisable assets	Bank warehousing facilities	Depends	Depends	Institutional
Uncollateralised Debt	Bank debt	Unlimited	100%	On balance sheet	No	Retail and institutional
Whole Loan Sale	Sale	Unlimited	100%	Off balance sheet	Yes	Institutional
Traditional Covered Bonds	Secured debt	Eligible assets	Capped	On balance sheet	No	Institutional
Structured Covered Bonds	Secured debt	Eligible assets	Capped	Depends	No	Institutional
Conduit RMBS	Sale	Securitisable assets	100% less retained tranches	Depends	Depends	Institutional
Term Cash RMBS	Sale	Securitisable assets	100% less retained tranches	Depends	Depends	Institutional
Synthetic RMBS	Self-funded with risk transfer	No legal restrictions	Partial	On balance sheet	Depends	Institutional

Source: European Securitisation Forum

2. VISION FOR AN INTEGRATED EUROPEAN MORTGAGE FUNDING MARKET

MFEG believes that a market-based, deregulated approach is best able to provide efficient markets, deliver maximum choice and best pricing for the consumer. An integrated European mortgage funding market should satisfy five main criteria. It should be complete, competitive, efficient, transparent and stable.

2.1. Complete

Funding arrangements should be designed to meet the needs of the mortgage products being offered on the market and not vice versa. At the same time, it is important for each market to be able to retain its own banking and mortgage financing model where it serves the interest of different borrower and lender requirements as well as the demands of domestic and international investors.

A balanced approach to funding mechanisms is therefore required. At present, different rules can apply within a jurisdiction for the issuance of covered bonds and RMBS, even though both are essentially similar transactions aimed at the provision of capital market funds for retail mortgages. Mortgage lenders use a combination of complementary financing techniques as part of their portfolio management strategy.

Recommendation

Mortgage lenders should be free to choose the most appropriate funding strategy for their business and have equal access to mortgage funding markets and investors irrespective of their location.

Any regulation should not favour one form of funding above another, since each funding instrument has its own advantages and disadvantages based on its particular product characteristics.

2.2. Competitive

Rather than displace existing commercial or specialised lending institutions, the integration of European mortgage funding markets is an opportunity to generate new business opportunities as well as promote competition in the market by enabling new companies to enter markets. To maximise its benefits, competition should occur at every stage in the mortgage value chain: origination, underwriting, funding, servicing, and risk processing.

A key element in introducing competition into EU mortgage funding markets is to ensure that there is no discrimination based on a mortgage lender's funding strategy.

While the requirement to be a bank in order to originate a mortgage constitutes a limited hurdle for banks due to the ability of European banks to passport into other countries, non-banks face distinct challenges in markets where banking licences are required. As regulated non-banks typically offer more innovative products and offer credit to new segments of the population, these barriers to competition should not be overlooked.

Distribution is a key element in the mortgage value chain and can be undertaken either directly or indirectly. In many countries, mortgages tend to be distributed directly via bank branches[4]. Indirect distribution, via an intermediary or broker is, however, increasing and is particularly important in countries such as Hungary, Ireland, Netherlands, and the UK. Well developed alternative distribution channels have also led to increased competition amongst lenders, promoting financial innovation and competition. For example, in the UK, mortgage brokers originate the predominant share of new mortgage lending, encouraging product innovation by lenders. While deposit-taking institutions usually have a wide branch network through which to collect deposits and originate mortgages, lenders who use capital market financing to originate mortgages usually have a more limited distribution network presence, hence the importance of well developed credit intermediaries and/or brokers. Mortgage lenders, both deposit taking and capital market financed, can then use credit intermediaries and/or brokers to distribute their mortgage products, without necessarily having to establish a presence themselves.

Mortgage lenders could achieve incremental profitability by utilising third party servicers with large economies of scale to drive down processing costs by using existing information systems and credit servicing staff across a larger borrower base. Traditional lenders are perhaps less likely to use third party servicers given the importance of maintaining a close relationship with consumers. For a pan-EU lender, it should however be possible to outsource specific parts of the business (e.g. servicing) to create operational centres across Europe, thereby increasing economies of scale and creating business opportunities. This is not the case at present. When a lender moves across borders, its costs rise since national laws in many Member States require lenders to open offices in order to operate.

The further development of third party servicing in Europe should be encouraged as it enables niche, or specialist lenders to enter a market and offer new products (e.g. non-conforming mortgages, second lien or equity release products) that may not be offered by mainstream lenders.

In several jurisdictions, there is a requirement for a servicer to have a banking licence. Certain companies, if regulated as banks in one jurisdiction, can use this as a "fast track" mechanism to establish themselves as a servicer in another jurisdiction. For other companies, who do not have a banking licence, the requirement appears to act as a barrier to entry. In certain markets, there is a fine line between how assets are serviced generally and whether general servicing (cash management, collections, further advances etc.) would deem the company to be a lender (i.e. to make credit decisions) and therefore require a banking licence.

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[4] For example, Denmark, Germany, Spain, France, Italy, Austria, Poland and Portugal.

Housing is an important social issue for many governments. As a result, there has been a proliferation of public mortgage lending, funding and insurance activities, which should be examined in order to assess whether they fulfil the obligations laid down in Article 87 of the Treaty.

Recommendations

MFEG would welcome measures to promote the development of alternative distribution channels. To this end, MFEG supports the Commission's intention to undertake a focused study on credit intermediaries in 2008.

Where a servicer or non-bank originator is authorised in one EU Member State, it should be automatically authorised to do the same in all other EU Member States, subject to minimum notification or registration requirements. The Commission should examine creating a 'passport' for non-bank originators and servicers.

Member States, which require banking licences for residential mortgage lenders, should limit the amount of regulation on non-deposit taking institutions to an appropriate level, commensurate with the risks with respect to capital and funding. Member States should ensure that legislation does not require servicers to hold a banking licence.

Member States should ensure that legislation, including securitisation laws, should not prohibit or restrict the cross-border servicing of assets – if that is the model chosen by the lender.

The Commission should ensure that public mortgage related activities are restricted to purely social, or other promotional purposes, within the context of Article 87 of the Treaty.

2.3. Efficient

The efficiency of European mortgage markets can be improved through the existence of more liquid and diversified markets. Caution should, however, be exercised to ensure that possible negative side effects do not ensue. In this respect, two aspects should be considered.

First, although the economic rationale for creating larger and more internationally diversified cross-border pools exists, there are many examples of originators who have chosen to securitise separately loans which have different characteristics or which have been originated in different jurisdictions. This separation allows the market to price the securities individually to reflect the appropriate risk profile taking, for example, foreclosure procedures into account. The creation of cross-border pools is, therefore, not necessarily always better than national pools or single originator pools since the required credit enhancement (and therefore costs of such as transaction) would be calculated by reference to the most risky rather than the best asset. Moreover, modern portfolio theory suggests that investors can also develop a diversified portfolio on their own account more precisely than could be constructed on their behalf by a third party.

Second, a frequently cited criteria for enhanced efficiency is standardisation. According to some arguments, the variety of mortgage contracts, mortgage products and underwriting criteria is a potential barrier to more efficient funding, leading to a lack of consistency in pools of mortgage collateral. This variety makes it more difficult to securitise pools and/or create large cover pools as well as to compare transactions. Consequently, it is sometimes argued that asset pool standardisation through the creation of standardised loan contracts could create more liquid markets; facilitate the transferability of assets; enhance the size of portfolios and thus economies of scale; and facilitate the analysis and decision-making process of investors. Standardisation, however, can also have a detrimental affect on the variety of products available and may not necessarily lead to mortgage markets developing a full range of solutions for all customers, especially those who do not conform to the common standards. European mortgage funding markets are already relatively efficient and the full-scale harmonisation to promote standardisation would be difficult to justify from a cost / benefit analysis.

The idea of a pan-European mortgage finance agency modelled on the US Government Sponsored Enterprises (GSEs) was considered in detail by the Forum Group on Mortgage Credit. According to the Forum Group report, "*although the creation of a pan-European facility aimed at further developing both the mortgage bond and RMBS markets would be beneficial to both lenders and borrowers, the Forum Group considered that such a facility should be organised and run as a private corporation*".[5] Such a pan-EU entity would not be consistent with the free market principles and would not provide the necessary conditions of efficiency and competition. MFEG agrees with the position of the Forum Group.

To this end, the focus of efficiency related measures should be on deregulation and market based solutions rather than across the board standardisation of mortgage products.

2.4. Transparent

Given that full scale standardisation would not only be difficult but also questionable in its effects, transparency plays a crucial role in facilitating investor understanding of the product and funding diversity. Risk managers, investors, rating agencies and banking regulators can benefit from increased and consistent information on the credit and prepayment performance of assets, registration systems, property valuation, etc. For example, for analysts, transparency to understand the risk within the pool is more important than standardisation.

Transparency will increase the efficiency and comparability of funding markets across Europe.

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[5] "The Integration of EU Mortgage Credit Markets", Forum Group on Mortgage Credit, December 2004. http://ec.europa.eu/internal_market/finservices-retail/docs/home-loans/2004-report-integration_en.pdf

2.5. Stable

The dispersion of risk in the market is crucial. A well-developed secondary market will assist financial institutions in better managing their risks by reducing or increasing their exposures to certain types of risk, e.g. currency, credit, prepayment, geographic or market risk. Financial institutions could obtain exposures to certain markets without having to incur the extra costs of setting up a distribution network to originate the loans.

Long-term funding from capital markets adds stability to mortgage markets across Europe.

Recommendation

MFEG recommends that EU and national regulators promote funding and risk transfer alternatives, which encourage market and institutional stability and remove the obstacles mentioned in this report.

3. PRIMARY MARKET ISSUES

3.1. Early Repayment

3.1.1. Context

A mortgage loan is extended for a specified term, usually more than ten years, and requires the repayment of interest, and if the loan is fully or partially amortising, principal over that specified term. Most mortgage loans are long-term loans, but common practice dictates that both the market conditions and the circumstances of the individual borrowers change over the life of the mortgage loan. Such changes in conditions and circumstances may prompt the mortgage borrower to prepay the loan partially or fully. Early repayment of the loan can create a number of consequences for the mortgage lender or investor.

The consequences of early repayment depend on several factors, such as whether the mortgage loan is a fixed or a floating rate loan, how the funding for such loan is raised and the costs of acquiring the loan for the borrower (marketing and commission costs). As interest rates are one of the major drivers of prepayments, prepayments of fixed rate loans typically increase in a falling interest rate environment and decrease in rising interest rate environment. While floating rate mortgages are less sensitive to interest rate changes (due to their floating rate nature, they reflect the interest variability), they are also subject to prepayments for other reasons, for instance, competition between lenders and the introduction of new or alternative products on the market. Prepayments of fixed rate loans are also subject to such reasons.

From the lender's perspective, a mortgage loan is designed to generate interest income and fee income. If a consumer repays a loan earlier than scheduled, the mortgage lender will not be able to generate the expected interest and fee income. The lender therefore will incur a loss. If a mortgage lender has raised funding with a stated maturity and coupon or has hedged the mortgages, the mortgage lender must replace the asset or break hedging arrangements which might prove expensive or even impossible. For instance, covered bond issuers must maintain the cover pool supporting the covered bond issuance according to certain legal or funding requirements.[6] Early repayment of the mortgages in the cover pool will, therefore, create a number of potentially significant costs and challenges for the lender associated with its asset-liability management.

From the perspective of the investors in callable mortgage covered bonds and RMBS, the early repayment of underlying mortgages in the collateral pool may lead to an earlier than expected repayment of their bonds. Given that the average life is a key component in bond pricing, improper calculation of the average life of bond investments may lead to losses for investors holding the loans in two ways. First, investors receive interest income from their bond investment for a shorter period of time than initially anticipated. Second, investors may suffer a loss from the reinvestment of the capital at less favourable market conditions since they receive the capital earlier than expected.

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[6] These requirements may include, for example, maintaining the appropriate size of the cover pool and substitution of mortgages in the pool.

Consequently, the availability of an early repayment option to the mortgage borrower has a direct connection with the profitability of the lenders' and investors' operations. A prepayment option, therefore, has a value and a cost. If the value is conferred to one of the parties of a mortgage loan, the cost has to be borne by the other parties.

Against this background, several major questions arise such as: whether the prepayment of a mortgage loan by the mortgage borrower should be considered a legal or a contractual right; whether, if such prepayment option is granted to the borrower, the lender has the right to prepayment compensation; if such prepayment compensation is considered, how it should be calculated, etc.

MFEG notes that in Europe, legal interventions into prepayment policy have often led to unacceptable distortions in mortgage loan pricing and cross-border lending activity.

3.1.2. Discussion

3.1.2.1. Legal Right

For the purpose of this report, unconditional early repayment means the full realisation of potential losses for lenders (or equally loan servicers and/or capital market investors).

US and Danish experiences support the view that if early repayment is an unconditional right to consumers, significant interest rate increases follow in the form of a prepayment option mark-up. In the case of a 30 year mortgage with a fixed rate maturity, such an option costs between 40 and 100 basis points per annum. In the case of shorter interest rate binding periods, costs are lower but still significant.[7] The spreads appear to indicate that reinvestment risk is an empirically more significant cost item than credit risk.

For this reason, almost all European countries apply some form of call protection to fixed rate mortgages, such as prepayment prohibitions or additional fees to discourage prepayments. Consumers who waive their prepayment option benefit through lower interest rates, saving the options costs that would necessarily have to be applied to all borrowers.

A majority of the MFEG members believe that early repayment should be contractual, i.e. that the contracting parties should be able to exclude early repayment. Members in favour of a contractual option are concerned that if early repayment were granted as a legal right, there would be a risk that compensation would be below actual lender loss levels. Members are also concerned about the asset substitution risk for managed structures, in particular covered bonds. Some covered bond issuers point out that unless early repayment is limited to a contractual option, asset substitution risk may not be entirely controlled, to the potential detriment of investors. However, it may also be argued that managing asset substitution risk is already a practical necessity for covered bond issuers.

A minority of MFEG members believe that early repayment should be a legal right subject to conditions. The argument is that fair and objective conditions are sufficient to realise tight loan pricing over benchmarks for funding such as Euribor or covered bonds and to reach sufficient levels of customer retention.

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[7] The mark-up on German callable 10 year fixed loans is currently between 20 and 45 basis points.

All members of the MFEG believe that consumers should be able to waive an unconditional right to early repayment. The common view here is that an unconditional right without any waiver would lead to unacceptable loan cost increases.

3.1.2.2. Early Repayment Charges

The charges for exercising an early repayment option may take two forms: a variable compensation (determined ex-post and based on actual losses) or a predetermined fee model (ex-ante determined and unrelated to actual losses).[8]

In general, compensation should be calculated in a fair and objective manner. This means that the lender's or investor's financial loss from early repayment should be covered. At the same time, the economic freedom of the prepaying consumer should not be impaired.

Compensation models often take the form of yield maintenance indemnity (YMI), thereby eliminating the financial gain for the consumer from exercising the prepayment option.[9] A frequent concern is how to formulate a compensation model that is easily understandable by consumers.

Predetermined fee models in fixed rate lending are rare and associated with statutory cap practices[10] or special market practices[11]. In longer term fixed rate situations, lenders incur considerable reinvestment risk. Charging a flat fee, therefore, appears sub-optimal compared to charging compensation based on actual losses. Nevertheless, a fixed fee adds to lender gains if interest rates increases and borrowers prepay. In short term fixed rate situations, predetermined fees may actually come close to a compensation model. Predetermined fee models in adjustable rate lending[12] serve essentially the purpose to protect the lender against loss of foregone servicing profit.[13] Predetermined fees have the advantage of customer clarity at the outset of the contract. In some countries, simplified calculation methods have been adopted.

If consumers were granted a legal right to early repayment, a majority of MFEG members believe that early repayment charges calculated using a variable compensation model would be the appropriate call protection. These are predominantly members from jurisdictions where fixed rate lending dominates and compensation rules already exist. A strong minority of MFEG members believe that contractually predetermined fees are the most suitable call protection. These are predominantly members from jurisdictions with dominance of adjustable rate lending where fees are the typical mean of call protection.

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8 See Annex 5.3.

9 Such compensation models are used, for example, in Germany, Ireland, Luxembourg, Netherlands, Austria and Sweden. Implicitly, Denmark also pursues a YMI concept for non-callable loans, which carry a 'delivery option' from the consumer to the investor.

10 For example, Spain, France and Italy. The French market is interpreted as applying a fee since the initial cap (Scrivener Law of 1979) has become the floor.

11 For example, Ireland and UK initial discounts.

12 For example, Spain, Italy and Portugal.

13 Some European countries allow foregone servicing profit charges through prepayment fees on adjustable rate loans, which carry little or no reinvestment loss.

3.1.2.3. Types of Losses

A lender can incur essentially three types of losses in the event of early repayment: administration costs, reinvestment loss (RL) and foregone servicing profit (FSP).

