

Münchener Hypothekbank eG Mortgage Covered Bonds

Covered Bonds / Germany

Initial Rating Assignment

June 1996

Contacts

Dr. Martin Rast
+44 20 7772-8676
Martin.Rast@moodys.com

Jörg Homey
+49 69 70730-740
Joerg.Homey@moodys.com

Client Service Desk

Frankfurt: +49 69 2222-7847
London: +44 20 7772-5454
clientservices.emea@moodys.com
New York: +1 212 553-1653

Monitoring

monitor.cb@moodys.com

Website

www.moodys.com

DEFINITIVE RATINGS

Cover Pool (€ million)	Cover Assets	Covered Bonds (€ million)	Rating
15,049	Commercial and residential mortgage loans	12,049	Aaa

The ratings address the expected loss posed to investors. Moody's ratings address only the credit risks associated with the transaction. Other non-credit risks have not been addressed, but may have a significant effect on yield to investors.

TRANSACTION SUMMARY

Moody's has assigned a definitive long-term rating of **Aaa** to the Mortgage Covered Bonds (Mortgage *Pfandbriefe* or *Hypothekpfandbriefe*) issued by Münchener Hypothekbank eG ("MünchenerHyp" or the Issuer; **Aa3/Prime-1/C+**). The Mortgage Covered Bonds are governed by the German *Pfandbrief* Act. The Mortgage Covered Bonds constitute a direct, unconditional and senior obligation of MünchenerHyp and are secured by a pool of assets (Cover Pool or *Deckungsmasse*).

As of June 2009, the value of the Cover Pool assets of the Issuer amounted to €15.0 billion. Around 50% of the Cover Pool assets are residential mortgage loans, while commercial mortgage loans account for around 42%; the remainder of 8% are substitute assets. Loans backed by properties in Germany accounted for 95% of the residential part of the Cover Pool and 78% of the commercial part.

Among other factors, the rating takes into account the following:

- the credit strength of the Issuer (rated **Aa3/Prime-1/C+**);
- the German legal framework for *Pfandbriefe*;
- the credit quality of the Cover Pool; and
- the maintenance of a certain over-collateralisation over and above the legal requirements.

Moody's has assigned a Timely Payment Indicator of Probable High to the Mortgage Covered Bonds, which is in line with other Mortgage *Pfandbriefe* issued under the German *Pfandbrief* Act.

As is the case with other covered bonds, Moody's considers the transaction to be linked to the credit strength of the Issuer, particularly from a default probability perspective. If the Issuer's credit strength deteriorates, all other things being equal, the rating of the Covered Bonds could be expected to come under pressure.

If the Issuer's rating or the pool quality deteriorates, the Issuer will have the ability, but not the obligation, to increase the over-collateralisation in the Cover Pool. Failure to increase the level of over-collateralisation under these circumstances could lead to negative rating actions. However, if the Issuer were downgraded below a certain threshold in the single-A range, Moody's might remove the benefit of any over-collateralisation that was not "committed" from its analysis.



Moody's initially analysed and will monitor this transaction using its rating methodology for EMEA Covered Bond transactions, as described in the Rating Methodology reports: "Moody's Rating Approach to European Covered Bonds" published in June 2005, "Timely Payment in Covered Bonds following Sponsor Bank Default", published in March 2008, and "Assessing Swaps as Hedges in the Covered Bond Market", published in September 2008. All can be found on www.moody.com in the Credit Policy & Methodologies directory, within the Ratings Methodologies subdirectory. Other methodologies and factors that may have been considered in the process of rating this issue can also be found in the Credit Policy & Methodologies directory.

