

European Structured Covered Bonds: Moody's Rating Approach

AUTHOR:

Annick Poulain
Senior Vice President
Structured Finance
(33) 1 53 30 10 31
Annick.Poulain@moodys.com

CONTRIBUTOR:

Arjan Verbeek
VP - Senior Credit Officer
Structured Finance
(44) 207 772 5524
Arjan.Verbeek@moodys.com

CONTACTS:

Detlef Scholz
Managing Director
Structured Finance
(49) 69 707 30 737
Detlef.Scholz@moodys.com

Juan Pablo Soriano
Managing Director
Structured Finance
(34) 91 702 6608
Juan.Soriano@moodys.com

Frederic Drevon
Managing Director
Structured Finance
(44) 20 7772 5356
Frederic.Drevon@moodys.com

Sam Theodore
Managing Director
Financial Institutions Group
(44) 207 772 5311
Sam.Theodore@moodys.com

Alexandra Sleator
Senior Vice President
Financial Institutions Group
(44) 207 772 5377
Alexandra.Sleator@moodys.com

WEBSITE:

www.moodys.com

CONTENTS:

- Summary Opinion
- Covered Bonds and Structured Covered Bonds
- Rating Universe
- Structuring Covered Bonds: Securing Cash Flows for Investors
- Some Illustrative Examples
- Why are Structured Covered Bonds Different from Securitisation Transactions

This special report follows up on the Special Report "European Covered Bonds: Moody's Rating and Analytical Approach" dated September 2002 available on www.moodys.com

SUMMARY OPINION

Covered Bonds and Structured Covered Bonds Defined

Moody's defines a covered bond as a full recourse debt instrument that is secured by a pool of mortgage assets and/or public sector claims. A law, usually referred to as a covered bond law, defines the security interest and eligible assets. Several European countries have their own covered bond law. Moody's rating approach for European covered bonds emphasises the strengths of these secured debt instruments relative to the senior unsecured debt obligations of a given issuer. In particular, because of the priority of claim over certain eligible assets (cover pool), covered bonds exhibit a lower severity of loss than unsecured obligations of the same issuer, and in certain cases may also display a reduced frequency of default.

Moody's defines a **structured covered bond** as (i) a covered bond where securitisation techniques have been used to enhance the rating of the covered bonds, or (ii) a secured bond issued against a pool of assets in a jurisdiction where no specific covered bond law has been established.

Some Securitisation Techniques Blended into Covered Bonds

As the covered bond market grows in importance, certain issuers have started to combine the benefits of existing covered bond frameworks with techniques borrowed from the securitisation world to enhance the rating of the covered bonds and/or reduce the volatility of the covered bonds' rating by reducing the credit-link with the senior unsecured rating of the issuer. Also, certain originators in jurisdictions where no covered bond law exists choose to finance their asset portfolios by issuing bonds on their balance sheets, backed by a pool of assets, without using the classic securitisation special purpose vehicle.

Contract Provisions Act as Credit Protection

Credit protections can be implemented to mitigate certain credit risks in covered bonds such as asset quality of the cover pool, risks arising from cash flow mismatches between assets and liabilities of the issuer, and operational risks. These types of protection are generally contrac-



tual provisions implemented by the structured covered bond issuer in relevant documentation. To the extent that the protection mechanisms reduce the expected loss of the covered bonds, higher ratings, possibly up to **Aaa**, may be assigned to the so-called "structured covered bonds". Moody's structured analysis consists of assessing the benefits and the enforceability of such protection and quantifies the reduction of the expected loss.

Structured Covered Bonds Used in France, Spain, and Denmark

Structured covered bond programmes have been successfully introduced in several European markets, such as France, Spain and Denmark, countries that have a covered bond law. In jurisdictions where no covered bond law has been established, similar instruments have been constructed, as in the Netherlands, for example. Moody's believes the structured covered bond market will expand, as low-cost funding is a priority for most originators involved in relatively low-margin mortgage and public sector lending.

Major Differences Between Structured Covered Bonds and Securitisation Transactions

Even with the benefits of structural provisions borrowed from the securitisation world, structured covered bonds differ quite extensively from securitisation transactions. Investors in structured covered bonds continue to have direct or indirect recourse to the originator, while only upon default of the originator is the collateral used to repay the covered bonds. In pure securitisation transactions only the cash flows from the assets serve to repay the bonds.