Administration costs are usually covered by compensation schemes, as are reinvestment losses. For calculating the reinvestment loss, asset (loan) to asset rate comparisons (AAC) is widely accepted as a principle.[14] Asset to liability comparisons (ALC) have been preferred where loan rate data collection issues existed or for simplification purposes.[15] Both AAC and ALC methods will lead to the same results, if configured to compensate for foregone servicing profit.[16]

An important question is, however, whether foregone servicing profit is included or not in a compensation scheme. If foregone servicing profit is not included in compensation models, there is a risk that the interest rate offered to consumers would need to include a mark-up to take into account the potential loss in foregone servicing profit. As such, consumers would pay for the potential foregone servicing profit in advance. One solution would be to apply the YMI principle to foregone servicing profit. Yet this requires the lender's costs structure to be clearly identified, which is problematic in European practice as prepayment data is not usually shared, if tracked at all.[17] Consequently, for practical reasons, a lump-sum indemnity covering foregone servicing profit may be favoured.[18] This might mismatch with actual lender loss. It should also be noted that a foregone servicing profit component seems unjustified in case of a consumer refinancing with the same lender, since this leads to no economic loss.

In practice, most compensation is an asymmetric YMI, meaning that compensation is only payable to the lender and not to the consumer. This is due to the predominance of the legal concept of indemnity, which forbids negative payouts (from lender to consumer).

Taking these issues into account, and supposing that a compensation model is adopted, a majority of MFEG members believe that all relevant lender losses should be covered, including administration costs, reinvestment loss and foregone servicing profit. This is important in order to ensure the provision of low cost loans.

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[14] Used in the Germany (one of two options), Netherlands and implicitly Denmark.

[15] For example, Germany (second option), Ireland and Sweden.

[16] In Germany, both methods arrive at identical results due to corrections made for foregone servicing profit.

[17] Most European lenders have not tracked prepayment data with reasons for prepayment (house move, refinancing, product switch, borrower death, etc). Prepayment models based on interest rate shifts or population migration statistics miss important variables, causing distortions and rendering forecasts incomplete.

[18] For example, in Spain, where indemnities on adjustable rate mortgages, which carry no reinvestment loss for the lender, are capped at 1%.

A few MFEG members believe that compensation for all possible loan types, whether they be fixed or adjustable rate, should only cover reinvestment loss and administration costs and, as such, should not cover foregone servicing profit. This would create a more equal level of compensation between different loan types. Those in favour of such an approach argued that the preservation of a non-callable funding structure, such as the Pfandbriefe, does not necessarily require the coverage of foregone servicing profit.

A few other MFEG members believe that only the foregone servicing profit should be covered. In efficiently operating capital markets, the reinvestment risk can be passed onto investors or hedged against. In contrast, foregone servicing profit cannot be passed on and thus the lender or servicer should be able to protect themselves against a potential loss.

Some MFEG members believe that reinvestment loss and profit for the lender should be treated symmetrically and that payments should be made to the consumer in the case of a reinvestment profit.

3.1.2.4. Caps or Waivers imposed on Early Repayment Charges

Both prepayment compensation and fees are typically subjected to caps. However, there are some exceptions.[19]

Although the majority of MFEG members oppose a cap on early repayment compensation or fees, a minority believe that, in order to avoid extreme levels of fees or compensation, a sufficiently wide cap could be imposed without creating distortions, provided that no further constraints are imposed.

It could be argued that caps or waivers might be required in financial hardship situations, such as divorce, death, or unemployment, in order to ease the burden of consumers. In some cases, however, caps are more widely applied, for example, on house sales and related moves. This extension is questionable since these activities are based on a deliberate economic decision of the consumer, as may employment decisions, and the intervention (cap) is tantamount to a financial mobility subsidy. In general, definitions of financial hardship are arbitrary. The same issues, e.g. financial hardship, may also arise with a pronounced rate shock in an adjustable rate contract, for which there are generally no caps or waivers in Europe. Such issues should be left to a reasonable enforcement regime.

A majority of MFEG members believe that caps or waivers should not be imposed, even for hardship cases. They argue that caps or waivers in hardship cases are distortive and that such cases should be dealt with under the respective default/foreclosure regimes. A minority of MFEG members, however, believe that caps or waivers in hardship cases are not distortive, thus supporting their use in case of financial difficulties.

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[19] Danish non-callable loan product or initial fixed rate loans in Ireland where interest rate fixing periods are limited by the market to a few years, which imposes an implicit low boundary to YMI. Portugal seems to be a case where uncapped fees are legally permitted.

Recommendations

MFEG agrees that:

- prepayment is a cost to the lender, which can be addressed by an interest rate mark-up, by a variable compensation or by a predetermined fee; therefore, there should be no unconditional (i.e. cost free) right to prepay;
- the compensation formula should be clearly established, transparent and easy to understand for the consumer;
- early repayment charges should not be subject to any further constraints either introducing limitations via hardship cases or through the imposition of caps or waivers;
- lenders and investors should develop prepayment models to better value the prepayment option thereby reducing its cost in order to meet consumer demand for a less costly prepayment option. To do so, lenders should ensure that information on prepayments becomes more readily available.

3.2. Property Valuation

3.2.1. Context

For many forms of mortgage funding and mortgage lending the most easily understood indicator of collateral quality is a reliable and up-to-date property valuation.

Property valuation impacts mortgage funding in the following four ways:

- **Banking supervision**. The preferential risk weight of mortgage loans under the Capital Requirements Directive (CRD)[20], requires consistent property valuation in order to define the part of the loan which is eligible to the preferential treatment. CRD provisions are considered as a key factor in driving convergence in property valuation and creating professional valuation systems. The new regime will create a need to revalue property in order to calculate an accurate risk weight.
- **Covered bond funding.** Consistent property valuation and loan-to-value ratios are one of the core eligibility criteria of mortgage assets being accepted as cover assets for covered bond funding. Any national covered bond legislation refers to property valuation as a fundamental criteria for the safety of the covered bond instrument. In most cases, the property valuation for covered bonds is based on a mortgage lending or prudent market value.

[20] The Capital Requirements Directive comprises of Directives 2006/48/EC and 2006/49/EC; 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), Official Journal L 177 of 30 June 2006, p. 1-200 and Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions (recast), Official Journal L 177 of 30 June 2006, p. 201-255.

- **RMBS transactions.** loan-to-value ratio (LTV) is an important component of the mortgage securitisation business. Any rating of RMBS transactions requires valuation of the mortgage assets to be securitised. RMBS laws, where existing, do not have specific requirements on LTV ratios or valuation. For RMBS transactions, ratings agencies generally take any valuation provided and recalibrate it for their analytical purposes.

- **Whole loan sales.** The sale of mortgage portfolios and mortgage portfolio trading is relying on consistent portfolio valuation and cluster valuation techniques. This is particularly acute where cross-border transactions are being considered.

At a Member State level, property valuation is characterised by a huge diversity with respect to valuation rules and valuation traditions. The valuation approaches can be generally divided in to either Market Value or Mortgage lending / Normalised Value. To both approaches, different methodologies apply: Rental Income method; Replacement cost method; or Comparison method. Valuation methodologies reflect national and even local market traditions and therefore differ from one country to another. Normalised value and mortgage lending value usually consist of a deduction to the market value being made to either take out volatility (e.g. Germany – Mortgage Lending Value) or to reflect a foreclosure value (e.g. Netherlands – Normalised Value).

In a certain number of Member States (for example, Germany and Spain), property valuation and the valuation profession are regulated by binding rules, i.e. laws and/or regulation. In other Member States (for example, the UK), property valuation standards are set by the profession itself without any involvement of public authorities. Finally, there are countries where neither legal nor self-regulatory rules exist. In many Member States, the profession of valuer itself is unregulated. Hence, the profession sets standards for the education of valuers and further qualification requirements in order to define a consistent set of best practice principles.

3.2.2. Discussion

While the CRD creates a framework, there is no comprehensive set of European rules on property valuation. European law only deals with valuation issues under specific aspects like the regulation of insurance companies or the rules on financial reporting. When foreign property is used as collateral for a funding instrument, the extent to which the valuation complies with domestic regulation can become critical. Without a reliable valuation, mortgage funding instruments could be considered unsecured and, therefore, far more expensive.

Where national regulations exist, compliance of foreign valuations with the lenders' home rules shall be ensured by transposing those valuations into the domestic legal framework. Alternatively, the mortgage lender should be allowed to recognise the host country rules or to apply the application of European / International valuation standards.

European standards, covering common definitions for a certain number of basic technical terms like market value, mortgage lending value, etc., should apply to valuation principles to ensure transparency. A European standard shall also include requirements regarding the valuation approach and the content of the valuation report. MFEG suggests that TEGoVA or another international body should take the lead in this exercise.

Convergence of valuation methods does not seem appropriate, because valuation methodology is relying on national rules and national property market specificities. The

choice and application of valuation methods should be mutually recognised by mortgage lenders and Member States in order to avoid the reporting of incorrect property values which may then put the lenders position at risk.

The abovementioned issues also apply to professional requirements and the qualification of valuers, especially in cross-border transactions. In the absence of certified valuers in foreign countries, it is important that the valuation of the foreign valuer can be relied on or that domestic valuers can be used instead. Convergence through market-driven common standards should be achieved in the area of professional qualification of property valuers. The same approach should be taken with respect to the requirements in the area of professional experience and training.

A related development in the field of valuation procedures is the development of automated valuation systems. Such systems should also be recognised or accredited by appropriate bodies. In order for such systems to operate satisfactorily, many of the issues noted above regarding clarity of valuation principles and the availability of independent professional valuations, need to be in place. In addition, a substantial database of physical property valuations is required in order to achieve appropriate confidence levels. Without a significant number of physical valuations, it is not possible to determine the statistical confidence required to provide a reliable automated valuation.

The advantages of an automated valuation system include more accurate indexation of properties to assist post issuance reporting, better risk assessment of current LTV's and the removal of capacity constraints which may be imposed by the introduction of qualifications for valuers in markets where these have not been applied previously. Automated systems are particularly important when assets with a longer period of seasoning are to be included as collateral, especially in regions where there has been high house price inflation. Automated valuation systems also address the CRD requirements for updated property valuations. Consideration should, therefore, be given to establishing criteria for recognising automated valuation systems to ensure statistically derived valuations are based on a wide and reliable basis.

Recommendations

MFEG recommends that convergence in valuation principles and professional requirements be achieved through a Recommendation rather than through binding EU regulation.

MFEG recommends greater disclosure of valuation methods and the development of a common definition of basic technical terms in order to aid transparency.

MFEG recommends that common standards be adopted for the professional qualification of property valuers.

3.3. Land Registration

3.3.1. Context

Procedures for constitution and registration of the mortgage may have an impact on the evolution of European funding markets in several ways:

The emergence of a European secondary market may be determined by the transferability of mortgages from one lender to the other. In some Member States, the transferability of mortgages is *inter alia* conditioned upon the registration of a new mortgage deed. Inefficient and costly registration procedures are thus a potential barrier to the emergence of a secondary market.

The emergence of cross-border funding transactions is often linked to the question of a level playing field for local and foreign lenders. An indication of an unlevel playing field are mortgage registers which are only accessible to local lenders or the provision of different services to local over non-domestic lenders.

To identify concrete barriers to the evolution of funding markets in Europe implied by procedures for constitution and registration of the mortgage, MFEG has drawn upon the EBIC scoreboard (See Table 2). Observations of MFEG are the following:

- In three of the Member States surveyed (Denmark, Ireland and Poland), the transfer of the surety to a new lender would require the registration of a new mortgage deed. The parties involved in the registration process will incur transfer costs, e.g. registration costs and administrative costs. This may be viewed as an obstacle to such transfers. In addition, in a number of Member States a true sale of a loan portfolio would require the acquiescence or consent of each borrower represented in the loan portfolio adding to the complexity of the administrative procedures.

- In six of the Member States surveyed (Denmark, Germany, Italy, Hungary, Portugal and Sweden), mortgage registers are not accessible cross-border. In some Member States, this arises from legislation or standards imposed by authorities, whereas in other Member States, it is simply a technical question.

- In the vast majority of Member States, electronic mortgage registers are in place. However, on-line registration is only accessible in half of the Member States. On-line registration would facilitate cross-border lending transactions and cross-border funding transactions.

- In five of the Member States surveyed (Belgium, Spain, France, Portugal and Sweden), non-registered mortgages and preferences (hidden charges) exist. The scope and size of these charges is uncertain. However, if used widely, they could be a source of uncertainty to investors.

- Time necessary for constitution and registration of the mortgage is typically fifteen to thirty days, with two months being the maximum. Total constitution and registration costs are on average one to two percent of the loan balance (maximum is six percent).

3.3.2. Discussion

Transfer of the surety to a new lender is a necessary step in secondary market transactions, if such transactions take the form of a true sale of the loan as opposed to a synthetic structure.

Ideally, transfer of the surety to a new lender should be a purely judicial process which does not expose the transaction parties to additional costs or unnecessary administrative burdens.

Member States requiring the registration of a new mortgage deed to complete the transfer of the surety to the new lender expose the transaction parties to payment of registration fees for each loan in the portfolio being transferred and time consuming administrative procedures for reasons which appear to be primarily fiscal. The burden of such routines may deter mortgage lenders from operating cross-border.

Similarly, Member States requiring the acquiescence or consent of each borrower represented in the loan portfolio being transferred expose the transaction parties to unnecessary administrative burdens and uncertainty with respect to the size and timing of the transaction, i.e. borrowers may not be willing to offer their consent or may not reply in due time. MFEG find that acquiescence or consent of the borrowers should only be required, if the terms of the loans in the loan portfolio are altered to the disadvantage of the borrower in the transaction process.

Cross-border access to mortgage registers may be impeded by partly manual mortgage registers or by multiple mortgage registers in a single jurisdiction. The consequence of such impediments may be the absence of a level playing field to the disadvantage of lenders involved in cross-border funding transactions. MFEG finds that priority should be given to a level playing field for cross-border lenders.

Drawing on the experiences from secondary market trading of securities, it is clear that a full transfer to dematerialised and electronic central registers of land and mortgages is one of the most important steps in promoting cross-border services and a level playing field. Such central and dematerialised registers will also remove many of the risks connected with documents, whether those are in bearer form or registered.

Recommendations

The Commission should ensure that mortgage loan portfolios are transferable to a new lender in all Member States without registration of a new mortgage deed for each loan in the transferred portfolio. Furthermore, the Commission should ensure that the transfer of a mortgage loan is not subject to the acquiescence or consent of the borrower if the loan conditions are not altered to the disadvantage of the borrower.

The Commission should ensure equal access to mortgage registers in all Member States for domestic and foreign lenders thereby creating a level playing field. In this respect, the development of central and dematerialised registers should also be encouraged.

In order to enhance transparency, the Commission should recommend the discontinuation of hidden mortgages and preferences.

Table 2: Registration in EU Member States

Registration	Scores	BE	DK	DE	GR	ES	FR	HU	IE	IT	NL	AT	PL	PT	FI	SE	UK
Ability to transfer the surety to the new lender	**11/16**	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No
Electronic register	**14/16**	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Register accessible on cross-border basis	**10/16**	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes
Register accessible on-line	**9/16**	No	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No	/	Yes	Yes
Average time necessary for constitution and registration (from application to registration)	**Average: 15–30 days Maximum: 2 months**	1–15 days	Max. 10 days	7 days to 4 weeks	5–14 days	1–15 days	1 month	Weeks	4–8 weeks	30–40 days	1–15 days	4 weeks	6 weeks	2 weeks to 2 months	A few days to a few weeks	A few days to a few weeks	25 days
Total of constitution and registration costs, including taxes, for a EUR 100 000 loan	**Average: 1–2% Maximum: 6%**	2702€ (2.7%)	2080€ (2.1%)	530€ (0.5%)	6000€ (6%)	1900€ (1.9%)	2206 € (2.2%)	46€ (.05%)	1400 € (1.4%)	<268€ (0.3%)	340–850€ (0.3–0.9%)	1300 € (1.3%)	150€ (0.2%)	/	/	1500€ (1.5%)	2165€ (2.2%)

Source: European Banking Industry Committee and MFEG Members

3.4. Foreclosure

3.4.1. Context

Inconsistent and lengthy foreclosure periods in Member States create uncertainty for investors as well as lenders, and ultimately drive up the cost of borrowing to the consumer. In certain cases, this discourages lenders from entering a country at all, which limits consumer choice. Furthermore, significant differences in efficiency of enforcement procedures amongst Member States add complexity to the valuation and risk assessment of cross-border loan portfolios.

MFEG has observed the following based on the EBIC scoreboard (See Table 3):

- The duration of the entire enforcement procedure varies from two months to seven years. Time necessary for court examination procedures varies from one month to two years, whereas the duration of the subsequent sales procedure may be as long as seven years.

- The total costs of the entire enforcement procedure vary from three per cent to nineteen per cent of the outstanding loan balance.[21]

3.4.2. Discussion

A well functioning enforcement system will generally lower funding costs and support lending to sub prime segments and is therefore beneficial to both lenders and borrowers. High-level enforcement costs will require, however, adjustments lowering the mortgage lending value of pledged property. MFEG supports efficient, transparent and low cost enforcement procedures.

The observations from the EBIC scoreboards suggest enforcement procedures to be efficient and transparent in most Member States. Significant gaps, however, exist in some Member States.

Gaps in efficiency and transparency may have an adverse effect on cross-border funding transactions. Gaps will imply that risk parameters such as the loss given default (LGD) and the probability of timely payment will not be homogeneous for all assets in a cross-border mortgage asset pool. This will be particularly pronounced, if jurisdictions in which enforcement procedures are deemed less efficient and transparent are represented in the pool. The complexity of the pool will increase even further if the pool is dynamic and the share of mortgage assets from less efficient and transparent jurisdictions is not limited in the pool. For this complexity, investors will demand a premium or even refrain from investing in cross-border mortgage asset pools.