OPINION

Strengths of the Transaction

- **Issuer:** The Mortgage *Pfandbriefe* have full recourse to MünchenerHyp (**Aa3/Prime-1/C+**).
- **The German legal framework:** The Mortgage Covered Bonds are governed by the German *Pfandbrief Act* (*Pfandbriefgesetz* or the Act). There are a number of strengths in the German *Pfandbrief* legislation, these include the following:
 - Under the terms of the German legislation, the Issuer is regulated and supervised by the Financial Supervisory Authority of Germany (*Bundesanstalt für Finanzdienstleistungsaufsicht* or *BaFin*).
 - Upon the insolvency of the Issuer, the claims of the Covered Bondholder will be secured by a pool of assets (Cover Pool).
 - The *Pfandbrief Act* sets out strict eligibility criteria for assets in the Cover Pool. The ordinary Cover Pool assets – either residential or commercial mortgage loans – are subject to a conservative evaluation of property values (Lending Value or *Beleihungswert*), and Mortgage Covered Bonds can only be issued against 60% of this lending value.
 - A minimum 2% stressed net present value (NPV) over-collateralisation must be maintained at all times.
 - The Issuer is also required to cover potential liquidity gaps over the next 180 days between payments expected to be received under the Cover Pool assets and the payments due under the outstanding Covered Bonds.
 - There is a Cover Pool monitor (*Treuhänder*) who is responsible for monitoring various operations with respect to the Cover Pool.
- **Credit Quality of the Cover Pool:**
 - The Mortgage *Pfandbriefe* are supported by a Cover Pool backed by high-quality assets. Around 50% of the total Cover Pool assets are German residential mortgage loans with a weighted average seasoning of 7 years and a weighted average Loan to Value (LTV) of approximately 47.2%. Around 42% of the total Cover Pool assets are commercial mortgage loans, whereby the majority of these claims are backed by multi-family developments, offices and retail buildings.
 - The quality of the collateral is reflected in its Collateral Score of around 8%.
- **Refinancing Risk:** There is a well-established and deep market for German *Pfandbriefe*. The liquidity matching requirements for the next 180 days also reduce refinancing risk (see above).
- **Market Risk:** The over-collateralisation of 2% on an NPV basis has to be maintained in stressed market conditions, e.g. movements of the yield curve and changes in the relevant exchange rates. MünchenerHyp has opted for the dynamic approach – which includes a minimum shift of the yield curve of 100 basis points (bps) – in order to meet mandatory stress test requirements.
- **De-Linkage:** Following an Issuer Default,¹ the Covered Bondholders will benefit from a special cover pool administrator (*Sachwalter*) that acts independently from the

¹ Issuer Default is defined in Moody's rating methodology for European Covered Bonds as removal from the Cover Pool of (i) support provided by entities within the Sponsor Bank group, (ii) ancillary activities of the Sponsor Bank group (i.e. those not related to the Cover Pool) and (iii) usually, management functions of the Sponsor Bank.

insolvency administrator of the Issuer. Further, if the German Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht* or *BaFin*) deems it necessary, the *Sachwalter* may be appointed ahead of any Issuer Default.

Weaknesses with Mitigants

- **Issuer:** As with most covered bonds, the Issuer has the ability to materially change the nature of the programme until a Issuer default, e.g. new assets may be added to the Cover Pool, new bonds issued with varying promises and new hedging arrangements entered into. These changes could affect the credit quality of the Cover Pool, refinancing risk and market risk. **Mitigant:** The bonds have a direct claim on the Issuer, rated **Aa3/Prime-1**.
- **Credit Quality of the Cover Pool:** As with most covered bonds in Europe, there are few restrictions on the future composition of the Cover Pool; hence, substitution risk exists. **Mitigants:** 1) The quality of the Cover Pool, over time, will be protected by, among others, the requirements of the Act. The Act sets out rules detailing which assets qualify as ordinary cover assets for Mortgage *Pfandbriefe*; and 2) Moody's will monitor the Cover Pool. If the quality of the collateral deteriorates below a certain threshold, the Issuer will have the ability, but not the obligation, to increase the over-collateralisation in the Cover Pool. Failure to increase the level of over-collateralisation following a deterioration of the Cover Pool could lead to negative rating actions.
- Cover pool assets located outside Germany are exposed to some legal risks (see section "Other Credit Considerations" below). **Mitigants:** MünchenerHyp has set up trust structures designed to protect US and Swiss assets respectively against secondary insolvency proceedings; this structure might improve the insolvency remoteness of these assets and is currently being analysed by Moody's. Furthermore, the Issuer is not taking deposits from outside Germany or entering into derivatives with borrowers which are in the cover pool; in Moody's view, these facts mitigate any set-off risk arising from cross-border lending.
- **Refinancing Risk:** Following an Issuer Default, to achieve timely principal payment, covered bondholders may need to rely on proceeds being raised through the sale of, or borrowing against, assets in the Cover Pool. Following an Issuer Default, the market value of these assets may be subject to certain volatility. **Mitigants:** 1) the high rating of the Issuer (**Aa3**). The higher the rating of the Issuer, the lower the chances of being exposed to this risk; 2) the depth of the German market; 3) the high level of support provided to *Pfandbriefe* in Germany; 4) Moody's has applied stressed refinancing margins.
- **Liquidity:** The programme does not benefit from any designated source of liquidity if cash flow collections are interrupted. **Mitigants:** The strengths of the Act, which include 1) the alternatives given to the *Sachwalter* for raising funds against the Cover Pool; 2) the minimum 2% over-collateralisation on a stressed NPV basis; and 3) the liquidity matching requirements for the next 180 days.
- **Market Risk:** As with the majority of European covered bonds, there is potential for market risks. For example, following an Issuer Default, covered bond investors may be exposed to interest risk, which could arise from the different payment promises and durations made on the cover pool and the covered bonds. In this transaction, there was only a small currency mismatch. **Mitigant:** The requirement that the value of the Cover Pool has to exceed the stressed NPV of the total of outstanding Covered Bonds issued against the Cover Pool by at least 2% (over-collateralisation).
- **Time Subordination:** After an Issuer Default, later-maturing Covered Bonds will be subject to time subordination. Principal cash collections may be used on a first-come-first-served basis, paying earlier-maturing Covered Bonds prior to later-maturing Covered Bonds. This could lead to over-collateralisation being eroded away before any payments are made to later-paying Covered Bonds.