COVERED BONDS AND STRUCTURED COVERED BONDS

European Covered Bond Definition

Moody's defines a covered bond as a full recourse debt instrument secured against a pool of mortgage assets and/or public sector claims. Several European countries benefit from specific frameworks governing covered bonds. These countries include Germany, with *Hypotheken* (mortgage) and *Öffentliche* (public sector) *Pfandbriefe*, Denmark with the *Realkreditobligationer*, France with *Obligations Foncières*, Spain with *Cedulas Hipotecarias*, Austria with *Austrian Pfandbriefe*, Luxembourg with *Lettres de gages*, Finland with *kiinteistövakuudellinen joukkovelkakirja* (public sector) and *julkisyhteisöväkkuudellinen joukkovelkakirja* (mortgage), Hungary with *Jelzalog level* and the most recent entrants to this market: Latvia with *kilu zimeand* and Ireland with the *Irish covered bonds*.

In addition, there are discussions in several other European countries considering the establishment of covered bond laws, including Sweden¹, Belgium, and Portugal. No specific legislation exists in the Netherlands, although bonds issued by financial institutions backed by a pool of mortgages are used.

At the end of 2000, the European Mortgage Federation reported that mortgage bonds outstanding amounted to about €564.2 billion. This figure includes only bonds backed by pools of mortgage assets. Including public sector assets the amount is close to €1.5 trillion.

Structured Covered Bond Definition

Moody's defines a structured covered bond as (i) a covered bond where securitisation techniques are used to enhance the rating of covered bonds or (ii) a secured bond issued against a pool of assets in a jurisdiction where no specific covered bond law has been established.

Moody's ratings are an expression of credit quality of a debt instrument reflecting the concept of expected loss. Expected loss is a function of the probability of default and the severity of the loss upon default. Therefore, to enhance the rating of a debt instrument, one can reduce either the probability of default or the severity of loss or both.

In cases where the combination of the credit quality of the covered bond issuer and the protections embedded in the framework prove insufficient to allow issuers to achieve their targeted rating level, generally **Aaa**, contractual protections may be added in order to enhance the covered bond rating. In the absence of a covered bond framework, originators may also elect to refinance their asset portfolio by issuing bonds directly on their balance sheet, benefiting from a security interest created on a contractual basis.

¹ A law reforming the current mortgage bond instrument is expected to come into force in July 2004

These additional contractual provisions, such as restrictions on asset type or over-collateralisation, reduce the likelihood of high losses and hence reduce the extent of the expected loss. The lower expected loss leads to a higher rating on the structured covered bond.

RATING UNIVERSE

It is important to understand the rating universe and the place covered and structured covered bonds (together often also referred to as covered bonds) have in the financing of companies in the capital markets. Broadly speaking, Moody's distinguishes four categories of bonds:

- Unsecured bonds
- Covered bonds
- Structured covered bonds
- Securitisation bonds

The level of credit risks of **unsecured bonds** is captured in the senior unsecured rating of an originator. The senior unsecured ratings of issuers vary from **Aaa** to **C**, with only a handful being rated in the **Aa** or higher category.

The second financing method is via **covered bonds**. Covered bonds are full recourse instruments of the issuer, generally a financial institution, and investors have the benefit of security of a cover pool of assets. The security is explicitly defined in the applicable law governing the covered bond framework. The rating on the covered bond takes into account the reduced severity and, in some cases, the lower probability of default, but overall remains very dependent on the fundamental rating of the issuer. A change in the senior unsecured rating of the issuer is likely to translate into a corresponding change in the covered bond rating.

Moody's covered bond ratings in Europe are generally one to four notches above the senior unsecured rating of the issuer². The number of notches between the senior unsecured rating and the covered bond rating depends on (i) the type of assets in the cover pool and (ii) the extent and tightness of risk mitigants contained in the underlying framework. The notching practices applicable in the various European countries vary, reflecting the relative strengths of the frameworks; the maximum number of notches achievable and as such publicly stated by Moody's, applies to German public sector Pfandbriefe, which can go up to four notches.

Structured covered bonds, like covered bonds, are full recourse instruments to the issuer. Investors benefit also from a security interest over a cover pool of assets (defined either by the covered bond law or on a contractual basis). In addition, structuring techniques are used to reduce the link between the structured covered bond rating and the unsecured rating of the issuer.