Recommendation

The Commission should undertake a study to determine best practices for enforcement procedures in all Member States and develop a scoreboard to encourage convergence toward best practice. A maximum target for the duration of legal enforcement procedures should be set.

[21] Differences in enforcement costs may prove to be greater since only reports from nine Member States are available on this issue.

Table 3: Foreclosure in EU Member States

Foreclosure	Scores	BE	DK	DE	GR	ES	FR	IE	HU	IT	NL	AT	PL	PT	FI	SE	UK
Mortgage deed is executory by nature	**8/16**	Yes	/	Yes	Yes	Yes	Yes	/	No	Yes	Yes	/	/	Yes	/	/	/
Mortgage deed must be made enforceable in a judicial decision	**8/16**	/	Yes	/	/	/	/	Yes	Yes	/	/	Yes	Yes	/	Yes	Yes	Yes
Execution is a purely formal procedure	**12/16**	Yes	Yes	Yes	Yes	Yes	Yes	/	Yes	Yes	Yes	Yes	Yes	Yes	/	/	/
Court re-examines the case	**4/16**	/	/	/	/	/	/	Yes	/	/	/	/	/	/	Yes	Yes	Yes
Time taken by this procedure:	**Average: 6–12 months Maximum: 18 months**	1 month	6 months	/	3–10 months	6–8 months	6–8 months	18–24 months	1 month	6–12 months	3–6 months	1–6 months	/	12–18 months	1 year	6–12 months	6–12 months
Time necessary for the sale procedure	**Average: 6–12 months Maximum: 7 years**	Max. 6 months	/	6–12 months	8–18 months	3–6 months	8–18 months	/	45 days plus 3 months	5–7 years	3–6 months	3–6 months	/	/	/	2–4 months	8–12 months
Time necessary for payment of creditors		3–4 months	4 weeks	2 months	Up to 2 years	3 months	7 months	4–6 weeks	1 month	/	4–8 weeks	6–10 months	/	/	5–6 weeks	4 weeks	4–6 weeks
Usual duration of the entire foreclosure	**Average: 6–12 months Maximum: 7 years**	18 months	6 months	12 months	3 months	7–9 months	15–25 months	11–13 months	6 months	5–7 years	6 months	6 months	/	18–30 months	2–3 months	4–6 months	8–12 months
Existence of hidden mortgages or preferences	**5/15**	Yes	No	No	No	Yes	Yes	No	No	No	No	No	No	Yes	No	Yes	No
Average cost of the foreclosure for a EUR 100 000 loan balance		18700€	/	/	16% of sales price	4250€	7000€	3000€ – 5000€	1000€	/	3000€ – 5000€	/	/	/	/	5000€	2588€ – 6975€

Source: European Banking Industry Committee

3.5. Data Protection

Directive 95/46/EC on the Protection of Individuals protects consumers against inappropriate distribution of information to third parties without their consent. The borrowers of mortgage loans are natural persons and, hence, the transfer and disclosure of the data referred to such borrowers is subject to the provisions of the Directive.[22] The Directive provides that "*personal data may be processed only if: (a) the data subject has unambiguously given its consent […]*".

This creates several problems with respect to mortgage funding: the need for credit assessments; additional administrative costs, including the need for borrower consent; and the need for transparency in investor reporting.

First, the information necessary for banks to make credit assessments cannot be shared amongst mortgage lenders in certain jurisdictions. So-called 'negative information' (borrower's number and size of missed payments, defaults, judgements for debt, etc) is often incomplete or difficult to share in some jurisdictions. Only in a few markets is 'positive information' (borrower's outstanding balances, etc.) shared, but only to a limited extent. This forces banks to rely on incomplete or inaccurate information when assessing borrower's credit worthiness (resulting in rejection of a loan application based on incomplete data and therefore limiting consumer choice, or resulting in a higher interest charged by the lender to compensate for unknown risk).

Second, data protection requirements create high administrative costs. For example, in Germany, trustee agreements, which include certain provisions on data protection, need to be reviewed by the banking regulator, BaFin, before a servicer can carry out due diligence on a portfolio. Furthermore, the requirement to obtain the data subject's consent for data processing will be relevant in a funding transaction, including a whole loan sale, where the servicing of the assets is transferred to a third party (either voluntarily or as a result of the originator's insolvency). This need for borrower consent has been implemented differently by Member States: some require the explicit authorisation of the data subject whereas in others, a tacit consent following the receipt of a notification of the data transfer suffices.

Finally, investors in RMBS require detailed up-front and ongoing pool performance information (e.g. mortgage product selected, details of borrower credit information, neighbourhood location, payment terms, LTV ratios, property location, debt to income ratio).

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[22] According to the Data Protection Directive, "personal data" means "*any information relating to an identified or identifiable natural person ("data subject"); an identifiable person is one who can be identified, directly or indirectly, in particular by reference to an identification number or to one or more factors specific to his physical, physiological, mental, economic, cultural or social identity*".

At present, it is impossible for any investor in Europe to analyse credit characteristics, credit performance and prepayment on a detailed loan-by-loan basis as in other jurisdictions, such as the US. This is due to the broad definition of "personal data" and the resulting uncertainty as to whether this information is considered to be "personal data". In practice, almost any data could be considered "personal". At present, RMBS issuers report aggregate pool data rather than on a loan-by-loan basis. This lack of detail, however, prevents many investors from purchasing RMBS, which raises borrowing costs due to uncertainty. As long as there remains uncertainty as to whether some information is considered to be "personal data", it is not possible to provide investors with loan-by-loan information on an RMBS portfolio. It is clear, however, that the borrower's name or address should not be disclosed.

Recommendations

MFEG recommends that personal data be permitted to be transferred between originators and third parties, including lenders and servicers that have a legitimate professional reason to review the data. The receiver must, however, treat the information confidentially.

MFEG recommends that personal data, excluding borrower's name or address, be permitted to be disclosed to investors for the purposes of investment decisions.

4. SECONDARY MARKET ISSUES

4.1. Covered Bonds

Covered bonds are debt instruments secured by a cover pool of eligible assets such as mortgage loans (property as collateral) or public-sector debt to which investors have a preferential claim in the event of default. While the nature of this preferential claim, as well as other safety features (asset eligibility and coverage, bankruptcy-remoteness and regulation) depends on the specific framework under which a covered bond is issued, it is the safety aspect that is common to all covered bonds.

Covered bonds are increasingly used in the marketplace as a funding instrument - in addition to savings deposits, mortgage-backed-securities, whole loan sales, etc - issued by credit institutions to finance their mortgage portfolios. The issuance of covered bonds enables credit institutions to obtain lower cost of funding in order to grant mortgage loans for housing and non-residential property as well as, in certain countries, to finance public debt. The portfolio investor has the advantage of investing in safe bonds with a relatively high return. Thus, covered bonds play an important role in the financial system.

4.1.1. Context

In the Directive on Undertakings for Collective Investments in Transferable Securities (UCITS Directive)[23], Article 22(4) defines the privileged treatment of non-structured covered bonds (i.e. those governed by specific legislation) in different areas of European financial market regulation. In brief, Article 22(4) requires:

- the covered bond issuer to be a credit institution;
- covered bond issuance to be governed by a special legal framework;
- issuing institutions to be subject to special prudential public supervision;
- the set of eligible cover assets to be defined by law;
- the cover asset pool to provide sufficient collateral to cover bondholder claims throughout the whole term of the covered bond;
- and bondholders to have priority claim on the cover asset pool in case of default of the issuer.

The advantaged legal position of non-structured covered bonds has resulted in a position whereby 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).

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[23] Directive 85/611/EEC of 20 December 1985 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS), OJ L 375, 31.12.1985, p. 3.

Another cornerstone of covered bond regulation at EU level is the CRD. The CRD establishes a specific treatment for non-structured covered bonds according to which covered bonds have beneficial credit risk weightings only if they fulfil the following requirements: compliance with the standards of Article 22(4) of the UCITS Directive; the asset pools that back the covered bonds must be constituted only of assets of specifically-defined types and credit quality; and the issuers of covered bonds backed by mortgage loans must meet certain minimum requirements regarding mortgage property valuation and monitoring.[24]

The covered bond definition of the CRD was established 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.

4.1.2. Discussion

MFEG has identified several potential improvements to certain aspects of covered bonds, which would create benefits for consumers, lenders and investors.

4.1.2.1. Loan Transferability

The ability to achieve efficient transferability of collateral in the secondary market would facilitate the creation of geographically diversified collateral portfolios.

The obstacles identified elsewhere in this report for primary markets (e.g. land registration, data protection, and early repayment) would also prevent the creation of cross-border collateral pools.

4.1.2.2. Collateral Instrument Limitations

Covered bond laws in different EU countries impose specific limitations on the type of assets that could serve as eligible collateral in cover pools. In a few Member States, mortgages on non-domestic property are not qualifying as eligible assets. These exclusions limit the ability of issuers to diversify their cover pools in terms of collateral types. A few members pointed out that the imposed limitations act as a protection mechanism for investors and are, therefore, justified.

4.1.2.3. Tax Issues

Tax matters associated with the transfer of loan portfolios as well as the interest flows derived from them are clearly a barrier to cross-border transfer of and/or funding of portfolios. For example, there is a risk of double taxation in certain circumstances when transferring mortgage portfolios between Member States.

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[24] CRD, Annex VI, paragraphs 68–71.

Recommendations

MFEG recommends that Member States who do not yet have covered bond legislation for all mortgage lenders consider introducing one.

MFEG recommends that non-domestic EU mortgage loans be accepted as eligible assets in cover pools. Any modification in the base of eligible assets should be designed in a way that ensures a high credit standard in the European Covered Bond issuance legal frameworks.

MFEG recommends bringing the tax implications of cross-border mortgage origination and sales into the tax harmonisation policy discussions/decisions. This should also be considered when renewing bilateral tax treaties.

4.2. Residential Mortgage Backed Securities (RMBS)

An RMBS is a security issued by a special purpose vehicle (SPV) which is backed by an identified pool of mortgage loans transferred to that vehicle.

4.2.1. Context

The first European RMBS was issued in the UK in 1985. Since securitisation is a relatively recent financing technique, most continental European civil codes did not cover a number of important technical issues necessary for transaction implementation, which are described below. France was the first country to introduce a securitisation law, in 1988, with other countries following thereafter.[25]

Ten EU Member States currently have some form of securitisation law. In most cases, there is not a single “securitisation law", but rather a series of amendments to various statutes and regulations that were developed around the specific public policy or commercial interests in each country at the time the securitisation laws were passed. These amendments include, for example, changing sections of the local bankruptcy code to clarify ring-fencing of assets; rules regarding notification of borrowers upon assignment; technical aspects of establishing special purpose companies or specialised securitisation fund vehicles; rules regarding companies that can collect payments from consumers (banks vs. non-banks); jurisdiction of relevant regulatory bodies (banks vs non-banks, securities regulators, consumer protection agencies); tax considerations (SPV income tax status, VAT, withholding tax, stamp tax); the use of derivatives to hedge positions; etc.

[25] Belgium, (1990), Spain (1992), Italy and Portugal (1999), Greece (2003), Germany (True Sale Initiative, 2004), Luxembourg (2004), Poland (2004), Malta (2006).

Structures and credit enhancement levels for each RMBS are generally determined by market forces (e.g. issuers, rating agencies and investors) that are specific to each pool of assets. The CRD does not directly address the regulation of securitisation vehicles. It does, however, contain significant principles as to the Basel Committee on Banking Supervision – International Convergence of Capital Measurements and Capital Standards (otherwise known as the new Basel Accord or Basel II) regulatory capital treatment of cash and synthetic RMBS transactions, both from an issuer and investor perspective.

4.2.2. Discussion

4.2.2.1. Lack of Consistency in National Legal Frameworks

RMBS issuance volume has been significant both in countries with and without securitisation laws. However, in many countries there are still significant obstacles caused by inflexible legal frameworks. In the UK, which does not have a securitisation law, issuance volume has been EUR 182 billion from 2004-2006 (until end September 2006), while issuance volume in Spain, which has a securitisation law, has been EUR 67.5 billion during the same time period. Absence of specific rules in continental European civil codes have either discouraged market participants in those jurisdictions from securitising their assets, or forced them to incur greater costs or burdensome formalities (i.e. use of off-shore vehicles, notify debtors, etc.). Since many of the existing frameworks are out-of-date or were enacted in reaction to a specific local industry or business need[26], many legal frameworks cannot accommodate important asset classes and structures and as such are very inflexible, limiting access to RMBS funding.

MFEG examined and endorsed ten principles, established by the European Securitisation Forum for integration into all existing and future national securitisation frameworks to enhance flexibility and provide the lowest possible cost of mortgage funding to originators by maximising investor interest.

(1) Unrestricted Asset Eligibility

All types of existing and future mortgage loans should be permitted without restriction. The interaction of market forces between issuers and investors, rather than governments, should decide which assets are eligible for securitisation.

(2) Origination by Banks and Non-Banks

Securitisation laws should not limit or restrict the type of originators that may securitise assets nor should they require a specific banking license for origination.

(3) Flexibility of SPVs

Securitisation laws should not subject SPVs to banking (or other regulated financial institution) license requirements, registration, or minimum capital requirements. The acquisition of ownership of assets or the raising of funds by the SPVs shall not be subject to onerous national regulatory approval processes.

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[26] An example of this can be found in Poland, where the Investment Funds Act of 27 May 2004 includes securitisation-related rules. Practical implementation of these rules have resulted in mostly only non-performing loans being securitised in the Polish market.

(4) Legal Clarity of Sale, Transfer, Asset Isolation and Insolvency/Bankruptcy Laws

Securitisation and related laws should also permit the transfer and isolation, without unduly lengthy regulatory delays, of the transferred residential mortgage assets, including commingled assets, by removing them from the legal reach of the originator, its creditors and its insolvency/bankruptcy or administrator officers. Member States should permit the transfer and isolation of assets with all the guarantees attached without notice to debtors with a minimal clawback period.

(5) Flexibility of Structures

There should be no legal restrictions on: the types of structures used; replenishment of mortgage assets; active pool management and multi-issuance structures (such as master trusts); and the use of interest rate and credit derivatives in structures.

(6) Facilitation of Third Party and Cross-border Servicing of Assets (See Section 2.2)

(7) Tax Neutrality and Transparency (See Section 4.2.2.2)

(8) Cross-border Recognition of Securitisation Vehicles (See Section 4.2.2.4)

(9) Transparent Disclosure and Financial Reporting (See Section 6.2)

(10) More Efficient Foreclosure Process (See Section 3.4)

4.2.2.2. Taxation

Tax complications on securitisation can arise both in the originator jurisdiction and in the jurisdiction of the issuing securitisation vehicle. Any uncertainty regarding the tax treatment of the structure as a whole, and in particular of the securitisation company, could jeopardise the integrity of the structure and the ability to obtain the credit rating required. Typically, tax issues in cross-border transactions are solved by the transaction structure or through legal and tax opinions.

Securitisation vehicles must be fiscally transparent and achieve tax neutrality through specific tax legislation for securitisation companies across Europe. In addition to this, the MFEG recommends provisions for advance clearance by national tax authorities regarding the status of vehicles involved.

The securitisation legislation and/or advance clearance should include provisions to ensure that there is not a withholding tax cost on cash flows both in and out of the issuing vehicle and to minimise or remove potential stamp duty, transfer tax or capital duty exposures and liabilities or trade tax. Greater clarity needs to be provided on the VAT treatment of both the transfer of underlying assets and fees payable by the issuing vehicle including an advance clearance mechanism by national tax authorities including the servicing costs.

In the issuing vehicle itself, the main tax concerns are for the structure to have minimal tax leakage/incremental tax costs (direct and indirect) that will increase the overall cost of funding to the borrower, and with respect to avoiding any withholding tax cost on returns to the ultimate investors. Regarding cross-border transactions, the most significant tax barrier to the freedom of location of the issuing vehicle relates to potential withholding tax liabilities on the underlying flows paid by the originator to the issuing

vehicle, and this depends principally on the tax rules of the originator jurisdiction(s) and on any double taxation or similar treaties that they have negotiated.

For servicers, potential problems range from unequal treatment from one country to another, to overt complexity when a servicer is managing assets in multiple jurisdictions. One example is VAT exemption on servicing fees which seems to be applied in certain jurisdictions but not others. In addition, the domicile of the issuer and servicer in cross-border asset transactions gives rise to many complex and costly tax issues.

4.2.2.3. IFRS Accounting Treatment of RMBS transactions

As of 1 January 2005, all EU listed companies are required to report under International Accounting Standards (IFRS-IAS). Present rules, which are under review by the IASB, result in many RMBS transactions being fully consolidated for IAS purposes which deters RMBS issuance for certain issuers.

Currently, accounting for securitisation is governed by two sets of standards and one interpretation.[27]

As a result, assets could in theory be fully derecognised, may remain on the originator's balance sheet, or may be partially derecognised to the extent of the originator's "continuing involvement". In practice, however, as the originator tends to retain part or all of the first loss for credit enhancement purposes (and conversely also the residual cashflows of the structure), securitised assets in almost all cases remain on the originator's balance sheet because it is interpreted as per IAS 39 that it has not transferred "substantially all" the risk and rewards. Furthermore, almost all securitisation SPVs are consolidated with the originator's group, because in accordance with the indicators of control in IAS 27-SIC 12, it is normally interpreted that the originator retains control over the SPV.