STRUCTURE SUMMARY

Issuer:	Münchener Hypothekbank eG (Aa3/Prime-1/C+)
Structure Type:	Mortgage Covered Bonds (<i>Hypothekpfandbriefe</i>)
Issued under Covered Bonds Law:	Yes
Country Applicable Law:	German <i>Pfandbrief</i> Act
Main Servicer:	Münchener Hypothekbank eG
Main Originator:	Münchener Hypothekbank eG
Swap Provider:	DZ Bank AG (Aa3/Prime-1/C-)
Monitoring of Cover Pool:	Cover pool monitor (<i>Treuhänder</i>), mandatory by operation of the <i>Pfandbrief</i> Act
Timely Payment Indicator:	Probable-High

COVERED BONDS SUMMARY

Total number of Covered Bonds outstanding:	582
Total amount of Covered Bond issuance outstanding:	EUR 12,559,155,530
Currency of the Covered Bonds:	EUR (92%), CHF (4%), USD (3%), JPY (1%)
Extended Refinance Period:	No
Principal Payment Type:	Bullet
Interest Rate Type:	86% fixed, 14% variable

COLLATERAL SUMMARY *(see also Appendix 1 for more details)*

Size of Cover Pool:	EUR 15,048,984,231
Main Collateral Type in Cover Pool:	Residential (50%) and commercial mortgages (42%); further cover assets (8%)
Main Asset Location:	Germany
Loans Count:	>100,000
Currencies:	EUR (83%), USD (13%), CHF (3%), other (<1%)
Concentration of 10 Biggest Loans:	6.1%
Interest Rate Type:	85% fixed, 15% variable
Current Over-Collateralisation (nominal basis):	19.8%
Current Over-Collateralisation (NPV basis):	24.3%
“Committed” Over-Collateralisation:	2.0% (mandatory minimum over-collateralisation based on stressed NPV calculation as required by the <i>Pfandbrief</i> Act)
Collateral Score:	8%
Further Details:	See Appendix 1
Pool Cut-Off Date:	30 June 2009

STRUCTURAL AND LEGAL ASPECTS

Mortgage Pfandbriefe are governed by the Pfandbrief Act

MünchenerHyp's Mortgage Covered Bonds (*Hypothekendarpfandbriefe* or Mortgage Pfandbrief) are governed by the German Pfandbrief Act (*Pfandbriefgesetz*). No specific structural feature is envisaged by the covered bond programme of MünchenerHyp. For a description of the general legal framework for Mortgage Covered Bonds governed by the Pfandbrief Act, refer to Appendix 3 of this report.

MOODY'S RATING METHODOLOGY

The approach used by Moody's for rating covered bond transactions is detailed in our Rating Methodology.² The impact of the credit strength of the Issuer, quality of the collateral, refinancing and market risks are considered below.

Credit Strength of the Issuer

The Covered bondholders benefit from a direct claim against the Issuer, rated Aa3/Prime-1

The Mortgage Pfandbriefe are full recourse to MünchenerHyp (**Aa3/Prime-1**). For details please refer to the Related Research section at the end of this report; specifically, Moody's latest Credit Opinion on MünchenerHyp, published in August 2008.

Quality of the Collateral

Around 46% of the total Cover Pool assets are residential mortgage loans

Moody's was provided with good-quality information on the Cover Pool assets. As of June 2009, the Cover Pool comprised residential and commercial mortgage loans plus some further cover assets. These claims add up to a volume of €15.0 billion (including substitute collateral).