Structured covered bonds may be covered bonds issued within a legal covered bond framework to which contractual provisions are added to provide additional protections against various sources of risks. Jurisdictions where no covered bond law is available might still be able to construct covered bond instruments, if the general legal framework allows it. An example would be the Netherlands, and other relatively credit-friendly jurisdictions.

Moody's rating approach for structured covered bonds includes a review of all sources of credit risks that may impair the issuer's ability to repay in a timely manner all sums promised to investors. The review also includes an assessment of the degree of protection granted by security packages and legal and contractual provisions governing the issuer.

The third method of capital market financing is **securitisation**, where only the cash flows from the assets are used to repay the bonds. The credit rating of the originator of the assets is involved only to a limited degree as the main rating criteria are the cash flow from the underlying assets and the structural protections built into the deal, and investors do not have recourse to the originator (as opposed to the other instruments outlined above).

2 Please refer to Special Report "European Covered Bonds: Moody's Rating and Analytical Approach".

The above categories can be represented as follows.

Instrument	Linkage	Rating Volatility	Achievable Rating
Unsecured bond	Increased amount of de-linkage	Reduced rating volatility	Senior unsecured rating of issuer
Covered bond			plus 1-4 notches
Structured covered bond			Up to Aaa
Securitisation bond			Up to Aaa

STRUCTURING COVERED BONDS: SECURING CASH FLOWS FOR INVESTORS

Moody's rating approach for European covered bonds recognises the strengths of these secured debt instruments relative to senior unsecured debt obligations of a given issuer. Covered bonds benefit from first priority of claim over the cover or asset pool, hence they exhibit a lower severity of loss than unsecured obligations, usually; in certain cases they may also display a lower probability of default.

As explained above, Moody's fundamental rating approach results in covered bonds being rated between one and four notches above the senior unsecured rating of the covered bond issuer. In the current environment where, in some cases, ratings of issuers are under pressure, structuring techniques can be applied to

- reduce the link between the rating on the covered bond and the issuer's unsecured rating and,
- reduce loss severity in excess of the limitations as specified in the specific covered bond law, if any.

When rating structured covered bonds, the focus of the credit analysis changes and the importance shifts from the fundamental credit strength of the issuer to the strength of the assets. Structuring techniques will aim at ensuring that cash flows of the cover pool will be sufficient, with a high degree of certainty, to repay the structured covered bonds on a timely basis, hence reducing the need of the recourse to the issuer for the repayment of the debt. The cash flow from the assets can be used to service the covered bonds even in the event of a bankruptcy of the issuer.

The reduction of loss severity will depend on the type of assets and the amount of enhancement, which can be added taking different forms and combinations. The main risks and protections that may affect the cash flows available from the assets to repay structured covered bonds are discussed in this section.

Asset Credit Quality

The better the credit quality of the cover pool, the lower the probability of default of the covered bond and also the lower the severity in case of default. Strict eligibility criteria for the assets in the cover pool and over-collateralisation are two ways of reducing the potential losses on assets.

Eligibility criteria

All covered bond frameworks define -more or less restrictively- what type of assets may be included in a cover pool. Covered bonds are backed by either mortgage loans or public sector loans, with the exception of the French obligations foncières, which may be backed by a mix of mortgage and public sector assets. Public sector loan pools are generally of good credit quality, as demonstrated by their historical performance and show resistance to cyclical downturns in the long run. The mortgage loans that are eligible in most frameworks include both residential mortgage loans and commercial mortgage loans; only a few frameworks (e.g. Ireland and Finland) have restrictions on commercial real estate loans.

Covered bond frameworks usually include maximum loan-to-value (LTV) thresholds for mortgage loans, which range from 60% to 80%. Some countries such as Germany, France, Luxembourg, and Finland apply the same LTV threshold for residential and commercial loans at 60%. Although this LTV limit is usually rather conservative for residential loans, it may not provide adequate protection for all commercial real estate lending activities in view of their greater level of risk. Other countries such as Denmark, and to a lesser extent Spain and Latvia, have introduced different LTV levels for residential and commercial lending.