The current securitisation accounting rules do not reflect the economic substance of transactions, as they require that the originator recognise on its balance sheet the entirety of the securitised assets, even though it may be exposed to their residual value only. This creates misleading financial statements, as those assets appearing on the originator's balance sheet are not available to the originator's creditors for their full value. Furthermore, this overstates leverage ratios for accounting purposes and may formally break bank loan covenant leverage tests. There may be also issues of double consolidation of the SPV, where the first loss in the transaction is sold to an investor which may be forced to consolidate as per IAS 27-SIC 12, while the originator keeps consolidating the SPV as a result of applying other indicators of control contained in the same Standard.

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[27] IAS 27 governs the consolidation of subsidiaries. It views SPVs as subsidiaries, hence, they are subject to the consolidation rules. To clarify whether IAS 27 should be applied to SPVs, the IASB issued the interpretation "SIC 12: Consolidation – Special Purpose Entities". SIC 12 outlines "indicators of control" over an SPV, which includes retention of risks and rewards, as well as control elements. IAS 39 governs the derecognition of financial instruments (i.e. removing the pool of securitised assets from the originators' balance sheet). To determine whether the pool of securitised assets should be derecognised, IAS 39 requires passing three successive tests: first, the pass-through test (has the originator transferred the assets); second, the risk and rewards test (has the originator transferred "substantially all" the risks and rewards of the assets); and third, the control test (has the originator retained control over the assets).

The IASB is aware of the current situation and is undertaking a review of consolidation rules and most likely derecognition rules as well. The Commission should monitor progress in 2007.

4.2.2.4. Recognition of Securitisation Vehicles: Cross-border and Investor Issues

Cross-border securitisation transactions currently face significant legal barriers. Most existing securitisation laws merely contemplate the transfer of assets to the local securitisation SPV and, thus, it is unclear whether the special provisions regarding taxation, bankruptcy remoteness or ring-fencing also benefit transfers to off-shore SPVs. Many of the cross-border transactions carried out to date have required setting up intermediary local SPVs in those jurisdictions where pools of assets were located to achieve legal certainty for the transfer under the local securitisation or civil law. This has greatly increased the costs and complexity of these transactions and, as a result, has limited their growth.

In order to recognise cross-border protection of transfers of assets in a Member State to a "recognised SPV" in another Member State, regulation could be passed to ensure that transfers of assets located in an EU jurisdiction different from the SPV jurisdiction are given the same effects of the transfers of assets located within the same SPV jurisdiction, in terms of ring-fencing and bankruptcy remoteness. This could be achieved by submitting the transfer of assets to a "recognised SPV" to the law governing the SPV itself or, alternatively, by allowing the parties to choose the law governing the "recognised SPV" as the law governing the transfer of the assets. The Commission should, therefore, create a broad concept of "recognised securitisation SPV" along the lines of the securitisation special purpose entity's definition in Article 4(44) of the CRD.[28]

The Commission should also amend Article 13 of the Regulation on Insolvency Proceedings[29] and Article 30 of the Directive on the Reorganisation and Winding up of Credit Institutions[30] to clarify that a transfer of assets to a "Recognised SPV" will not be deemed a "Detrimental Act" unless the originator's creditors provide proof that such transfer can be declared null and void in accordance with the law governing the transfer.

Investment funds can only invest up to 5% of their assets in AAA rated RMBS of a single RMBS issuer (an issuer should be defined as a single SPV) under the UCITS Directive. Given the high quality of AAA rated RMBS, the UCITS Directive should be amended so that investment funds can invest up to 25% of their assets in AAA rated RMBS of a single RMBS issuer in order to maximise investor flexibility.

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[28] Article 4(44) of the CRD includes the following definition: "*a 'securitisation special purpose entity' (SSPE) means a corporation, trust or other entity, other than a credit institution, organised for carrying on a securitisation or securitisations, the activities of which are limited to those appropriate to accomplishing that objective, the structure of which is intended to isolate the obligations of the SSPE from those of the originator credit institution, and the holders of the beneficial interests in which have the right to pledge or exchange those interests without restriction*".

[29] Council regulation (EC) No 1346/2000 of 29 May 2000 on insolvency proceedings, OJ L 160 of 30.6.2000, p. 1–18.

[30] Directive 2001/24/EC of the European Parliament and of the Council of 4 April 2001 on the reorganisation and winding up of credit institutions, OJ L 125 of 5.5.2001, p. 15–23.

Recommendations

MFEG recommends that all Member States with existing securitisation laws, as well as those Member States considering the enactment of securitisation laws, introduce changes to ensure that the legal framework is based on 10 broad ESF "RMBS Principles". These changes will make the use of RMBS more flexible and cost efficient.

MFEG recommends that national governments be mindful of the implications of various taxes on the overall costs of securitisation when setting these policies.

The Commission could create a broad concept of "recognised securitisation SPV" along the lines of the securitisation special purpose entity's definition in Article 4(44) of the CRD. The Commission should also clarify that a transfer of assets to a "Recognised SPV" will not be deemed a "Detrimental Act".

The UCITS Directive should be amended so that investment funds can invest up to 25% of their assets in AAA rated RMBS of a single RMBS issuer.

4.3. Temporary Warehousing Facility

There are no specific obstacles pertaining to the extension and utilisation of such facilities as a way to provide mortgage funding. Many other issues and barriers identified in this report – in particular, those related to mortgage origination, servicing, RMBS and Basel II – also apply to warehousing facilities.

4.4. Whole Loan Sale

A whole loan sale requires the same conditions as a regular securitisation of a mortgage portfolio. The primary requirements are related to the ability to assess the credit and market characteristics of the mortgage pool so that it can be priced effectively, the ability to legally transfer the title without exorbitant expenses and delays, and the ability to monitor the behaviour of the mortgage pool over time. As such, many of the other issues dealt with in this report – in particular, those related to mortgage pool information, valuation, prepayments calculation, and legal aspects – also apply to whole loan sales.

Additional obstacles include:

- In certain European jurisdictions, withholding tax is imposed on whole loan sales which makes the transfer uneconomic. This is true for selling, for example, UK mortgages to a non-UK taxpayer. However, other jurisdictions (e.g. the Netherlands and Germany) have no withholding tax issue. In Germany, there is VAT uncertainty on servicing transferred transactions.

- The availability and legality of independent third-party servicers. Generally, a whole loan sale transaction leads to a transfer of the servicing function. This is normally not the case in a traditional mortgage securitisation. In many countries, third-party specialised independent servicers are not available or are severely restricted by the requirement that the servicer must be a bank.

- Insufficient disclosure or availability of loan portfolio data, or lack of comparability in definitions and the way the data is tracked.

The creation of an electronic market platform for portfolio trading would enhance liquidity in the secondary market for mortgages. This would also help create larger, more diversified portfolios as pools for either covered bonds or RMBS issues. This would particularly benefit smaller originators. The creation of a platform should be driven by private initiative. MFEG does not recommend any public policy action.

Recommendations

Whole loan sales should be afforded the same treatment as the other funding instruments for mortgage lending and can be used as an efficient funding source for mortgage lending.

5. THIRD PARTY CREDIT ENHANCEMENT

Third Party Credit Enhancements (TPCEs) are agreements that cover originators for different types of risk regarding a single mortgage loan or a portfolio of mortgage loans.

The obstacles to the application of TPCEs will become less meaningful with the implementation of the CRD. The broadened spectrum of recognised credit risk mitigation products and focus on (economic) risk management is expected to promote considerable growth of the use of TPCEs, as the higher risk loans will be requiring a higher capital base. Taking measures to manage these risks will therefore have a strong regulatory and economic incentive. Such credit risk mitigation products have historically been offered by public as well as private providers.

The question of whether mortgage credit guarantees should be provided by the State or by the private sector has been the subject of a number of reports and articles and continues to animate discussions of analysts and policy makers. Certainly both systems can coexist, although public guarantees should refrain from competing with the private industry and instead limit their scope of activity by covering the level of risk that the private sector could not manage effectively or handle economically, respectively would not be willing to provide.

Recommendations

The Commission should ensure a consistent transposition of the CRD regarding TPCE.

6. INVESTOR ISSUES

MFEG identified a range of issues, which affect the marketability and pricing of all capital market funding products.

6.1. Definitions

As funding markets have developed on a piecemeal basis across Europe, the extent to which information on the underlying collateral is available to investors can vary significantly. Even when information is provided, issuers may have different definitions of the default, delinquency or recovery rates as well as LTV ratios. This is true not only for issuers in different countries, but can also occur between issuers in the same country. Furthermore, such information can be inconsistent due to the varied nature of the underlying housing markets and differing practices employed in each mortgage market.

A lack of standard definitions can sometimes result in information which may initially seem comparable being quite different. The lack of clear definitions makes it difficult to compare transaction performance and hence to calculate prices. This may lead to an increase in funding costs in markets where data is scarce or unreliable, or even to investors not participating in certain jurisdictions as they are unable to verify key information regarding their investments.

Amongst other things, these differences across jurisdictions in the EU make it impossible to assemble a multi-jurisdictional portfolio of loans with similar financial profile and characteristics.

Recommendations

MFEG recommends the development of market-driven standardisation of some of the key terms used in secondary markets. These standards would be used for monitoring the performance of a transaction and at the same time promoting transparency.

6.2. Consistency and Transparency of Reporting

The availability of data prior to issuance is primarily provided in the prospectus or Offering Circular and as such is already subject to the Prospectus Directive in Europe, which provides a regulatory framework for such information.[31] Legislation is, however, subject to interpretation and the level of information provided is variable. The increased provision of regular performance data via websites also increases transparency.

A lack of consistency in the information disclosed to investors on collateral pools, RMBS tranches, and to some extent, covered bond pools is an obstacle to transparency. Greater standardisation of the means of issuing and disseminating information on the collateral which supports funding should therefore be encouraged.

Information is fundamental for the development of the covered bond market to its full potential. Given the diversity of the European covered bond market, such information

[31] Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 on the prospectus to be published when securities are offered to the public or admitted to trading and amending Directive 2001/34/EC (Text with EEA relevance), OJ L 345 of 31.12.2003, p. 64–89.

would allow investors to compare product offerings across markets and choose the desired price/risk investment profile.

Areas in which market information for covered bonds could be enhanced would be the following: market rules and regulations; product information and characteristics; mortgage pool information and reporting; portfolio granularity; risk management; composition and behaviour; market risks (interest rate risk, prepayment risks, etc); and risk weightings assigned by supervisory authorities. Information on pool data is of particular importance, with view to the debate on early repayment.

As there is a limited trading activity for RMBS - most of investors still are buy-and-hold - the relevance of security, collateral and loan level information is greater at issuance and later during the life of the securities.

It is currently difficult to gather price information regularly on a large number of European RMBS both at the time of creation of the security (transaction reference data) and during the life of the security (dynamic reference data). In order to improve the quality, uniformity and availability of information, the ESF published a set of Securitisation Market Practice Guidelines[32] in May 2006.

These have been widely welcomed as setting out best practices regarding fields and definitions for post-issuance of RMBS transactions as well as recommendations for pre- and post-issuance responsibility, timeliness and regularity of securitisation reports. In total, 86 different fields and relative definitions have been identified as most relevant for RMBS investment decisions. These currently cover security level data regarding the notes being issued, collateral level data regarding the aggregate pool characteristics, stratified aggregate loan level data and contact level information. In the future, this could include loan-by-loan data.

Market forces rather than regulation provide a means for greater transparency and better practice. This flexible approach means that as markets develop, new requirements can emerge more quickly.

Recommendations

MFEG recommends that reporting standards for covered bond pool information be developed by the market on the basis of best practice.

MFEG encourages private sector standardised reporting initiatives for RMBS, such as, the ESF "Market Practice Guidelines".

MFEG believes that the use of issuers' websites for post issuance reporting as the most accessible method should be encouraged.

6.3. Repos

A repo (a sale and repurchase agreement) involves a sale of securities with a simultaneous agreement to repurchase those securities at a specified price at a predetermined date in the future.

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[32] The ESF's Securitisation Market Practice Guidelines can be found at: http://www.europeansecuritisation.com/pubs/FinalESFGuidelines16May06.pdf.

In Europe, the securities most often used in the repo market have traditionally been government bonds. The use of RMBS is still relatively limited especially compared with covered bonds. The main problem in the RMBS repo market historically has been perceived high haircut levels which are caused by perceived trading illiquidity and infrequent valuations.

A number of private sector initiatives are developing ABS indices and third party pricing services to tackle the issue of getting valuations on RMBS that trade infrequently.[33] Data shows that the price volatility of RMBS in Europe is very low, as the vast majority of the issuance is both floating rate and triple-A rated. This high degree of stability of RMBS price means that repo traders could for the most part rely on month-to-month valuations.

Although as a result of these developments the availability of theoretical prices is now rather good, the secondary market liquidity and trading in the repo market has not yet increased significantly. But there do not appear to be any direct impediments preventing the liquidity of the secondary market from improving which could be tackled by policy makers. If there is enough demand from repo traders or investors to use this type of collateral, a market driven solution will be found.

6.4. Basel II

Basel II rules are meant to strengthen the safety, soundness and stability of regulated banks. Though Basel II affects only banks, the funding markets feel the effects, based on likely changes in banks' investment patterns – some of which have already begun to occur.

The CRD implements Basel II in Europe, essentially codifying the provisions of Basel II into EU legislation. Although the CRD largely follows Basel II, it contains certain features to take account of the specificities of European markets, for instance, the CRD also establishes a pan-European framework for covered bonds for the first time.[34]

The approaching implementation date of Basel II globally including the US Notice of Proposed Rulemaking, as well as the CRD, has begun to have positive effects on overall MBS funding costs. Spreads on AAA RMBS tranches have tightened considerably and could have room to tighten further, when the Foundation and Advanced Internal Ratings Based (IRB) approaches step up to greater effect in 2008 and even more so in 2009. Under the Basel II framework, capital requirements for non-investment grade tranches of RMBS have risen considerably due to the higher potential loss severity of these tranches. However, due to the very small BB tranche sizes, this has a minor impact on overall funding costs to RMBS issuers. For the majority of covered bonds, the capital requirements for non-structured covered bonds generally remain at 10% for the standardised approach, but might even improve slightly for IRB investors. The covered

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[33] Individual banks – such as Merrill Lynch, Lehman Brothers, Barclays Capital and Deutsche Bank – have also developed ABS pricing indices which can be used for calculating indicative/theoretical prices. The ESF established a Traders' Working Group to encourage these valuation initiatives in cooperation with the European Repo Council. There are an increasing number of providers of pricing solutions for RMBS, such as ABSXchange LLC, Markit Group, Standard and Poor's Securities Evaluations, FT Interactive, Bloomberg, Hypoport and LehmanLive.

[34] See Section 4.1 for further information.

bond risk weightings for investors under the IRB approach will at least in part depend on bank internal estimates of risk parameters.

The CRD needs to be transposed into EU Member States' national legislation by 31 December 2006. In doing so, individual Member States may follow different transposition routes, which could lead to varying degrees of regulatory capital relief for identical products including for identical credit risk mitigation tools purchased by mortgage originators in different Member States.

MFEG is increasingly concerned that a number of areas where the CRD is unclear or leaves discretion to national regulators, may result in differences in interpretation and application among jurisdictions and firms. In addition, unclear provisions in Basel II, and hence in the CRD, are likely to preclude certain types of transactions, which may be very detrimental to the further development of such transactions. Below are examples of such issues:

- **Definition of "significant risk transfer".** The CRD requires that, in order to achieve regulatory capital relief for the assets that have been securitised, the originator transfer a significant amount of credit risk associated with the assets securitised. The CRD sets out minimum requirements for the recognition of significant risk transfer, however looking at specific transactions, there remains discretion for supervisors to decide if significant risk transfer has been achieved or not. MFEG, therefore, believes that the concept "significant" is unclear.

- **"Implicit Support" and Revolving Structures.** Implicit support arises when a bank provides support to a RMBS transaction or other securitisation in excess of its predetermined contractual obligations. The CRD explicitly prohibits originator and sponsor banks to provide such implicit support. If they fail to comply with this requirement, they have to hold regulatory capital for the securitised exposures as if they had not been securitised. There is a risk of inconsistent application of “implicit support” rules, in particular, as to whether structures with replenishment of assets constitute implicit support. In particular, there may be RMBS structures where the originator recurrently sells assets to the SPV during the life of the transaction and the SPV recurrently issues securities and the originator retains some of those tranches. Since the replenishment of assets in an RMBS is not contractually mandatory, this constitutes neither implicit nor explicit support. If national regulators take the view that replenishment structures constitute implicit support, this would stop revolving structures from being issued and needlessly shorten the weighted average life of pools, driving up costs to borrowers.

- **Treatment of swaps with SPVs.** There is a lack of clarity on how banks should treat the counterparty credit risk of swaps with SPVs (trading vs. banking book). In some countries, banks have to treat the counterparty credit risk of swaps with SPVs as a securitisation position, incurring large costs to update their systems, whereas in other countries, this may not be the case. There is also uncertainty around super senior swaps in synthetic securitisations.

- **Liquidity Facilities.** A liquidity facility is a position in a RMBS or other securitisation transaction that arises for a bank because it has committed to provide liquidity to an SPV. The treatment of liquidity facilities when assets default is unclear in certain conditions.

In addition, the following two issues regarding the CRD text were raised: maturity mismatch and the eligibility of RMBS as cover assets for covered bonds.