Table 1:

Overview Cover Pool Assets

	(€)	(%)
Total pool	15,048,984,231	100
Residential mortgage loans	7,525,718,702	50
Commercial mortgage loans	6,333,265,529	42
Further Cover Assets	1,190,000,000	8

Residential Mortgages

Well-seasoned residential loans with an average LTV of around 48%

As of June 2009, around 50% of the Cover Assets were residential mortgage loans located across Germany (95.3%) and Switzerland (4.7%); Austrian residential assets constitute less than 0.1% of the pool. The vast majority of the residential mortgages loans (73%) are secured by owner-occupied dwellings. The majority of the properties are houses and apartments (see Appendix 1 for further details).

Positive characteristics of the credit quality of the residential part of the Cover Pool include:

Low weighted average LTV

- The high number of long-dated fixed-rate loans.
- The good seasoning of the loans, with a weighted average seasoning of approximately seven years.
- A low weighted average LTV of around 47%.
- Granularity and diversification, with a high number of borrowers in the residential mortgage pool and properties spread across the whole of Germany.
- The affordability of all loans has been checked and Moody's understands that there are almost no loans with "limited income verification" in the Cover Pool as of the date of this report (see Appendix 2 for further details).

Negative characteristics of the credit quality of the residential Cover Pool include:

Some regional concentration on Bavaria

- Uncertainty regarding employment status of the borrower, which is unknown for almost 83% of the residential lending.
- Concentration of the Cover Pool both on Germany and within Germany (some regional concentrations in Bavaria, North-Rhine Westphalia and Baden Wuerttemberg, which together account for 62% of the residential mortgage loans).

² "Moody's Rating Approach to European Covered Bonds", published in June 2005 (see Related Research).

Scoring model is used to assess credit quality of residential mortgages in the Cover Pool

The above-mentioned factors have been incorporated into Moody's analysis. Moody's calculates a Collateral Score based on the characteristics of the residential loan pool using a scoring model in order to assess the credit quality of this portion of the Cover Pool.

Commercial Mortgages

Commercial mortgages account for around 42% of the total Cover Pool

As of June 2009, around 42% of the Cover Assets are commercial mortgage loans, of which the majority are secured by properties located in Germany (58%). Within Germany – and similar to the residential mortgages in the Cover Pool – the properties are located across the country, but with some concentration in Bavaria, North-Rhine Westphalia and Hesse. With respect to loans secured on properties outside Germany, commercial mortgages are granted in the US (32% of the commercial Cover Pool) and other member states of the European Union, namely in France, the Netherlands and the UK (see Appendix 1 for further details).

The number of borrowers is reasonably high and the ten largest obligors account for around 15% of the commercial mortgage part of the Cover Pool. Multi-family developments and offices account for the vast majority of the commercial mortgages.

Positive characteristics of the credit quality of the commercial part of the Cover Pool include:

- A high portion of multi-family properties and offices (together amounting to around 74% of the commercial pool).
- A low weighted average LTV of around 59.7%.
- Certain granularity of the commercial part of the Cover Pool.

Negative characteristics of the credit quality of the commercial Cover Pool include:

- Hotels and industry facilities account for around 10% of the commercial mortgage loan pool.
- Some level of borrower concentration: the 10 largest borrowers account for 15% of the commercial assets.

High portion of multi-family and offices

Monte Carlo simulation is used to assess credit quality of commercial mortgages in the Cover Pool

The above-mentioned factors have been incorporated into Moody's analysis. Moody's calculates a Collateral Score based on the characteristics of the commercial portion of the pool using a Monte Carlo simulation approach in order to assess the credit quality of this portion of the Cover Pool. Moody's collateral score model for commercial loans takes into account, *inter alia*, the impact of concentration on borrower, regional and country levels as well as the different types of property securing the loan.

Summary of the Collateral Analysis

Adjustments to Moody's analysis

In order to calculate the credit risks of the Cover Pool assets, Moody's used its collateral score models for residential and commercial pools. We were provided with good-quality information on the Cover Pool. However, only limited information was provided on junior loans, so we have made what we believe are conservative assumptions on the amount of junior-ranking loans made by third parties against properties included in the Cover Pool.

The Collateral Score is 8% and reflects the high credit quality of the Cover Pool

The result of the Cover Pool analysis is the Collateral Score.³ Moody's calculates a Collateral Score based on the credit quality of the Cover Pool assets as described above. In addition, the Collateral Score published in this report reflects all adjustments made, so this number includes the cushion built in to address the factors described above. For this transaction, the Collateral Score is around 8%.