Most covered pool definitions include assets originated in jurisdictions other than that of the covered bond issuer, the exceptions being the Spanish and Swiss frameworks, which do not allow any foreign assets. Foreign assets are typically limited to EEA and the remaining G7 countries³. Although this flexibility may be positive to the extent that it brings diversification, it may also increase the risk profile of the asset pool. One area of concern that would need to be analysed is the originator's underwriting and servicing skills outside its home market, and also the enforceability of security interest may be more complex than in the originator's domestic market.

The pool securing a covered bond may change over the life of the bond. Cover pools are open-ended, meaning that new loans may be added on a regular basis, exposing covered bond holders to a change in cover pool characteristics and hence risk characteristics.

Criteria vary in the different frameworks, with some being stricter than others, depending on what the intention of the legislation was. If an issuer restricts itself, on a contractual basis, to refinance only certain types of eligible assets by using tighter eligibility criteria than those required in the applicable legislation, this might improve the risk profile of the cover pool. Tighter criteria may eliminate, for instance, riskier assets or assets that are outside the area of expertise of the originator. This could result in a reduction of losses for investors and ensure a greater stability of cover pool composition over time. Criteria may be applicable either to individual loans or to a pool as a whole (such as concentration limits on some asset type).

Over-collateralisation

With the exception of the Spanish and Danish frameworks, which require over-collateralisation (i.e. an excess of eligible assets over liabilities), most covered bond laws require solely that the amount of assets be greater than the amount of liabilities at all times.

Adding over-collateralisation, which is commonly used in securitisation transactions as a form of credit enhancement, provides protection against losses on the pool of assets. The assets provided in excess provide protection against losses that may exceed the net interest margin on the pool, which is the first layer of protection.

In order to assess the benefits that may be gained with over-collateralisation, two issues must be analysed:

- the enforceability of such over-collateralisation - i.e. whether covered bondholders would effectively benefit from such protection in case of the issuer's bankruptcy, and
- the quantitative benefit of such over-collateralisation in terms of reduction of expected losses for covered bondholders.

The question of enforceability of over-collateralisation in covered bonds is complex. It requires a clear understanding and interpretation of how the cover pool and the issuer will be treated in bankruptcy. As opposed to securitisation transactions, most covered bonds are issued by a legal entity that conducts other activities and has other creditors than covered bondholders. Would the bankruptcy administrator recognise that all the cash flows from the cover pool would only be available to repay the covered bonds or whether some of these funds may be used to repay other debts of the issuer? This analysis must be conducted for each jurisdiction in light of applicable covered bond framework and bankruptcy laws.

The French, Irish, Danish, Spanish and Latvian covered bond laws would allow over-collateralisation, if any, to benefit the covered bondholders. In the case of France and Ireland, this is relatively easy in that covered bonds are issued by a special purpose subsidiary of the originator. According to Moody's there are uncertainties whether over-collateralisation in the German framework would protect Pfandbriefe investors or whether the excess in the cover pool would be released and made available to repay other creditors.

Once the legal aspects have been clarified, the analysis will focus on quantitative aspects of the over-collateralisation, in other words the level of protection that it provides and thus the reduction of expected losses for the structured covered bonds. The approach used is very similar to the methodology used for sizing credit enhancement in securitisation transactions.

³ Danish law allows any foreign assets

Cash Flow Mismatches

Structurally, covered bond issuers are exposed to cash flow mismatches that arise because cover pools are mainly composed of amortising loans while liabilities have bullet repayments. Also, mismatches arise from interest rate risks as the majority of cover pool assets are fixed rate while liabilities may be floating or fixed rate. Covered bond issuers may also be exposed to currency risks, although these tend to be less frequent.

Regarding cash flow mismatches, generally European covered bond frameworks require that nominal present value of the assets must be greater than liabilities at any time. Two frameworks have addressed this in a stricter manner, Denmark with its balance principle, and Ireland, which requires that the average duration of the assets should not exceed the average life of the liabilities.

Nonetheless, Moody's believes that the maturity mismatches between assets and liabilities expose covered bond issuers to interest rate risks, which may impair their ability to repay. On one hand, financing gaps expose issuers to thinner margins because of greater refinancing costs, in rising interest rate environments or should their credit spread increase. On the other hand, assets with shorter maturities than liabilities expose the issuer to re-investment risks and also therefore thinner margins. This risk is somewhat mitigated by the flexibility allowed by most frameworks to have substitution assets if no more eligible assets could be added to the cover pool. However, substitution assets that can be included are generally low-risk assets, which usually generate relatively low yields; also usually substitution assets are usually limited by law to up to 10% or 20% of total assets.