- **Maturity mismatch issues.** In synthetic securitisation transactions, maturity mismatches between assets and liabilities occur when credit protection is purchased on assets with uncertain lives. If the maturity of the securitised pool of assets is longer than the maturity of the credit protection, the CRD requires that the originator builds-up capital during the five last years of the credit protection. This restriction results in a progressive reduction of capital relief in view of the risk transferred returning to the originator's balance sheet after the termination of the credit protection. Market participants have pointed out that the maturity mismatch rules in the CRD wrongly understate, and sometimes even suppress, any capital relief during the 2-3 last years of the credit protection, which will significantly impair European bank's ability to disburse risk throughout the financial sector because synthetic securitisations are detrimentally treated under these maturity mismatch rules. It should be noted that synthetic securitisation is particularly useful to securitise pools of assets located in different jurisdictions and, hence, it contributes to the integration of European securitisation markets, while cross-border cash securitisation is still hindered by substantial legal and commercial barriers.

- **Eligibility of RMBS as cover assets for covered bonds.** The eligibility of senior, effectively AAA rated, RMBS tranches as cover assets for covered bonds was accepted in the CRD but only up to 20% of the value of the outstanding covered bonds. Until 31 December 2010, however, this 20% limit will not apply. The Commission is required to review if an extension of this derogation is appropriate. The prospect of this review creates uncertainty in asset/liability management by covered bond issuers.

Recommendations

MFEG encourages the issuance of CRD transposition guidance by the Commission, in particular, on the issues described in Section 7.4.1.

The Commission should allow senior RMBS to constitute 100% of the cover assets for covered bonds and confirm the AAA RMBS eligibility as cover assets for covered bonds beyond the 2010 CRD deadline.

6.5. Property Indices

Official house price indices do not exist in most EU countries. Alternative data sources provided by real estate agencies, mortgage banks and notary organisations vary not only in frequency and timeliness, but also have several shortcomings such as an incomplete coverage in terms of region and dwelling type, different price recording practices (e.g. offer prices versus purchaser prices) and different methods for adjusting price data for varying dwelling.[35]

In this context, the ECB currently compiles and publishes a semi-annual indicator of euro area residential property prices based on non-harmonised data, weighted using national GDP shares (instead of transaction or housing stock-based weights which are not available for all countries). Moreover, as far as housing costs are concerned, the EU Harmonised Indices of Consumer Prices (HICP) only include rents actually paid by tenants and light maintenance expenditure, while the implicit rents paid by home owners and major improvements are excluded from this measure[36]. With a view to potentially including owner-occupied housing in the HICP, Eurostat, the statistical office of the European Commission, has launched a pilot study which is expected to deliver first results in 2007/2008.

The absence of recognised indices for house prices in many jurisdictions was identified as a barrier to mortgage funding. There is at least one index of commercial property prices which has been important in developing of the funding of commercial property.[37] The development of a nationally recognised property index is seen as extremely useful for mortgage funding and portfolio purchases. The creation of a property index that could eventually become tradable, would allow lenders to hedge real estate exposures and promote other products and concepts, such as the provision of Equity Release products for elderly customers.

A number of alternative sources are available to compile such an index. Examples include data available from real estate agents of purchase prices, although sample sizes can be small. Large lenders have data from application or completions. Land registry data is the most comprehensive but can take longer to become available although as more registries become electronic this may be less of an issue. Insurance companies may also be able to provide data. The objective would be to create as long a series of consistent data as possible in each jurisdiction, rather than looking for uniformity across Member States. This would allow for some of the individual characteristics of housing markets to be accommodated. Indices can be organised on either a national or regional level. The more defined the areas are the better the quality of the information. Consistency and transparency of data are more important than uniformity.

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[35] See ECB Monthly Bulletin, February 2006: Assessing the house price developments in the euro area, p. 57.

[36] See: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-BE-04-001/EN/KS-BE-04-001-EN.PDF

[37] Investment Property Database (IPD) has developed a set of commercial real estate indices to measure real estate performance (yields, capitalisation rates, etc) in many European and other global markets.

In addition, improved information on structural housing indicators, for which the availability and timeliness also varies across countries, would also be beneficial.[38] Such indicators would, for instance, be the number of private households, dwellings, vacancy rates, starts and completions of housing construction, number of housing transactions and type of tenure (broken down into owner-occupied and rented), which the ECB has started to collect in cooperation with the EU national central banks. A successful conclusion to this project would be very helpful in developing efficient funding markets.

Recommendation

MFEG encourages the development of national house price indices across EU Member States. This would assist in the provision of more accurate valuation information, increase the efficiency of collateral in all forms of capital market funding under consideration and help to manage the exposure to real estate price risk through the development of derivative markets.

6.6. Selling Restrictions

A number of issues were identified which were not felt to be critical barriers to funding but did create a number of unnecessary obstacles for investors in certain Member States. These involved a variety of selling restrictions, additional listing requirements and differing withholding tax rules. Some examples are listed below:

- In Italy, it is necessary to obtain specific clearance from the central bank before securities can be sold to Italian based investors;

- There are restrictions to the number of Spanish investors who can invest in a transaction without advanced notification of the deal (limited to 10);

- Restrictions to ensure notes are distributed only to professional investors differ between Member States (notably Italy and Netherlands). It is recommended that such restrictions be standardised across the EU.

Recommendation

MFEG believes that selling restrictions on securities are not helpful to creating a consistent funding market across the EU and should be removed.

[38] See ECB Monthly Bulletin, February 2006: Assessing the house price developments in the euro area, p. 58.

ANNEX TO THE REPORT OF THE MORTGAGE FUNDING EXPERT GROUP

DISCLAIMER

The views expressed in this report are the views of the Expert Group and its members, and not of the European Commission.

1. List of Mortgage Funding Group Members and Observers

Members	Organisation
BATCHVAROV Alexander	Merrill Lynch
DÜBEL Achim	FINPOLCONSULT
ETZKORN Jörg	Wüstenrot & Württembergische AG
GODARD Jean-Louis	BNP Paribas ALM
GUÉRIN Sandrine	Crédit Foncier de France
HIESBERGER Christoph	Pfandbriefstelle der österreichischen Landes-Hypothekenbanken
KANE Brian	Standard & Poor's
KRISTIANSEN Klaus	Realkredit Danmark A/S
KRYSIAK Zbigniew	PKO BP
MÜLLER Gabriele	Genworth Financial, Mortgage Insurance Europe
NAGY Csaba	OTP Jelzálogbank Rt. (OTP Mortgage Bank Ltd.)
OLIVEIRA Filomena	Caixa Geral de Depósitos
RAHNER Hartmut	Deutsche Genossenschafts-Hypothekenbank AG (DG HYP)
RODRIGUEZ MARTINEZ Alberto	Confederación Española de Cajas de Ahorros (CECA)
STEWART Ian	Halifax Bank of Scotland plc (HBOS)
THOMPSON Ronald E Jr.	Royal Bank of Scotland Group plc (RBS)
TORIO Antonio	Grupo Santander
VINDEVÅG Leif A	Euroshareholders
Observers	**Organisation represented**
KERJEAN Stéphane	European Central Bank (ECB)
LAMBERT Annik	European Banking Industry Committee (EBIC)
WATSON Rick	European Securitisation Forum (ESF)
WELLER Benedict	European Central Bank (ECB)

2. MAIN MORTGAGE FUNDING PRODUCTS

2.1. Covered Bonds

2.1.1. What is a Covered Bond?

Despite the absence of a well established definition, market participants agree that those instruments classified as covered bonds share some characteristics:

- **Framework**. Non-structured covered bond issuance in the EU is governed by specific covered bond legislation. In some countries (e.g. Netherlands and UK), contractual arrangements are applied, which are typically called structured covered bonds. The frameworks establish the basic important features.

- **Cover Assets.** The range of eligible cover assets in existing European covered bond systems is listed in the CRD: exposures to public sector entities; residential and commercial mortgage loans; exposures to credit institutions; senior MBS issued by securitisation entities and ship loans.

- **Valuation of mortgage cover pool & LTV criteria.** European covered bond systems have legal provisions or generally accepted principles for property valuation. LTV limits for single assets are very similar, ranging from 60% to 80% for residential mortgage loans. In some countries, there are additional LTV limits on a portfolio basis.

- **Asset-liability management guidelines.** Asset-liability management guidelines exist in most of the covered bond systems, but large differences in technical details and the degree of explicit regulation make a detailed comparison rather difficult. An 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. In some of the jurisdictions, the law requires the inclusion in the cover pool of the derivatives related to the bonds issuance (in some cases, the interest rate and/or the currency hedging is also mandatory). If the derivatives are part of the autonomous pool, the derivatives counterparts rank *pari passu* with the bondholders regarding the senior claim on the cover pool.

- **Cover pool monitor & banking supervision.** Compliance with Article 22(4) of the UCITS Directive has led to some standardisation in cover pool monitoring and banking supervision. Most covered bond systems have established an external, independent cover pool monitors who must have appropriate qualifications. Moreover, in most countries, national banking supervisors (and in some cases, financial market regulators) exercise special supervision of covered bonds.

- **Segregation of assets & bankruptcy remoteness.** EU covered bond systems use different techniques to protect holders against claims from other creditors in case of the insolvency of the issuer. Some 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 when the issuer goes insolvent. 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).

2.1.2. How does a Covered Bond work?

The main objective of covered bond systems, whether based on legal or contractual framework, is to protect:

- covered bondholders against credit events at the level of the issuer and/or parent company;

- against risks that might create cash flow imbalances between the cover asset pool and the covered bonds.

Most covered bonds are "plain vanilla", mainly fixed rate, with bullet structure, have high credit rating and provide high level of liquidity to investors.

What differentiates covered bonds from other funding instruments is that covered bondholders have a dual claim on (a) the issuer and (b) the assets and the cash-flows of the underlying dynamic cover pool. Thus, in the event of an issuer's insolvency and the separation of the cover pool from the balance sheet of the issuer, covered bond investors have a preferential claim against the cover pool.

2.1.3. Rationale for issuing Covered Bonds

Covered bonds enable banks to finance large mortgage pools efficiently when compared to unsecured senior funding. The "secured" nature of the instrument allows issuance in the longer maturities, enhancing the institution's asset/liability management possibilities.

In a world of decreasing government deficits, investors are constantly searching for securities with a positive spread against government securities. These securities need to satisfy the high credit quality criteria associated with government or quasi-government debt portfolios (a high AA or AAA rating). Covered bonds achieve high ratings because they generally have a privileged status versus senior creditors of the issuing financial institution as well as an excellent credit track record.

Furthermore, these investors demand the possibility of selling the bonds to the market quickly and efficiently. Hence, the widely adopted market making arrangements and the existence of platforms, such as EuroMTS Limited[39], to which most market makers have adhered. This provides the necessary liquidity for investors.

Finally, their traditional bullet maturity structures offer simplicity in contrast to the wider variety and complexity of RMBS products, which are attractive to different groups of investors with different objectives. In this way, covered bonds and RMBS each offer investor diversification to an issuer who wishes to use a mortgage portfolio as collateral for funding purposes.

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[39] EuroMTS Limited is the company that manages the pan-European electronic trading platform for government and quasi-government Eurobenchmark bonds, bonds denominated in euro with at least EUR 5 billion in outstanding size.

2.1.4. Covered Bond Market

As of year-end 2005, the EU residential and commercial mortgage covered bond market had reached total volume outstanding of EUR 876 billion.[40] This compares with a European corporate bond market of approximately EUR 780 billion outstanding.

Table 4: European Covered Bond Laws

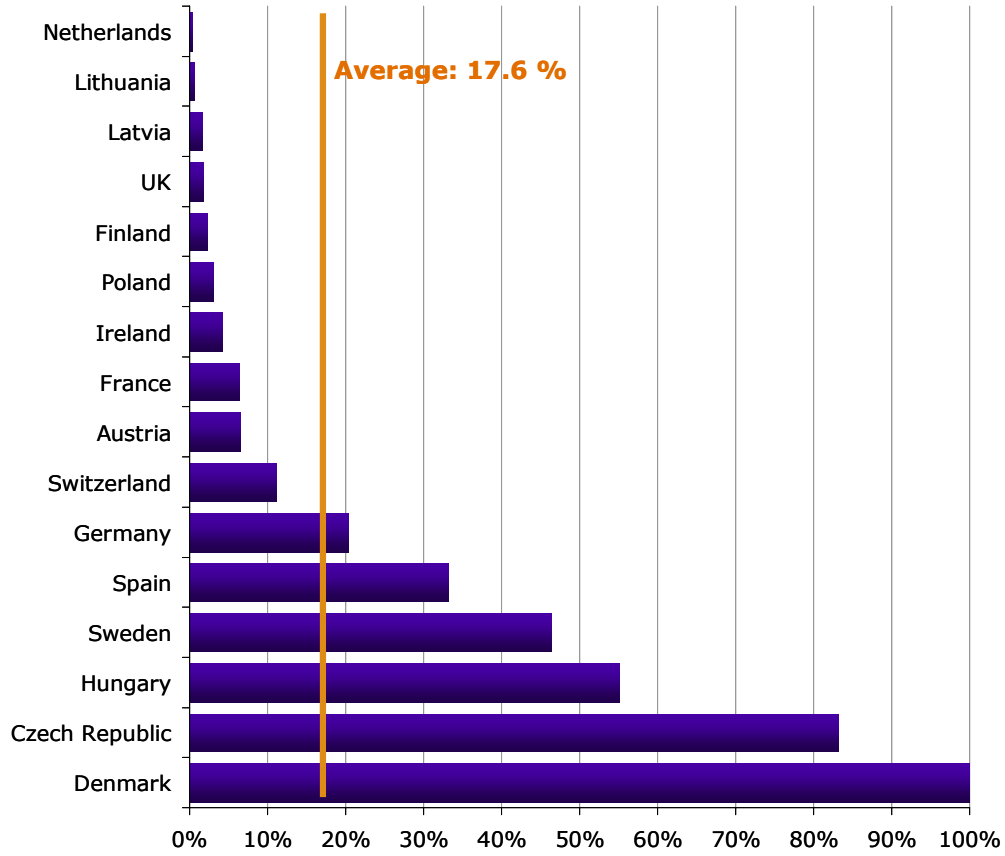
COUNTRY	**Entered into force/amendments**	
Czech Republic	1995	
Denmark	1850/1989	
Germany	1900/2005	Pfandbrief Act
Spain	1981/2003	
France	1852/1999	
Ireland	2000	Asset Covered Securities Act
Italy	2005	Primary Legislation*
Latvia	1998	Law on Mortgage Bonds
Lithuania	2003	
Luxembourg	1997	
Hungary	1997	Mortgage Bank Act
Netherlands	contractual basis	
Norway	2002/2006	Mortgage Act
Austria	2005	Mortgage Bond Act
Poland	1928/1998	
Portugal	2006	
Finland	2000	
Sweden	2004	
United Kingdom	contractual basis	
Romania	2006	Mortgage Bond Law
Ukraine	2005	Law on Mortgage Bonds
Switzerland	1930/1996	Pfandbriefgesetz (PfG)
Note: *introduction of Articles 7bis and 7ter which update the Securitisation Law 80/2005. Secondary legislation is pending.		

Source: EMF/ECBC

Considering the size of the collateral pools and the low level of mortgage financing currently achieved through the issuance of covered bonds in well-developed mortgage markets such as the UK, the Netherlands or Italy (See Graph 2), the market has substantial growth potential. Furthermore, the creation of covered bond legislation in high-growth mortgage markets, such as Poland and Hungary, will contribute positively to the development of the mortgage markets themselves. The attractive volumes and credit spreads achieved by some jurisdictions, has also encouraged other countries, such as Portugal or Italy, to enact covered bond legislation.

[40] Source: EMF/ECBC.

Graph 2: Residential and Commercial Mortgage Covered bonds outstanding as a % of mortgage loans-2005



Source: EMF/ECBC

2.2. Residential Mortgage Backed Securities (RMBS)

2.2.1. What are RMBS?

Residential mortgage backed-securities are, together with covered bonds, the main instruments to use mortgage portfolios as collateral or assets for funding in European capital markets.

In a typical cash RMBS transaction the bank, finance company or independent originator of a mortgage portfolio transfers the asset pool to a SPV in return for cash, which represents a payment in consideration of the value of the loans. The SPV, a bankruptcy remote entity, issues securities to investors and uses the proceeds from the issuance to purchase the asset pool. The interest and principal received on the mortgage loans over time are used to redeem senior and subordinated tranches as well as the equity/first loss tranche (See Graph 3).