For further information, please see Appendices 1 and 2 for a summary of the Cover Pool.

Other Credit Considerations

Substitution risks are mitigated by the Pfandbrief Act

As with most covered bonds in Europe, there are few restrictions or limitations on the future composition of the Cover Pool. This may have the effect of creating substitution risk. Mitigants to substitution risk, which should protect the quality of the Cover Pool over time, include:

- The requirements of the *Pfandbrief Act*.
- The fact that the Cover Pool composition will be monitored. If the quality of the

³ The Collateral Score can be seen as the amount of risk-free enhancement required to protect a **Aaa** rating from otherwise unsupported assets – so the stronger the credit quality of the collateral, the lower the collateral score. This only considers the credit deterioration of the assets and ignores any risk from refinancing and market risk (see Rating Methodology "Moody's Rating Approach to European Covered Bonds").

Some legal risks can arise from cross border lending

collateral deteriorates below a certain threshold, the Issuer will have the ability, but not the obligation, to increase the over-collateralisation in the Cover Pool in order to support the current rating. If additional over-collateralisation is not added following a marked deterioration of the collateral, this could lead to a negative rating action.

In the event of the Issuer's insolvency, Moody's believes that cover pool assets located outside Germany are less protected against claims of other creditors of the Issuer than assets located in Germany. In particular, Moody's has identified and analysed the following scenarios:

- Loans to borrowers located outside Germany or loans not governed by German law: In the case of loans not governed by German law, the borrower may be allowed to exercise set-off, thereby reducing the amount payable by such borrower. **Mitigant:** The Issuer does not take deposits from outside Germany nor enters into derivatives with borrowers in the cover pool.
- Loans to borrowers located outside the European Economic Area (EEA). In addition to the above risk, Moody's understands that these cover pool assets may not be available to the covered bondholders on a priority basis because other (unsecured) creditors of the Issuer may successfully access the assets in the cover pool. This may – due to secondary proceedings being commenced under the respective domestic law, for example – result in a lower recovery. **Mitigant:** MünchenerHyp has implemented trusts which are designed to ringfence US and Swiss mortgages and a certain amount of such loans have already been entered into these trusts. Moody's is currently analysing these trusts and gives value to the relevant assets for a transition period – see Related Research for Moody's comment on such transition period.⁴

Refinancing the Cover Pool

Lower refinancing risk than in other jurisdictions due to the level of support provided in the German Pfandbrief market

Following an Issuer Default, where the "natural" amortisation of the Cover Pool assets alone cannot be relied on to repay principal, Moody's assumes that funds must be raised against the Cover Pool at a discount if covered bondholders are to receive timely principal payment. After an Issuer Default, the market value of these assets may be subject to certain volatility.

Aspects specific to this programme that are refinancing positive include:

- Under the terms of the *Pfandbrief* Act: The *Sachwalter* (special cover pool administrator) has the ability to sell the total or parts of the pool. Due to the depth of the German market and the high level of support provided to *Pfandbriefe* in Germany, refinancing risk is perceived as lower than in other jurisdictions.
- The credit quality of the Cover Pool, which is reflected in a relatively low collateral score compared to other Mortgage *Pfandbriefe*. Better credit quality of the Cover Pool will lead to lower write-offs for losses and lower refinancing margins applied.
- Relatively short average lives of the assets in the Cover Pool.
- The Issuer is also required to cover potential liquidity gaps over the next 180 days between payments expected to be received under the Cover Pool assets and the payments due under the outstanding Covered Bonds.

Aspects specific to this programme that are refinancing negative include:

- All notes issued under the programme are bullet. Furthermore, the programme does not benefit from any contractual provisions to allow for an extension of a principal refinancing period.
- The administrator of the Cover Pool may be unable to change the rate charged to the underlying borrowers during the entire life of the loan.
- The Cover Pool contains derivatives. Moody's is concerned that there is some likelihood that these swaps may terminate at or soon after Issuer Default. However, we note that the aggregate notional amount of these swaps is only about €250 million.

⁴ Please see Related Research: Press Release "Moody's updates on status of non-EEA assets in Austrian and German Covered Bond transactions", published in June 2009.

Market Risk

Following an Issuer Default, Moody's considers the impact on the Covered Bonds of changes in interest and currency rates. Moody's examines scenarios of rates both increasing and decreasing and then adopts the worst-case scenario. The interest and currency stressed rates used over different time horizons are published in Moody's Rating Methodology.