The benefits of hedging instruments may be limited by the uncertainties of the amortisation pattern of the assets in the cover pool, due for instance to prepayments. Mortgage loans are subject to prepayments, exposing covered bond issuers with thinner margins as prepayment penalties may not cover for the losses affecting the lender. Prepayment risks vary by country and are particularly high in France, where prepayment penalties are capped by very protective consumer regulations; in Germany prepayments are typically not allowed for fixed-rate loans. Prepayment risks are limited for Danish mortgage bond issuers because borrowers prepaying must purchase back the corresponding bonds at market price.

In recently introduced frameworks, such as France, Luxembourg and Ireland, and in recent amendments of the German, Latvian and Finnish laws, derivative contracts for hedging are part of the cover pool. Also, as opposed to classic ISDA documentation, insolvency of French, Irish, Luxembourg, Latvian, Finnish and German covered bond issuers does not constitute a termination of the hedge contracts. This provision reduces the probability of default on covered bonds and lessens severity of loss in case of an issuer's insolvency. The corollary of this is that hedge counterparties benefit from the same priority of claims as that of covered bondholders.

Effective Asset-Liability Management Mitigates Risk

Efficient asset-liability management guidelines implemented on a contractual basis may reduce structured bond investors' exposure to cash flow mismatches. These guidelines may include limits on interest rate gaps in notional amounts or more protective limits in maximum exposure in stressed scenarios. Denmark has in its legislation such a concept, which strictly limits interest rate and currency mismatches to 1% and 0.1%, respectively, of the capital of the issuer.

In addition, residual exposure to interest rate risk may be further mitigated by over-collateralisation to the extent that it would benefit the bond holders (see question of enforceability discussed above).

Liquidity Support Reduces Default Probability

Although covered bondholders are heavily, if not wholly, dependent on market funding, no covered bond framework formally requires alternative sources of liquidity or maintenance of back-up facilities. Most covered bond law frameworks provide that payments to covered bondholders would not be accelerated in case of the issuer's bankruptcy. However, the start of insolvency proceedings may result in temporary payment disruption for the covered bonds. This may be caused by operational issues (the issuer is usually in charge of servicing the asset in the cover pool) or legal proceedings. For example, Moody's believes that upon the bankruptcy of a Spanish covered bond issuer, payments to Cedulas investors may be temporarily suspended. This risk may be mitigated by the addition of external liquidity that may help the issuer to avoid missing an interest payment in a stress

scenario⁴. The reduction in the probability of default is also a way to reduce expected losses on a debt security and thus improve its rating.

Counterparty Risks

As mentioned above, conservative interest rate and currency hedging policies, as well as implementing back-up facilities, reduce the risks from cash flow mismatches. The protections are effective to the extent that the counterparties providing such hedge or support are performing.

Counterparty risk also exists if originators have outsourced other functions, such as servicing or bank accounts, to third parties. This is closely linked to the "Operational and Servicing Risks" section below.

In order to mitigate risks from default of counterparties, eligibility criteria for counterparties dealing with the covered bond issuers may be implemented. Criteria calling for a certain rating level of the counterparty is particularly effective. Furthermore, to reduce the exposure to a deterioration of the credit quality of a counterparty, the requirement for collateralisation of the exposure to the counterparties further strengthens the credit quality of covered bonds.

Operational and Servicing Risks

As noted, the creditworthiness of a covered bond instrument is highly dependent on the cash flows generated by the assets comprising the cover pool and the quality of the issuing entity's asset-liability management. Therefore, the quality of asset origination, monitoring, and servicing, as well as asset-liability management are crucial.

This raises the questions of (i) who is willing and able to take over the operational functions upon insolvency of the issuer⁵ and (ii) who pays for that service.

SOME ILLUSTRATIVE EXAMPLES

Structured covered bonds have been successfully built in several European markets, including France, Spain, Denmark, the Netherlands and Germany. Moody's believes that the market for structured covered bonds will expand, as the need for low-cost funding is a priority for most originators involved in the relatively low-margin mortgage and public sector lending business. Following are some country-specific examples of the use of covered bonds.