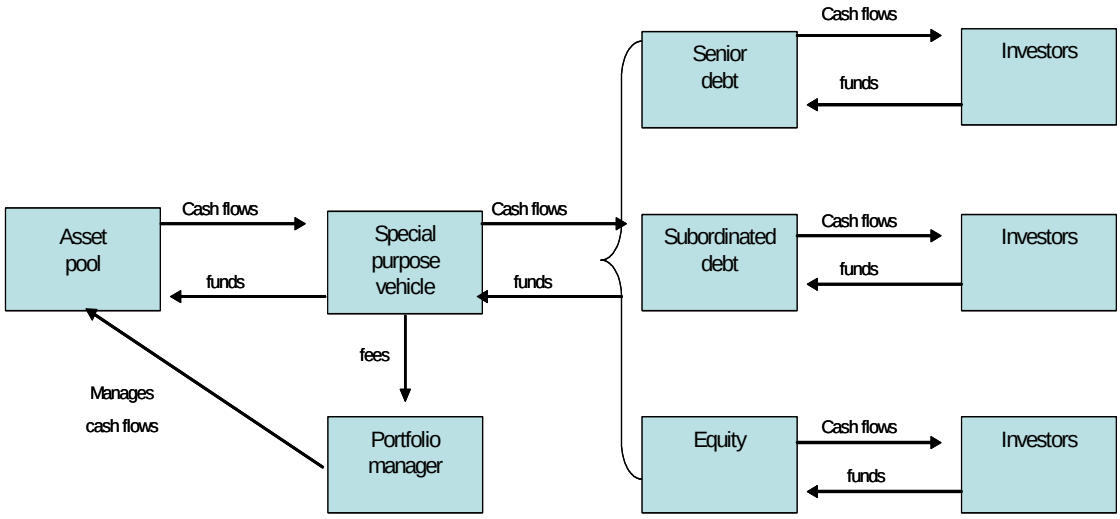
2.2.2. How do RMBS work?

There are two main types of RMBS structures:

- **Cash RMBS.** The rationale for cash RMBS issuance can be to achieve funding combined with risk transfer (for regulatory or economic capital reasons). The notes are typically tranched according to credit rating (Aaa/AAA down to unrated first loss tranches). The SPV notes can be fixed or floating rate, but if there is a mismatch between the interest rate profile of the mortgage loans and the SPV notes, an interest rate swap or other hedging technique is required. A specific type of cash RMBS structure is the "master trust" which is designed for cost-efficient repeat issuance where cash flows from a large pool of mortgages are allocated across tranches, and principal prepayments from loans can be substituted into new eligible mortgages for pool replenishment;

- **Synthetic RMBS.** Alternatively, if the rationale for the transaction is for regulatory or economic risk transfer rather than funding, the mortgage loans will not be sold to an SPV, but rather retained on the originator's balance sheet. This is known as a "synthetic" securitisation. Risk will be transferred by the originator purchasing credit protection in the form of a credit derivative. The originator typically purchases protection from an SPV that issues notes that are linked to the credit performance of the reference pool. The source of repayment on the credit linked notes is the cash deposited from the sale of the notes, together with a swap payment between the originator and the SPV.

Graph 3: Illustrative Cash RMBS Structure



Source: European Securitisation Forum

2.2.3. Rationale for issuing RMBS

RMBS can help achieve desirable social and economic goals, such as stimulating the growth of affordable housing; increasing the availability and lowering the cost of consumer credit; promoting efficient market structures and institutions; facilitating the efficient use and rational allocation of capital; and facilitating the achievement of governmental fiscal, economic and regulatory policy issues.

There are a significant number of advantages to issuing RMBS for an originator. The originate-and-sell process enables originators to maximise return on equity, and allows mortgage lenders who are not deposit-taking banks to enter new markets, which has fostered innovation and competition.

Another advantage is the diversity and depth of the investor base for the various credit tranches from high rated AAA to unrated first loss. The investor base is therefore different from other fixed income products, which enables originators to diversify funding sources. RMBS attracts investors interested in certain asset classes with a specific spread and risk return.

Since there are no fixed over-collateralisation ratios determined by a legal framework, securitisation can raise a high percentage of cash funding in relation to the principal amount of mortgages used as collateral.

From a risk management standpoint, securitisation enables originators to truly transfer credit risk to third parties, as well as in many cases prepayment risk.

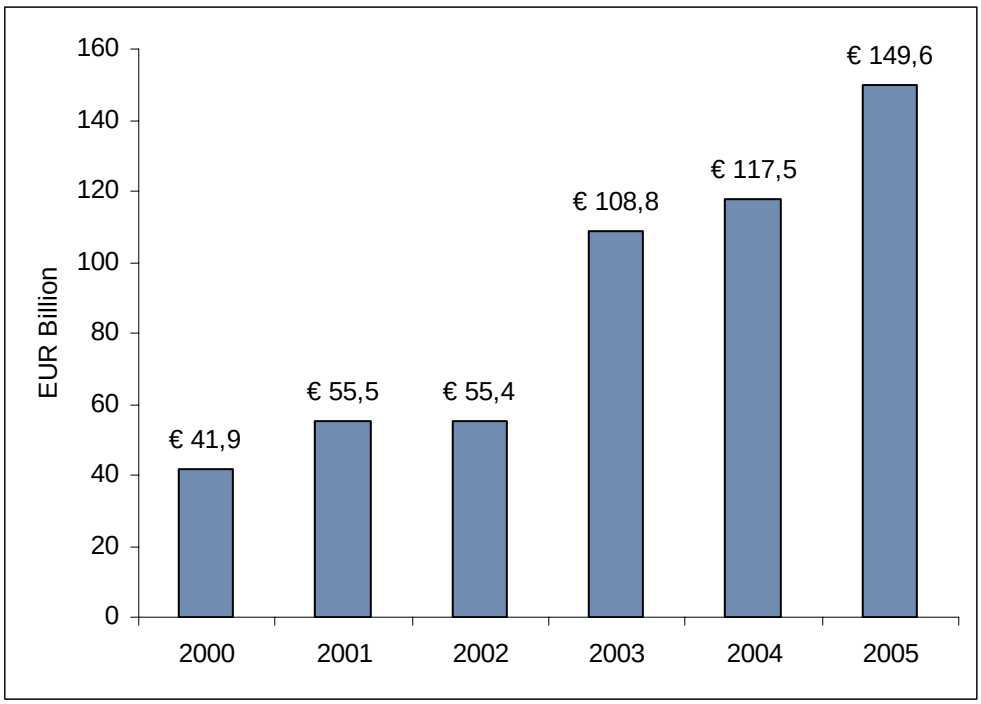
The product also reduces asset-liability mismatches, since the weighted average life of RMBS is usually similar to the weighted average life of the underlying mortgage loans. Originating banks can achieve regulatory capital reduction for the amount of risk transferred.

2.2.4. RMBS Market

In terms of market size, it is expected that 2006 will be a record year in terms of RMBS issuance, with significant growth over 2005 when full-year issuance reached EUR 144.9 billion. In overall terms, total RMBS outstanding is estimated to be approximately EUR 500 billion[41] as of the third quarter of 2006. RMBS represent approximately 10% of the total volume of residential mortgage loans outstanding in the European Union of approximately EUR 5.1 trillion.

[41] Source: ESF Researchers Working Group, Bloomberg.

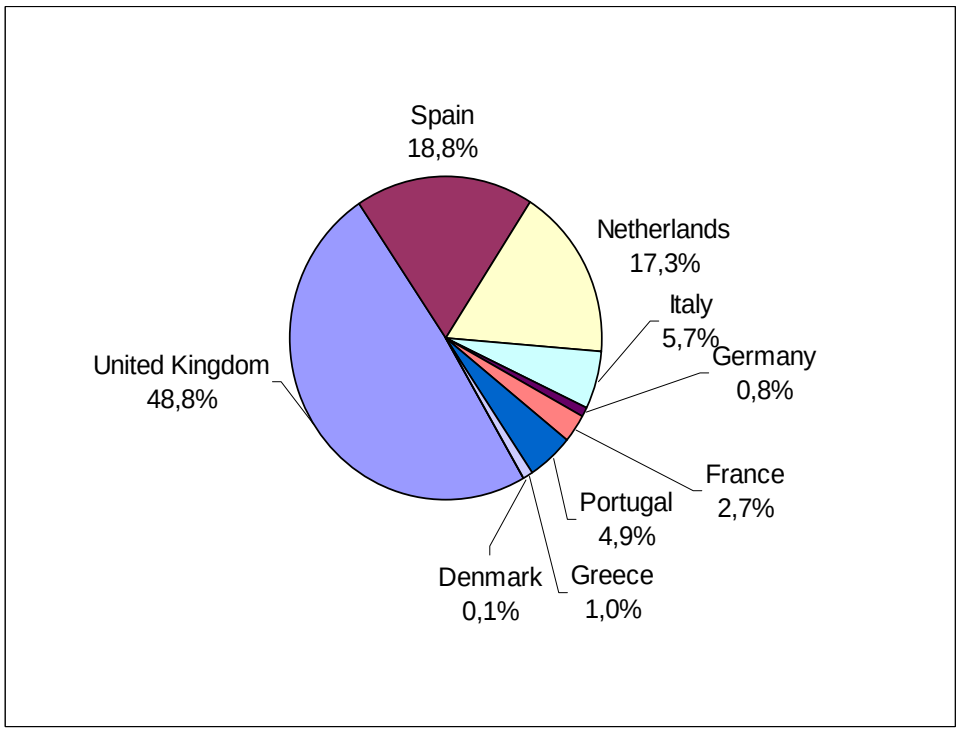
Graph 4: Historical European RMBS Issuance: 2000–2005



Sources: Informa, IFR and RBS

The market is growing rapidly both in terms of geographical diversification and structure and product innovation, such as the securitisation of non-conforming loans. In the UK, non-conforming RMBS products (sub-prime and buy-to-let) account for approximately 16% of 2006 to end September 2006.

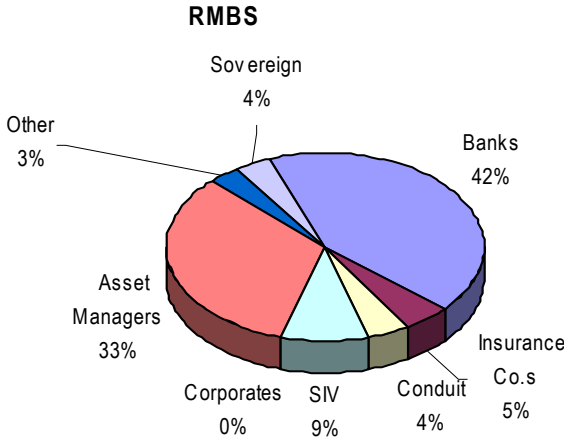
Graph 5: European RMBS Issuance in 2005 by Country of Collateral



Sources: JP Morgan Securities, Inc., Dealogic, Thomson Financial and Structured Finance International

The institutional investor base for both true sale and synthetic RMBS includes institutions such as banks, pension and insurance funds, fund managers, credit and hedge funds, central banks and corporates. In addition, the investor base for first loss tranches has increased and demand exceeds supply.

Graph 6: European RMBS Investors Types, 2005



Source: Merrill Lynch

Table 5: Summary Comparison of European Securitisation Laws (as of November 2006) and RMBS Issuance Volume

	Spain	France	Belgium	Germany	Italy	Greece	Luxembourg	Portugal	Poland
RMBS 2004-6 (issuance €bn)	67.5	10.2	1.0	7.6	25.6	5.3	0.0	16.3	NA
SPV issues									
- SPV Type	Fund	Fund	Fund/Company	Company	Company	Company	Fund/ Company	Fund/ Company	Fund/ Company
- SPV registration license requirements	Registration with securities regulator.	None, but the fund must be incorporated and managed in France.	Registration with Financial Regulator.	N/A	Registration with banking regulator.	None	Registration with securities regulator.	Registration with securities regulator and authorisation by banking regulator.	Registration with financial market supervisor.
- Structure restrictions (segregated compartments, revolving of assets?)	Closed structure (no revolving of assets or compartment)	No restrictions	Closed-end structures (no redemption or repurchase of assets)	Not regulated.	Not regulated	SPV securities cannot be offered to the public	No restrictions	No restrictions	Not regulated

Source: European Securitisation Forum

Cash securitisation									
	Spain	**France**	**Belgium**	**Germany**	**Italy**	**Greece**	**Luxembourg**	**Portugal**	**Poland**
- True sale of Mortgage-backed assets	Sub-participation via issue of mortgage participation.	Execution of a transfer agreement without further formalities.	Execution of a transfer agreement without further formalities.	Registration with Refinance Register.	Publication of transfer in Official Gazette and creation of entry in the Land Register.	Execution and registration of an assignment agreement.	Execution of notarial deed of transfer. Unclear if registration with Land Register is required.	Execution and Registration of a private assignment agreement.	Execution of securitisation agreement subject to specific conditions.
- Future flows permitted?	Yes with restrictions.	Yes with restrictions.	Yes with restrictions.	Not regulated, but permitted in practice.	Yes with restrictions.	Yes with restrictions.	Yes. Transfer expressly protected against bankruptcy.	Yes with restrictions.	Yes with restrictions.
Synthetic securitisation	Permitted by law	Permitted by law	Permitted by law	Not regulated	Not regulated	Not regulated	Permitted by law	Not regulated	Not regulated

Source: European Securitisation Forum

Tax Regime									
	Spain	**France**	**Belgium**	**Germany**	**Italy**	**Greece**	**Luxembourg**	**Portugal**	**Poland**
- Is SPV subject to neutral tax regime?	No	Yes	Yes	No, however special provisions apply regarding the deduction of finance costs for trade tax purposes.	No	Yes (subject to exemptions)	Yes	No	Fund – yes, Company – no
- Withholding Tax (WHT) on flows in and/or out of SPVs?	Cashflows in: should not be subject to WHT. Cashflows out: May be WHT obligations depending on residence of the investor.	Cashflows in; depends on the State of the source of income. Cashflows out: the payment of interest by the official SPV (so called "FCC") is subject to a domestic withholding tax of 16%, unless a tax treaty provides for a lower rate. One must determinate whether the FCC will be tax transparent for the purpose of the treaty or not and if it may benefit from a treaty.	Yes, exemptions and reductions possible.	Cashflows in: should not be subject to WHT. Cashflows out: WHT will be payable on interest payments to German residents where a domestic paying agent is involved. Payments to foreign holders should not trigger WHT.	Cashflows in: ordinary advance tax WHT. Cashflows out: 12,5% on interest paid and capital gain for Italian individuals and black listed entities.	Cashflows in: WHT on cashflows in should be exempted. Cashflows out: There is not a complete exemption from WHT on cashflows out of the securitisation SPVs.	Distributions and any other income paid=interest payments=> no WHT		Funds – no WHT; Company – yes according to general rules.

- VAT on services provided to SPV?	Custody and management VAT exempt.	Management fees charged by the management. company to the SPV are VAT exempt. They can be subject to VAT upon election by the management company.	Yes , exemption for specific services possible.	Depends on the nature of services. Usually expect to be VAT exempt on basis services are auxiliary activities rather than a factoring service.	Yes	SPVs fall within the scope of ordinary VAT provisions.	No VAT on management services.		Funds – vindication services subject to VAT; exemption possible (tax ruling required). Company – yes; 1% Tax on civil law transactions – disputable (possible exemption – tax ruling required for securing taxpayer's position).

Source: European Securitisation Forum, and Deloitte for tax information

2.3. Temporary Warehousing Facilities

2.3.1. What is a Temporary Warehousing Facility?

Warehousing facilities are short term revolving loans extended to specialised mortgage lenders and conduits for the purposes of originating residential mortgage loans.

2.3.2. How does a Temporary Warehousing Facility work?

A warehousing facility is extended by a bank to a specialised mortgage finance company for the purposes of underwriting mortgage loans. Once a critical mass of mortgage loans is accumulated, they are securitised or sold in bulk (whole loan sale) and the proceeds used to repay the warehousing facility. The facility can then be re-drawn to originate more new mortgage loans. This is a typical form of financing used by specialised lenders and effectively provides them with working capital.

2.3.3. Rationale for a Temporary Warehousing Facility

The raison d'etre of a temporary warehousing facility is to provide financing for lenders, which otherwise would have difficulty raising funds: they do not take deposits, are usually too small to access capital markets as unsecured borrowers and are not banks to rely on wholesale funding from other banks. Hence, temporary warehousing facilities allow such alternative and small mortgage lenders to access funding and extend mortgages to usually under serviced sectors of the population.

2.3.4. Market for Temporary Warehousing Facilities

Warehousing facilities are primarily used by specialised mortgage finance companies. Hence, they appear in countries where such companies are most active: above all the UK, and increasingly the Netherlands and Germany. While there are no public statistics about the availability and size of the warehousing facilities, their overall size is estimated at between EUR 5 billion and EUR 10 billion.

The availability of warehousing facilities is meant to encourage new, alternative to bank, lenders to enter the market with subsequent competition by product and price with the established lenders. Such new lenders, at least initially, tend to focus on segments of the market, whose needs for mortgage financing and mortgage products have not been satisfied by the existing traditional lender, thus performing an important function of not only increasing market product offerings but also targeting them to under serviced sectors of the population. The warehousing facilities market is private in nature with all the details of the facility (size, maximum term, advance rate, pricing, eligibility criteria of the mortgages to be originated, take-out financing, etc.) negotiated on a bilateral basis.

2.4. Whole Loan Sale

2.4.1. What is a Whole Loan Sale?

Whole loan sale is another funding mechanism for mortgage originators, whereby they sell and transfer a mortgage portfolio to another party.

This can be done on a programmatic basis and on an ad hoc basis.

A programmatic basis is when a mortgage originator underwrites mortgages following specified guidelines set by the future buyer and then sells the portfolio once a certain size has been reached and the conditions of mortgage origination have been met. This is a way for mortgage investors (specialised mortgage investors or mortgage originators) to acquire a mortgage portfolio which meets certain criteria to achieve a desired credit quality or diversification of their mortgage holdings (for example, a regional mortgage lender may buy a portfolio from other regional lenders and thus constructs a nationwide diversified portfolio; or a mortgage investor may build up a mortgage pool by buying whole loan portfolios from different parties and may seek an exit from these holdings through securitisation). This is also a way for a mortgage originator to dispose of mortgage exposure that may be ancillary to its main line of business (for example, an insurance company may be interested in selling insurance, which in some countries is directly associated with mortgage lending).