Aspects specific to this programme that are market risk positive include:

- The exposure to market risk is mitigated by the mandatory NPV test (whereby the *Pfandbrief* Issuer is obliged to maintain a minimum over-collateralisation of at least 2% on a stressed NPV calculation basis), taking into consideration stressed interest rates scenarios and currency risk.
- The German *Pfandbrief* Act requires *Pfandbrief* issuers to regularly run stress tests regarding interest rate and foreign exchange rate risks. MünchenerHyp has opted for a stress test based on the so-called dynamic approach – which includes a minimum shift of the yield curve of 100 bps – to meet the regulatory requirements. As of March 2009, MünchenerHyp has entered swaps into the Cover Pool register of its Mortgage *Pfandbriefe* to reduce market risk; these swaps are with DZ Bank (an affiliated German bank) and amount to a total of about €250 million.

Aspects specific to this programme that are market risk negative include:

- The vast majority of MünchenerHyp's outstanding Mortgage *Pfandbriefe* and Cover Pool assets are denominated in euros. Furthermore, some cross-currency swaps have been entered into the Cover Pool, which reduce the risk. However, there is some remaining currency risk which has been taken into consideration in Moody's modelling.
- Interest-rate risk exists, deriving from the mismatch between the interest rates (fixed/floating) on assets and liabilities. The vast majority of the Cover Pool assets as well as of the outstanding Mortgage *Pfandbriefe* have a fixed rate; some swaps have also been entered into to further reduce the exposure. However, some mismatch arises, as illustrated in Table 2.

Table 2:

	Assets (%)	Liabilities (%)	WAL Assets (years)	WAL Liabilities (years)
Fixed rate	85	86	6	6
Variable rate	15	14	4	3

WAL = weighted average life (time to maturity).

In the modelling of this transaction, Moody's has given value to an interest rate stress of 100 basis points, reflecting a parallel downside and upside shift on the yield curve (swap rates). However, the stresses applied by Moody's approach when modelling interest rate shifts exceed this level. In the event of insolvency of the Issuer, Moody's does not currently assume that the special cover pool administrator (*Sachwalter*) would always be able to efficiently manage any natural hedge between the Cover Pool and the Covered Bonds.

LINKAGE

All Covered Bonds are linked to the Issuer of the Covered Bonds

All Covered Bonds are linked to the issuer of the Covered Bonds. The Covered Bonds will therefore come under rating stress if the Issuer's credit strength deteriorates. Reasons for this include:

- Refinancing risk: Following Issuer Default, if principal receipts from collections of the Cover Pool are not sufficient to meet the principal payment on a Covered Bond, funds may need to be raised against the Cover Pool. However, the fact that the Issuer has defaulted may negatively impact the ability to raise funds against the Cover Pool.
- The exposure to decisions made by the Issuer in its discretion as manager of the Covered Bond programme. For example, prior to an Issuer Default, the Issuer may add new assets to the Cover Pool, issue further bonds and enter new hedging arrangements. Such actions could negatively impact the value of the Cover Pool.

- More generally, by the incorporation of the strength of the Issuer in accordance with Moody’s rating methodology.

As a result of this linkage, the probability of default of the Covered Bonds may be higher than expected for a senior unsecured debt with the same rating. However, Moody’s primary rating target is the expected loss, which also takes into account severity of loss, which in this case is consistent with the covered bond rating.

TPIs assess the likelihood that a timely payment will be made

Moody’s Timely Payment Indicators (“TPIs”)⁵ assess the likelihood that timely payments will be made to Covered Bondholders following an Issuer Default, and thus determine the maximum rating a covered bond programme can achieve with its current structure while allowing for the addition of a reasonable amount of over-collateralisation.

Having an independent cover pool administrator may reduce potential conflicts of interest between the Covered Bond investors and other creditors

Aspects specific to this programme that are TPI-positive include:

- The high level of support provided to *Pfandbriefe* in Germany
- German *Pfandbrief* legislation, including:
 - At the time of the declaration of bankruptcy of the Issuer, or earlier if *BaFin* considers it necessary, a cover pool administrator (*Sachwalter*) will take over management responsibility of the Covered Bond programme.
 - The *Sachwalter* will act independently from the insolvency administrator of the Issuer. Having an independent cover pool administrator may reduce potential conflicts of interest between the Covered Bond investors and other creditors.
 - The Issuer is also required to cover potential liquidity gaps over the next 180 days between payments expected to be received under the Cover Pool assets and the payments due under the outstanding Covered Bonds.
- Set-off: Moody’s understanding from legal and industry advisors with respect to Covered Bonds governed by the *Pfandbrief* Act is that set-off risk for loans registered in the Cover Pool, made under German law and located in Germany is excluded by the operation of the *Pfandbrief* Act.