France

The French *Obligations Foncières* are issued by a *société de crédit foncier* ("SCF"), which is a special-purpose subsidiary of the originator. The French law specifies that the covered bond issuer is bankruptcy-remote from its parent. This feature of the French law makes *obligations foncières* relatively easy to structure. The framework does not provide for mandatory over-collateralisation but would allow *obligations foncières* holders to benefit from cover pools in excess. Upon insolvency of the covered bond issuer: i) all payments to creditors that do not benefit from a priority of claim over the cover pool are suspended, ii) any cash flows coming from any SCF's assets are available to make payments to the covered bond holders on scheduled dates. On the negative side, the French legal framework does not provide detailed guidance for asset and liabilities management.

Two issuers have chosen to structure their *obligations foncières*.

Compagnie de Financement Foncier's structured covered bonds are rated **Aaa** by Moody's. In addition to the benefits derived from the *obligations foncières* framework and the credit quality of Crédit Foncier as originator and servicer, the **Aaa** rating was achievable thanks to the introduction of structural protections implemented by the issuer. Those include contractual rules related to asset-liability management, loan additions and liquidity management, as well as dynamic over-collateralisation that adjusts to pool characteristics. Over-collateralisation provides protection against credit losses on the assets and residual interest rate risks. For those frameworks that address it, providing for a special manager does not equate to arranging for a back-up servicer.

⁴ Moody's ratings address timely payment of interest and ultimate payment of principal by legal maturity date.

⁵ For those frameworks that address it, providing for a special manager does not equate to arranging for a back-up servicer.

CIF Euromortgage's structured covered bonds are rated **Aaa** by Moody's. The issuer has imposed on itself a restriction to include only **Aaa**-rated RMBS in its cover pool and to follow defined contractual rules for asset-liability management to limit interest rate and liquidity risks. It also provides over-collateralisation to cover residual interest rate risks.

Denmark

The Danish covered bond framework is one of the oldest and strongest in Europe. It has LTV guidelines for different asset types, a mandatory over-collateralisation of 8% on a risk-weighted basis, strict ALM guidelines through the balance principal, and restrictions on interest and currency risk that can be assumed. Liquidity risk arising from timing of cash flows is also addressed in the law.

The other strength is the ability to enhance the ratings through structuring techniques without having to repackage the covered bond. The restrictions that an issuer places on itself are legally enforceable.

There are five rated issuers of covered bonds in Denmark. Realkredit Danmark and Nordea Kredit have achieved the rating on their mortgage bonds on the strength of the framework and the fundamental rating. BRFkredit and Nykredit have capital centres rated based on the framework and the fundamental rating, but increased the rating on another capital centre using structuring techniques; Totalkredit has achieved its rating by applying structuring techniques.

Spain

The Spanish covered bond law provides a minimum 11% mandatory over-collateralisation; however, because Cédulas Hipotecarias benefit from a security interest over all commercial and residential mortgage loans of the issuer, the over-collateralisation rate is much higher in practice (over 100%). However, this over-collateralisation can disappear if issuance levels increase. The main risk with respect to the Cédulas is default probability. In case of issuer insolvency, there will be a delay in payment on the Cédulas in case of insolvency of issuer.

A solution to the default on the Cédulas in the event of issuer bankruptcy consists in repackaging the Cédulas and adding external source of liquidity. The **Ayt Cédulas Cajas** transactions are a good example: several Cédulas issued by up to 30 Cajas are repackaged into a special-purpose vehicle (SPV), which benefits from a funded reserve fund provided by the originators. This reserve fund provides credit protection against losses of the underlying assets, but more importantly provides liquidity to the issuer.

The funds enable the issuer of the structured Cédulas (the repackaged Cédulas) to continue making interest payments for up to two years on about 25% of the Cédulas the issuer holds. This generally represents the top two or three largest Cédulas issuers in the pool mitigating the risk of suspension of payments in case of issuer insolvency.

Germany

The German framework is among the oldest in Europe. It does not require mandatory over-collateralisation at the cover pool level. Recent amendments have been introduced aimed at improving protections against asset liability mismatches resulting from different duration for assets versus liabilities.