An ad hoc basis is when a mortgage investor may seek to build a portfolio of mortgages by buying mortgage pools from different originators on an ad hoc basis. A mortgage originator (such as an insurance company) may, for example, seek to exit the mortgage underwriting business once and for all by selling its current holdings, or a mortgage originator may want to sell a portion of its portfolio to allow it to restructure its mortgage book and improve its management of mortgage-related risk exposures.

2.4.2. How does a Whole Loan Sale work?

The portfolio of residential mortgages is sold via a mortgage sale agreement to a third party who typically receives a premium over the par value of the loans from the seller. The sale is usually conducted via a bidding process, with two rounds of bidding. Following the first round of bids, the preferred bidders will conduct detailed due diligence on the portfolio, which would include a detailed loan re-underwriting and file audit. A set of representations and warranties are included as part of the mortgage sale agreement. These would be similar to those offered by an originator in an RMBS transaction, but usually expire after a set time e.g. three years. The representations and warranties are usually subject to heavy negotiation between the parties.

The servicing of the portfolio is either retained by the seller (for a fee) or transferred to the purchaser or a third-party servicer.

2.4.3. Rationale for a Whole Loan Sale

There are several reasons why parties would want to participate in whole loan sale transactions (See Table 6).

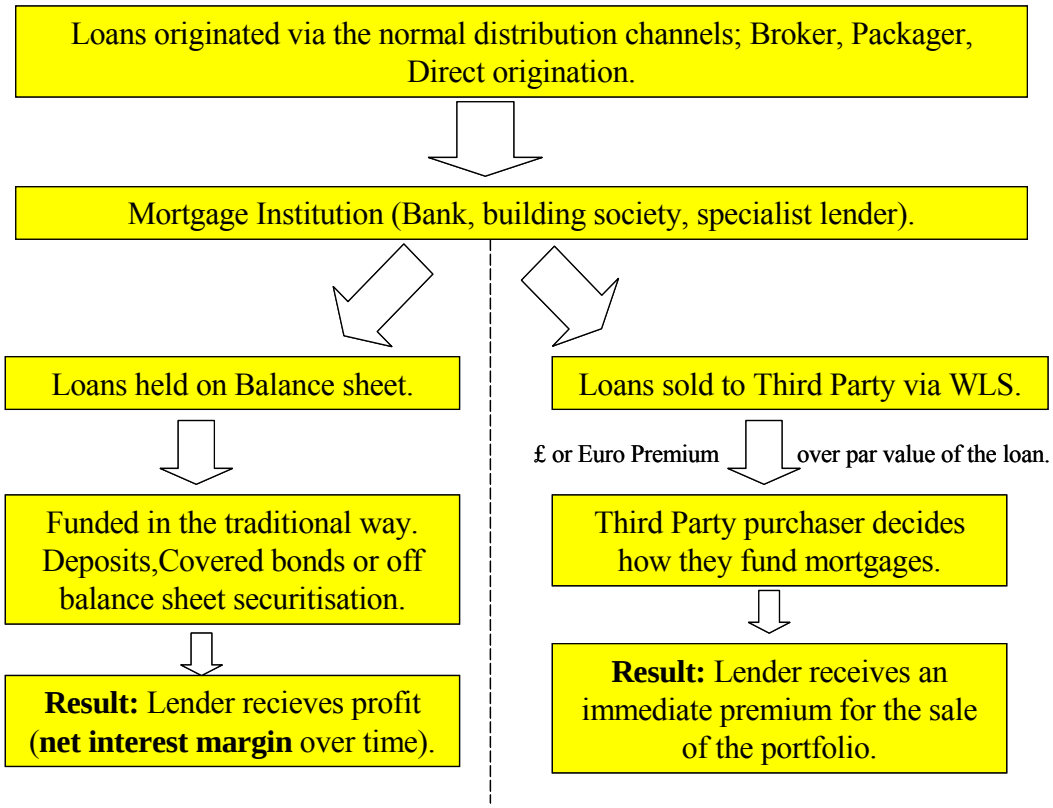
Table 6: Reasons for Participating in a Whole Loan Sale

Seller	**Buyers**
Additional source of funding	Buy & hold
Clear the balance sheet of mortgage assets	Desire to gain exposure to new asset types
Ability to sell with cash proceeds above par value in many cases	
	Arbitrage/trade on
Leveraging origination capacity	Build critical mass in mortgage market
Efficiency of execution	Acquire customer base
The risk limits for mortgage assets or product type are close to being exceeded	
Not part of core business, e.g., insurance company may not want to hold onto mortgage assets long term since mortgages may have been originated to generate insurance business	

Source: MFEG

A growing trend is for mortgage originators to look on whole loan sales as an additional source of revenue, allowing the lender to generate two profit streams from their mortgage book: a net margin profit from retained loans and a premium, or fee income from loans sold via whole loan sale (See Graph 7).

Graph 7: Traditional Mortgage Originator using Whole Loan Sale Funding



Source: S&P

The key here is that the lender is able to leverage its existing origination network to generate fee income.

2.4.4. Whole Loan Sale Market

In the late 1980s, the US market saw the value chain in the mortgage industry breaking up. This development led to more efficient origination and funding of assets. The mortgage originator specialises in underwriting mortgages for a fee, which is usually expressed in the amount paid by the mortgage pool buyer above the mortgage pool's par; the mortgage investor achieves its own portfolio building, exposure size, and diversification goals; another party usually specialises in servicing the portfolio on behalf of the mortgage investor for a fee.

Furthermore, the whole loan sale may give rise to a capital markets transaction as the mortgage investor seeks to dispose of its mortgage pool holding via securitisation. For that reason, the mortgage origination may be done under specific guidelines and documentation, which in turn allows for homogeneity and standardisation, facilitating the follow-up capital markets transaction.

Although whole loan trading is the primary driver of non-agency RMBS issuance in the US, the European market is at an early stage of development.

Most European activity to date has been UK-focused, with a growing number of players participating in the trading of 'near prime' and 'specialist mortgage' portfolios. Outside the UK, there has been limited activity in the Netherlands, Germany, and Belgium.

Traded volumes in the UK market this year are expected to be between £10 billion and £20 billion, supported by a growing number of traditional mortgage lenders and capital markets players. It is expected that activity in other European jurisdictions will grow as interest and expertise in this form of financing becomes more widespread.

3. THIRD PARTY CREDIT ENHANCEMENT (TPCE)

3.1. What is TPCE?

Third Party Credit Enhancements (TPCEs) are agreements that cover originators for different types of risk regarding a single mortgage loan, or a portfolio of mortgage loans. They come in different legal formats, typically in the form of an insurance contract (mortgage insurance), a guarantee, or as a credit default swap providing protection on a so-called reference pool of mortgages.

3.2. How does TPCE work?

Mortgage insurance is credit default insurance, typically for high loan-to-value residential mortgage loans. Under a mortgage insurance policy, it is the mortgage lender not the mortgage loan borrower who is insured. The insurance covers the loss a mortgage lender may suffer following the default of a borrower on a mortgage loan if the sale proceeds (following the sale of the property) are insufficient to cover the outstanding debt and repossession expenses.

Mortgage insurance normally takes the first loss in a securitisation. Inclusion of mortgage insurance in the first loss position in a securitisation by a highly rated provider can enhance the RMBS, creating process and cost efficiencies.

Credit derivatives are contractual agreements between two parties that lay out the rules for the use of a derivative instrument to transfer credit risk from one party to another. The party taking the risk position (protection seller / protection provider) will receive a fee. One of the main differences between mortgage insurance and credit derivatives is that with a credit derivative, the buyer of protection receives a payment if a defined credit event occurs anywhere, whereas with mortgage insurance, the purchaser of insurance needs to present its claim in the context of the insurance contract, and subject any exclusions within that contract. Payment of claims regularly happens after foreclosure, not immediately after the credit event.

A bank guarantee is a one-way contract between a bank as the guarantor and a beneficiary as the party to whom a guarantee is made. Guarantees are also being provided by so-called monoline or multiline financial guarantors, providing timely payment guarantees for highly rated notes of securitisations, or super-senior swaps in synthetic securitisations.

3.3. Rationale for TPCE

TPCE can provide a number of benefits and stimulate efficiency in both the primary and secondary mortgage markets:

- **Increased efficiency in securitisation.** TPCE products have a positive funding effect, enabling originators to fund at better rates / on extended portions of their portfolios. Within securitisation transactions, TPCEs assume specific risk positions and thus improve the tranching of the portfolio, replacing other types of credit enhancement. Guarantee firms regularly play in the super-senior portions of securitisations, providing payment guarantees for the most highly rated notes. Mortgage insurance provides first loss protection and increases the share of highly rated notes issued within a transaction. Other TPCEs, like the Dutch NHGs, are equally being taken into account in the tranching of the relevant securitisation transactions.

- **Increased volume and liquidity** of secondary market transactions.

- **Enhanced efficiency** of the secondary market in Europe, in particular, the covered bond market. As being discussed by a number of regulators, TPCEs could be included in the collateral pool to mitigate credit risks incorporated in high loan-to-value loans, thus allowing higher portions of the mortgage book to be funded by covered bonds. The Mercer Oliver Wyman study on risk and funding[42] highlighted the existence of EUR 500 billion of untapped demand for low equity mortgage products.

- **Increased risk management** that reinforces adherence to strict lending guidelines and performs checks during the life of loan through regular audits. Credit risk is being spread from the banking sector to a different sector.

- **Capital Relief.** The CRD has broadened the range of credit risk mitigation products (CRMs) that credit institutions can apply to reduce regulatory capital requirements on specific types of assets. The CRD (subject to certain criteria being met) recognises guarantees and credit derivatives as eligible CRMs and has introduced a set of different rules for their use. While derivative products are commonly used to protect pools of loans, particularly in RMBS transactions, mortgage insurance is designed to reduce risk either on individual loans or on mortgage portfolios, in the primary as well as in the secondary mortgage market.

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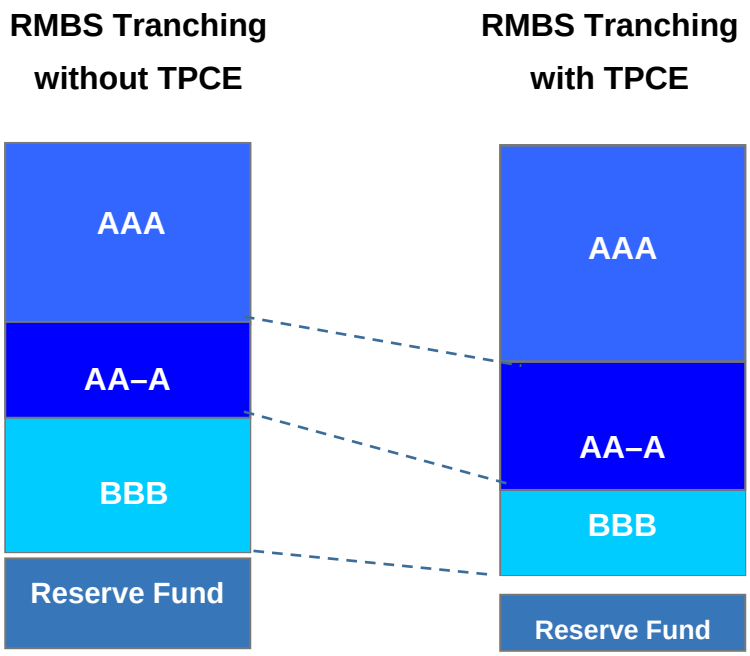
[42] "Risk and Funding in European Residential Mortgages", Mercer Oliver Wyman, London, April 2005.

Graph 8: Impact of Third Party Credit Enhancement



Source: Genworth Financial

3.4. TPCE Market

A number of European countries, such as Sweden, Finland, France, Hungary and the Netherlands, have developed public guarantee schemes although they often present different features and may pursue slightly different objectives. Examples for public sector offerings are:

- the Dutch NHG (National Housing Guarantee) Programme, which insures specific loans granted to private borrowers in the Netherlands;

- the Provide-Platform sponsored by Kreditanstalt für Wiederaufbau (KfW), which grants protection to European originators of residential mortgages and supplies a synthetic securitisation platform for those originators.

Public guarantees have traditionally been introduced to meet public policy objectives such as increasing homeownership, supporting low income households, supporting the building industry, etc. They do not appear to be always run efficiently, managed according to market practices or priced prudently.[43]

Private offerings are available from guarantee companies, credit institutions and mortgage insurers, typically in the form of monoline companies.

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[43] "Mortgage Credit in EU countries: Constraints on exploiting the single currency market", Bob Buckley and Rob Van Order.

4. SERVICING

4.1. What is a Third Party Mortgage Servicer?

Mortgage servicing comprises the 'day-to-day' administration and management of mortgage loans from their inception to final payment. Administration includes calculation and collection of monthly principal and interest payments, maintaining bank accounts in securitisation transactions, paying taxes and insurance premiums and taking steps to collect overdue payments including foreclosure.

In Europe, where the majority of residential mortgage loans are funded 'on balance sheet', the servicing of mortgage portfolios is predominantly carried out by the original lender. Over the last ten years, the rise in 'off balance sheet' funding, mainly through securitisation, has given rise to the outsourcing of the loan servicing functions to third party mortgage service providers. These companies provide 'end-to-end' loan administration functions to the legal or economic owners of the mortgages.

4.2. Growth of Third Party Servicing

The continued growth of the European securitisation market has led to an increasing proportion of mortgage assets being managed by third party mortgage service providers. As the volumes of RMBS issuance from new jurisdictions increase, so too does the number of domestic and cross-border servicers willing to provide streamlined administration, reporting and collection services.

In addition, the emergence of whole loan sales as a viable funding alternative for mortgage originators is also increasing demand for third party mortgage servicers. Given that whole loan traders often want to be able to transfer all credit, legal and operational risk associated with a portfolio, growth in whole loan sales should increase demand for third party servicers. This is most notable in the UK, where the majority of portfolio trades to date have involved a full transfer of servicing.

As is evident from US market development, servicers play a key and strategic role in linking primary and secondary mortgage markets. They allow for the unbundling of the origination, servicing and funding of mortgages so that originators can focus on their core competencies and deploy capital where it provides the best return. A number of new and specialised lenders expanding into various European countries can be seen. Some of these players exclusively use securitisation as their primary funding tool and, through the use of front-end risk pricing and tranching of mortgage risk through RMBS securities, are able to provide a broad range of risk based mortgage products to retail borrowers.

Table 7 shows a sample list of mortgage servicers operating in different European jurisdictions. A small number of these are engaged in cross-border servicing. The two largest European servicers are HML and Stater. HML operates exclusively in the British Isles and provides servicing and administration functions to a large proportion of the UK non-conforming sector. Stater provides end-to-end servicing operations in the Netherlands (where they have 30% of the mortgage market), Belgium and Germany.

Table 7: Illustrative List of Servicers Operating in the EU

UK	GERMANY	ITALY	NETHERLANDS
Homeloan Mortgages Ltd. (HML)	Stater Deutschland GmbH & Co. KG	Credito Fondiario e Indust SpA	Stater
Scarborough Mortgage Services			
Vertex	Crown Mortgage Management GmbH	Italfondiario SpA	Quion
Crown Northcorp		Zenith Service S.r.l.	
		Securitization Services	
SPAIN	**PORTUGAL**	**BELGIUM**	**FRANCE**
UCI	Domus	Crown Mortgage Master servicer)	Credit Foncier

Source: S&P

4.3. Rationale for Third Party Mortgage Service Providers44

There are several reasons for using third party mortgage service providers.

First, many originators do not have servicing capabilities in the countries they operate in. Third party service providers are, therefore, an essential part of their business plan. For financial institutions wishing to enter a foreign mortgage market, they offer a low cost means of entry on a level playing field with existing lenders.

Second, the use of third party service providers can offer efficiency gains. Smaller and medium sized financial institutions that may require substantial investment in IT systems and operational quality to meet Basel II and solvency requirements can outsource them to third party servicers. Securitisation and covered bond reporting can also be undertaken by third party servicers. Furthermore, by pooling activities, third party servicers can develop and share best market practice.

Third, the use of third party service providers can develop the link between primary and secondary financial markets, and offer support for off balance sheet funding as well as improved access to capital markets.

The continued development of the third party mortgage servicing market will bring an increased level of transparency to assets being funded by secured financings, thus leading to greater liquidity and a lower cost of funding for originators.

44 Information has been amalgamated from websites of mortgage service providers.

5. EARLY REPAYMENT

5.1. Context

The prepayment option is treated differently across Europe: by law or by tradition, or both. This variety does not facilitate cross-border mortgage lending and mortgage funding, and may negatively affect the development of new mortgage products and the introduction of new mortgage funding instruments.

A related obstacle to cross-border funding is the generally limited information about the prepayment behaviour of mortgage pools in different countries across Europe. This affects the willingness of investors to buy and the way they price the respective funding instruments, if the prepayment risk is passed on to investors.

5.1.1. Legal Right

Early repayment as an unconditional legal right exists only as an isolated exception. In some Member States (e.g. Germany as well as the UK and Ireland through case law), an unconditional legal right exists for prepaying adjustable rate loans. In Germany, there is an unconditional right on fixed rate mortgages for interest-binding periods over 10 years, after the initial 10 years have elapsed.