Aspects specific to this programme that are TPI-negative include:

- All Covered Bonds outstanding have a bullet repayment at maturity, without any extension period for the repayment of the bonds.
- The programme does not benefit from any designated source of liquidity if cash flow collections are interrupted.
- Commingling risk: Upon the appointment of the *Sachwalter*, it is Moody’s understanding that the *Sachwalter* has a priority claim on all cash flows stemming from the Cover Pool assets. However, these cash flows have to be separated from other cash flows to the Issuer before they can be used to make payments to Covered Bondholders.

Based on the considerations discussed above, Moody’s has assigned a TPI of Probable High to this Covered Bond programme. This is in line with other Mortgage *Pfandbriefe* issued under the Act.

ORIGINATOR, SERVICER AND OPERATIONS REVIEW

Moody’s visited MünchenerHyp for an Operations Review meeting.

During this review, Moody’s analysed the origination practices and procedures, as well as the valuation procedures related to the underlying properties, as applied by MünchenerHyp. See Appendix 2 for a summary.

MONITORING

The Issuer is expected to deliver certain performance data to Moody’s on an ongoing basis. In the event that this data is not made available to us, our ability to monitor the ratings may be impaired. This could negatively impact the ratings or, in some cases, Moody’s ability to continue to rate the notes.

⁵ See Moody’s Rating Methodology: “Timely Payment in Covered Bonds following Sponsor Bank Default” published March 2008.

RELATED RESEARCH

For a more detailed explanation of Moody's approach to this type of transaction as well as similar transactions, please refer to the following reports:

Rating Methodology

- Moody's Rating Approach to European Covered Bonds, June 2005 (English version - SF57011) (German version – July 2005: SF58550)
- Timely Payment on Covered Bonds following Sponsor Bank Default, March 2008 (SF109992)
- Assessing Swaps as Hedges in the Covered Bond Market, September 2008 (SF142765)

Special Reports

- European Covered Bond Legal Frameworks: Moody's Legal Checklist, English version: December 2005 (SF66418) (German version – January 2006: SF67969)
- Rating Transition Rates for Covered Bond Programmes, 1996-2008, February 2008 (114622)
- A Framework For Stressing House Prices In RMBS Transactions in EMEA, July 2008 (SF131751)
- EMEA Structured Finance Asset Performance Outlooks, September 2008 (SF140664)
- EMEA Covered Bonds 2008 Review & 2009: Refinancing Risk Comes to the Fore, January 2009 (SF152665)

Announcements

- Moody's announces update of covered bond refinance stresses following credit crisis, 29 February 2008
- Moody's increases refinancing margins for European covered bonds, 8 April 2009
- Moody's: Covered bond issuer ratings important for accuracy and stability of covered bond ratings, 30 April 2009
- Moody's: Rating Action: Moody's concludes refinancing review; negative rating action on two Covered Bond programmes; 12 June 2009
- Moody's: Moody's updates on status of non-EEA assets in Austrian and German Covered Bond transactions, 29 June 2009

Credit Opinion

- Moody's Global Credit Research – Credit Opinion: Muenchener Hypothekenbank eG, 11 August 2008

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

APPENDIX 1: COVER POOL INFORMATION

Table 3:
German Residential Assets

Overview	
Asset type :	Residential
Asset balance :	7,169,270,233
Average loan balance :	72,105
Number of loans :	99,428
Number of borrowers :	n/d
Number of properties :	n/d
WA Remaining Term (in months) :	79
WA Seasoning (in months) :	84

Details on LTV	
WA Unindexed LTV (*) :	47.2%
WA Indexed LTV :	n/d
Valuation type :	Lending Value
LTV threshold :	60%
Junior ranks :	n/d
Prior ranks :	7.6%

(*) Based on original property valuation
 (**) Should include Borrowers with a previous personal bankruptcy or Borrowers with record of court claims against them at time of origination
 (***) n/d : information not disclosed by Issuer
 (****) This "other" type refers to loans directly to Housing Cooperatives and to Landlords of Multi-Family properties (not included in Buy to Let)

Specific Loan and Borrower characteristics	
Loans with an external guarantee in addition to a mortgage :	n/a
Interest Only Loans :	0.1%
Loans for second homes /Vacation :	n/d
Buy to Let loans /Non owner occupied properties :	26.5%
Limited income verified :	0.0%
Adverse Credit Characteristics(**) :	0.0%