Strictly speaking, so far, no German Pfandbriefe issuer has chosen to structure up its covered bond. However, in a synthetic CMBS transaction, Duke 2002 Ltd⁶, the collateral consisted of **Aa1**-rated public sector Pfandbriefe. This collateral was enhanced to a **Aaa** equivalent by combination of credit enhancement and liquidity mechanism. The sizing of the credit enhancement (against losses on the public sector Pfandbriefe cover pool) was based on a two-party pay analysis, which reflects the fact that there are, on the one side, the obligations of the bank and, on the other, the security the cover pool provides. The legal status of the cover pool allows a certain de-linkage between the default probability of the bank and default under the Pfandbriefe. It should be noted, however, that the two-party pay approach may not be applicable for mortgage Pfandbriefe because default probability may be too correlated between the cover pool and the issuing bank.

6 see New Issue Report dated October 17 2002

The Netherlands

ABN AMRO Bouwfonds Nederlandse Gemeenten N.V. (Bouwfonds) is a good example of an issuer of structured covered bonds in a jurisdiction that does not have a specific covered bond law. The covered bonds are issued under a medium-term note programme, and all the notes are countersigned by a security trustee. The trustee has been pledged a pool of residential mortgage assets as security for the investors in the notes.

Moody's believes that structured covered bonds will develop throughout Europe, in countries which benefit from an established covered bond framework as well as countries with creditor-friendly jurisdictions. Securing low-cost and flexible refinancing sources is a priority for originators involved in the relatively low-margin sectors of mortgage and public lending.

WHY ARE STRUCTURED COVERED BONDS DIFFERENT FROM SECURITISATION?

Even with the benefits of structural provisions borrowed from the securitisation world, structured covered bonds differ quite extensively from securitisation transactions.

The main differences are as follows:

- The issuer is not bankruptcy-remote, not restricted in its business, not an orphan company, and is not limited by business or financial covenants;
- The assets remain on the balance sheet of the originator and are not sold to an SPV. Most⁷ cover pools are held on the balance sheet of the originator but are legally segregated from the other assets, ensuring a separate treatment of covered bonds and the covered pool in case of an insolvency;
- There is a greater linkage between the rating of the structured covered bonds and the asset originator's credit quality. One of the reasons for this is the operational link, which is very difficult to restrict or to find efficient mitigants;
- The structured covered bond issuers are open-ended "vehicles" whose cover pool can evolve without any limit in time;
- Structured covered bonds issuers have exposure to asset-liability management risks to which securitisations are typically not exposed;
- And finally, being issued by companies or financial institutions, covered bonds have greater exposure to event risks, which is not usually the case with securitisation transactions.

⁷ With the exception of the French and Irish frameworks, which provide that cover pool are held in a separate legal subsidiary that is bankruptcy-remote from its parent.

SF21457isf

© Copyright 2003, Moody's Investors Service, Inc. and/or its licensors including Moody's Assurance Company, Inc. (together, "MOODY'S"). All rights reserved. **ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY COPYRIGHT LAW AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.** All information contained herein is obtained by **MOODY'S** from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, such information is provided "as is" without warranty of any kind and **MOODY'S**, in particular, makes no representation or warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability or fitness for any particular purpose of any such information. Under no circumstances shall **MOODY'S** have any liability to any person or entity for (a) any loss or damage in whole or in part caused by, resulting from, or relating to, any error (negligent or otherwise) or other circumstance or contingency within or outside the control of **MOODY'S** or any of its directors, officers, employees or agents in connection with the procurement, collection, compilation, analysis, interpretation, communication, publication or delivery of any such information, or (b) any direct, indirect, special, consequential, compensatory or incidental damages whatsoever (including without limitation, lost profits), even if **MOODY'S** is advised in advance of the possibility of such damages, resulting from the use of or inability to use, any such information. The credit ratings, if any, constituting part of the information contained herein are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. **NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.** Each rating or other opinion must be weighed solely as one factor in any investment decision made by or on behalf of any user of the information contained herein, and each such user must accordingly make its own study and evaluation of each security and of each issuer and guarantor of, and each provider of credit support for, each security that it may consider purchasing, holding or selling. Pursuant to Section 17(b) of the Securities Act of 1933, **MOODY'S** hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by **MOODY'S** have, prior to assignment of any rating, agreed to pay to **MOODY'S** for appraisal and rating services rendered by it fees ranging from \$1,500 to \$1,500,000.