In some Member States, early repayment is a contractual option in certain situations. In Germany, early repayment of fixed rate mortgage loans can be contractually excluded for interest-binding periods up to 10 years and unless the borrower's financial freedom to act is impaired by denying him early repayment.[45] In Denmark, so-called 'non-callable' mortgage loans carry contractual exclusion of prepayment, but can be repurchased by the consumer through the so-called 'delivery' option from the investor at the market price.

5.1.2. Caps or Waivers imposed on Early Repayment Charges

Cap practices vary widely. Compensation schemes are limited to a maximum interest fixing period with no numerical or proportional cap. In Germany, this is 10 years and in Denmark, non-callable loans are de-facto limited to 5 years. Prepayment fees are capped as percentages of the exposure at prepayment (e.g. in Spain, France and Italy) or as multiples of interest payment (e.g. in Belgium as well as in France in combination with a percentage).

Waivers on conditions imposed on early repayment exist in the event of house sales and/or move and death of borrower (e.g. in Belgium, France and Netherlands) and in the event of unemployment of borrower (e.g. in France). The Netherlands also waives YMI for prepayments under 10% of the exposure per annum.

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[45] According to a Supreme Court judgement of 1997. This is currently assumed the case in the case of house sales, for which a legal right subject to conditions exists by law.

Regulation of early repayment conditions was undertaken primarily during the high-inflation phase of the 1970s, when they reflected concerns over increased defaults of borrowers locked into very high interest rate financings. These concerns are largely obsolete in the current interest rate risk environment; the exception would be extremely long term interest fixing periods of non-callable loans, which might theoretically give rise to very large indemnity levels. Truncating the applicable interest fixing periods, as practiced in Denmark and Germany at 5 or 10 years, is arbitrary but appears plausible given the shape of interest rate cycles. Caps of 3% of exposure (France) or 3 months interest (Belgium) are certainly too low to compensate approximately for losses. A re-emergence of inflation risk in the future could justify a reinstatement of cap rules, yet this does not seem to be an issue of immediate concern.

5.2. Empirical Dimensions of Prepayment Risk

Table 8: Synopsis of conditional prepayment rates (CPR) and prepayment option value quotes in Europe, mid-2006

	Product	Fixing period	CPR*	Option value quotes**	Call protection applied
Denmark	FTM	20-30 yrs	10-30% **C**	30-60bp (30 year) **C**	None (some discount issues)
	FTT	2-5 yrs	10% **C**	0 **C**	YMPP, symmetric
France	FTM	15-20 yrs	10-20% **C**	n.a., likely ca 30bp **L**	Capped PP
Germany	FTT	5-20 yrs	n.a.	20-45bp (10 year) **L**	None
	FTT	5-20 yrs	n.a.	10-20bp/10% per annum. 0-10 bp/5% per annum. (term invariant) **L**	None within partial prepayment range agreed
	FTT	5-20 yrs	3-6% **C**	~0 **L**	YMPP or exclusion
Netherlands	FTT	5-10 yrs	15-20% **C**	30 bp (10y) **C**	YMPP over 10% p.a., caps
UK	Hybrid (FTT-float)	2-3 yrs & 3 mths	30-40% **C**	n.a.	Uncapped PP
Portugal	Float	12 mths	10-11% **C**	n.a.	Uncapped PP
Spain	Float	12 mths	8-25% **C**	n.a.	Capped PP
Italy	Float	1-6 mths	5-8% **C**	n.a.	Capped PP

Sources: Merrill Lynch (2006a) and (2006b), Duebel (2006), Soerensen (2006), interviews with Danish lenders. Evidence based on capital market transaction analyses (C), bank term sheets, surveys & analyses (L).
Notes: *CPR measured 2 years after the origination date of unseasoned current coupon loan pools (i.e. measured in 2006/2005 for 2004/2003 pools). **Mark-up over fixed interest rate with full call protection.

Abbreviations: CPR – conditional prepayment rate, FTM – fixed-to-maturity, FTT – fixed-to-term, C – capital market transactions price, L – lender quote, PP – prepayment penalty, YMPP – (actuarial) yield maintenance prepayment penalty.

5.3. Conceptual Issues: Fees versus Compensation

Graph 9 develops the basic concept of fee and compensation models of call protection for fixed rate mortgages. Start with assuming a fixed coupon rate (e.g. 5%).

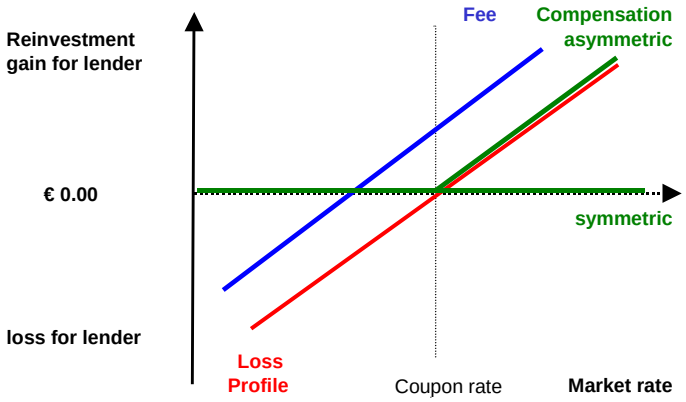
If a prepayment occurs at market interest rates below the coupon (loan) rate (e.g. 4%), a reinvestment loss occurs. In this case, a prepayment fee reduces the loss of the lender (blue line, situated above red loss line). It is, however, arbitrary and thus usually does not

cover the loss. Yield maintenance compensations (green line) are computed in a way that eliminates losses.

If prepayment occurs at markets rates above the coupon (loan) rate (e.g. 6%), the reverse mechanics kicks in. Fees are charged, although no lender loss occurs, resulting in a profit of the lender.

Many compensation models are asymmetric in not letting the borrower participate in a reinvestment gain of the lender – a symmetric compensation eliminates such gains.

Graph 9: Fee vs. compensation payment profile and lender reinvestment loss/gain profile for fixed rate mortgages



Source: Dübel/Finpolconsult

In contrast to the US, European lenders – with the notable exception of Denmark – do not currently explicitly assess early repayment or price early repayment risk for fixed rate mortgages. Outside Denmark, early repayment risk has only been transferred to the capital markets in a few exceptional cases, e.g. French FCC market.

Yet, the development of the covered bond markets and the RMBS markets both rely on the availability and reliability of a pool of mortgage loans, through whose amortisation and/ or liquidation the respective capital markets instruments can be repaid. Moreover, the upcoming IFRS 7 regulations asks lenders to assess the expected durations of financial instruments, and thus model early repayment, in order to enable readers of financial statements to assess the nature and extent of risk exposure.

For these reasons, it will become crucial for both European lenders and investors in covered bonds and RMBS issued in Europe to be able to estimate the certainty of repayment of the respective bond based on the cash flows generated by the underlying mortgage pool. This holds true even for portfolios protected by compensation (e.g. through a yield maintenance indemnity) since so-called 'non-financial' early repayment, e.g. triggered by non-financial motives such moves, divorce, unemployment and related sales, may also be viewed.

Early repayment assessments are today increasingly needed for investor reporting purposes. With the ratings of covered bonds increasingly delinked from the ratings of the issuing institutions, and the approaches of rating agencies giving priority to the cover pool in rating the bonds, it is essential for investors to be able to initially understand and regularly follow the pool composition. Hence, the transparency and reporting of pool

data becomes very important. While this has been fully addressed in RMBS, this issue has yet to be addressed for covered bonds.

Finally, early repayment rates could affect the credit quality of the cover pool for covered bonds and the mortgage pool for RMBS, as well as the outstanding volume of the respective back-up pools, which in turn raises the questions about the need of substitution and replenishment. For RMBS, this has been a well established practice since the development of Master Trust RMBS structures or stand-alone discrete trust RMBS, which allow for replenishment. Experience seems to demonstrate that these risks are manageable, especially if there is compensation in place and thus early repayment speeds are low. Lenders, which have issued MBS and covered bonds, tend to use a relatively small percentage of their mortgage books to back up such issuance. From that perspective, the lenders can afford to provide the necessary substitution / replenishment of the respective pools. Hence, lenders can manage different early repayment speeds that occur in the respective mortgage pools. Those early repayment speeds are quantifiable and can be managed on a pool basis.

6. BASEL II

Under Basel II, banks may elect one of two approaches for credit risk: Standardised and IRB. Within the IRB approach, two further sub-approaches may be taken – the Foundation and Advanced IRB approaches. The principal difference between two IRB approaches lies in the use of supervisory or, respectively, banks own estimates for the loss given default of an exposure when calculating asset risk weights.

The Tables below summarise some of the key implementation dates for the CRD, as well as risk weightings for RMBS and covered bond positions. Whilst directly impacting bank investors, the new regulatory regime has implications for mortgage funding markets as a whole.

The CRD specifies risk weights for Qualifying Covered Bonds. The vast majority remain at a 10% risk weight under the Standardised Approach where the sponsoring bank has a 20% risk weight (See Table 11). Under the IRB approach, a much lower risk weight is possible: potentially as low as a 2.1% risk weight, for bonds with a maturity of one year or less. Under the Foundation IRB approach, the loss given default for covered bonds is defined at 11.25% for AAA covered bonds until 2010 while the probability of default depends on the issuer. Granular AAA rated senior tranches of RMBS would have a risk weight of 7% (except for a possible 6% risk weight for qualifying super senior AAA tranches).

Table 9: Basel Approaches, Implementation Dates, and Capital Floors.

Approach	From Year-End 2006	From Year-End 2007	From Year-End 2008
Standardised Approach	Implemented	Implemented	Implemented
Foundation IRB	95% floor	90% floor	80% floor
Advanced IRB	Parallel Calculation	90% floor	80% floor

Source: Bank of International Settlements

Table 10: Standardised Approach for Securitisation

Risk Weight	Basel II		CRD Credit Quality Step
20%	AAA to Aa3	≈	1
50%	A1 to A3	≈	2
100%	Baa1 to Baa3	≈	3
350%	Ba1 to Ba2	≈	4
Deduct	B1 or below and unrated.	≈	5 or below

Source: Bank of International Settlements, EU and RBS assessments

Table 11: Qualifying Covered Bond Standardised Approach Risk Weights

Credit Quality Step	1	2	3	4	5	6
Institution Risk Weight	20%	50%	100%	150%	150%	150%
Covered Bond Risk Weight	10%	20%	50%	100%	100%	100%

Source: CRD

Table 12: Risk Weights for Securitisation Tranches – IRB Approach

External Rating	Senior Tranches and Eligible Senior IAA Tranches	Base Case	Non-Granular Pools
Aaa	7%	12%	20%
Aa	8%	15%	25%
A1	10%	18%	35%
A2	12%	20%	
A3	20%	35%	
Baa1	35%	50%	
Baa2	60%	75%	
Baa3	100%		
Ba1	250%		
Ba2	425%		
Ba3	650%		
Below Ba3 and unrated	Deduction		

IAA Internal assessment approach. Source: Bank of International Settlements

Table 13: Standardised Approach for Securitisation

External Rating	Risk Weight
Aaa to Aa3	20%
A1 to A3	50%
Baa1 to Baa3	100%
Ba1 to Ba3	350%
Bi or below and unrated	Deduct

Source: Bank of International Settlements

Table 14: Implied IRB Corporate Credit Risk Weights versus Securitisations

Rating	Corporate Senior 45% LGD	Corporate Subordinated 75% LGD	Securitised
AAA	14.4%	24.1%	7%-20%
AA	18.0%	30.1%	8%-25%
A	31.6%	52.7%	10%-35%
BBB	73.5%	122.6%	35%-100%
BB	115.0%	191.7%	250%-650%
B	138.4%	230.6%	Deduction (1250%)
CCC/C	198.8%	331.4%	Deduction (1250%)

NB: Assumes average PD from Fitch, Moody's and Standard and Poors ratings.
Sources: RBS analysis, Rating Agencies

7. GLOSSARY

AAC	Asset (loan) to asset rate comparisons.
ABS	Asset Backed Security. A generic description of any note or certificate secured by and on which principal repayment is linked to the repayment of cash flows received on any type of asset.
ALC	Asset to liability comparisons.
Bankruptcy-Remote, or Ring-Fenced	In order to separate the creditworthiness of the SPV that issues rated notes from any potential bankruptcy or insolvency of the seller of the notes, the rating agencies and transaction lawyers typically require the sale of assets to be structured in a certain way so that the SPV cannot enter into other transactions that could adversely affect the credit of the rated assets. This typically will include limitations on the number of directors, limitations on the corporate by-laws to restricted activities, and the presence of a non-management director on the board of the SPV.
CDO	Collateralised Debt Obligation. A generic description of any note or certificate secured by the repayment and on which principal repayment is linked to cash flows received on debt, whether in cash or synthetic form. Generally, most CDOs refer to the use of corporate obligations as underlying credits.
Clawback Period	The period in which subsequent to the declaration of a sale or assignment an insolvency administrator or regulator can declare a transfer of an asset null and void if the sale or assignment was intended to fraudulently transfer assets in anticipation of insolvency.
CMBS	Commercial Mortgage Backed Security. A generic description of any note or certificate secured by and on which principle repayment is linked to the repayment of cash flows received on commercial mortgages.
CPR	Conditional Prepayment Rates
CRD	Capital Requirements Directive: Directives 2006/48/EC and 2006/49/EC. 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 European Council adopted the CRD on 7 June 2006 and the Directive was published in the Official Journal L177 of 30 June 2006. The national implementation of the CRD is scheduled for the end of 2006.
CRMs	Credit Risk Mitigation products, as specified in the CRD.
ERP	Early Repayment
ESF	European Securitisation Forum
FCC	Fund Commune Créance, a French securitisation vehicle.

FSP	Foregone Servicing Profit. Defined as gross margin corrected by saved administration and risk costs over the residual maturity of the loan. Germany allows in the AAC model for add-on charges for FSP over the residual interest rate fixing period, in the ALC model, the FSP add-on is reversely engineered by adding saved administration and risk costs to the liability rate. Sweden defines a relatively high minimum deductible for saved administration and risk costs within its ALC model, which is tantamount to eliminating additional FSP charges. Netherlands only allows for AAC, without any FSP add-on; the same applies implicitly to Denmark.
Haircut	In the context of a repo (repurchase agreement) transaction, the amount of market value overcollateralisation required. For example, if a haircut was 2%, then a borrower would need to provide to the repo counterparty collateral with a market value of no less than 102% of the amount borrowed.
High Loan-to-Value Ratio (HLTV)	High Loan-to-Value Ratio. Generally, mortgage loans with an LTV of 75% or above.
IASB	International Accounting Standards Board
IPD	Interest Payment Date
IFRS	International Financial Reporting Standard
IRB	Internal Ratings based Approach. Under Basel II as well as the CRD, a regulatory framework where capital is assessed based on internal ratings and modelling as agreed between the regulated bank and the regulator.
LGD	Loss given default.
LTV	Loan-to-Value ratio. Mortgage loan balance divided by the value of the property
MFEG	Mortgage Funding Expert Group
Monoline financial guarantors	Specialised insurance companies that are generally regulated under Article 69 of the New York State Insurance laws. These insurers provide credit insurance on structured products as well and certain other products such as government or quasi-government bonds. Examples include MBIA, Ambac, FSA, FGIC, Assured Guaranty, XL Capital, and CIFG
Multiline financial guarantors	Insurance companies that provide a broad range of life, non-life and other products, including structured transactions.
NHG	National Housing Guarantees.
Originator	The company or business unit that creates the loan which is secured by a residential property. The originator does not need to be the lender.

Reinvestment loss (RL).	The formulae applied here differ: Netherlands, Germany (one of two options), and implicitly Denmark specify asset (loan)-asset rate comparisons (AAC); Ireland, Germany (second option) and Sweden use asset-liability (ALC) comparisons with correction factors. In Germany, both methods arrive at identical results due to corrections made for foregone servicing profit.
RMBS (Residential Mortgage Backed Security)	A generic description of any note or certificate secured by and on which principal repayment is linked to the repayment of cash flows received on residential mortgages.
Securitisation	A technique or process by which cash flows from a pool of underlying assets is sold or transferred to a special purpose vehicle ("SPV"), which then issues various tranches of rated and/or unrated notes. The notes are typically sequentially ranked in order of seniority of repayment, with the unrated or first loss/equity notes (the most subordinated) having the highest credit risk. The SPV can be a company, a fund or a trust, depending on the jurisdiction.
SPV	Special Purpose Vehicle
Super Senior Tranche	Super senior tranche. A further tranching of a transaction's AAA tranche into a senior AAA (the super senior) and a subordinated AAA (the subordinate AAA). The purpose of this tranching is that there is a different investor and counterparty base for the super senior tranches as compared to standard AAA tranches.
TPCE or TPCEs	Third Party Credit Enhancement(s) or Third Party Credit Enhancers
Tranche	A note issued by an SPV, or a portion of risk (if in credit derivative form) that defines certain categories of risk. Tranches can be rated or unrated. The "attachment point" of a tranche is the level of losses than can be sustained on tranches subordinate to a given tranche before the holder incurs a loss, and the "detachment point" of a tranche is the level of losses that can be sustained before the tranche senior to a given tranche will incur a loss.
YMI	Yield Maintenance Indemnity. The charge for the lender's financial loss over the residual interest rate fixing period of the loan.
Whole loan sale	The sale of a mortgage loan or pool of loans in unsecuritised form.