Performance	
Loans in arrears (≥ 1.5months - < 3months) :	0.3%
Loans in arrears (≥ 3months - < 12months) :	0.6%
Loans in arrears (> 12months) :	n/d
Loans in a foreclosure procedure :	0.2%

Multi-Family Properties	
Loans to tenants of tenant-owned Housing Cooperatives :	n/a
Other type of Multi-Family loans (****) :	n/a

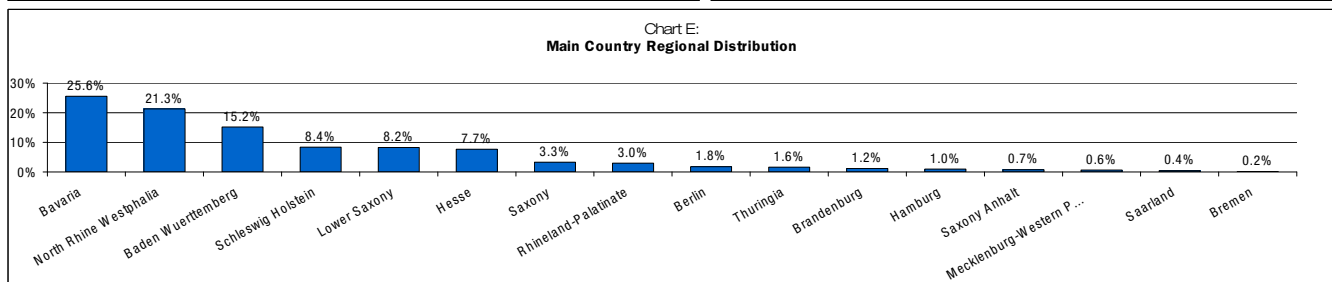
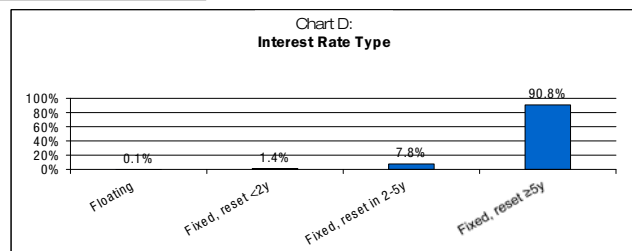
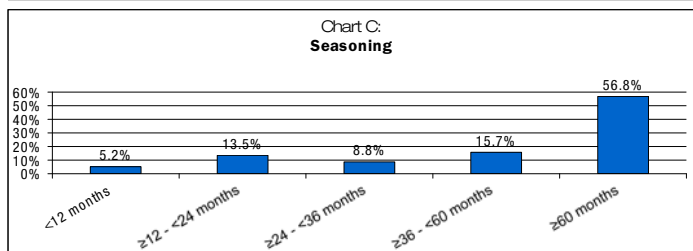
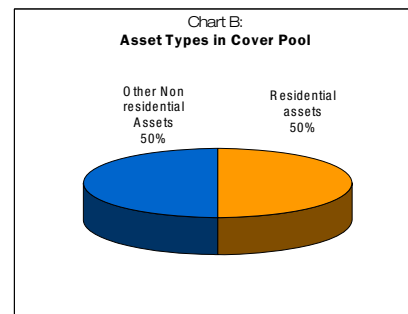
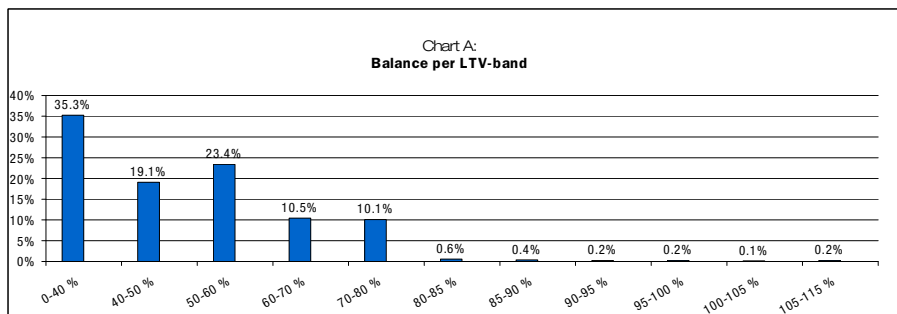


Table 4:

Commercial Assets

Overview

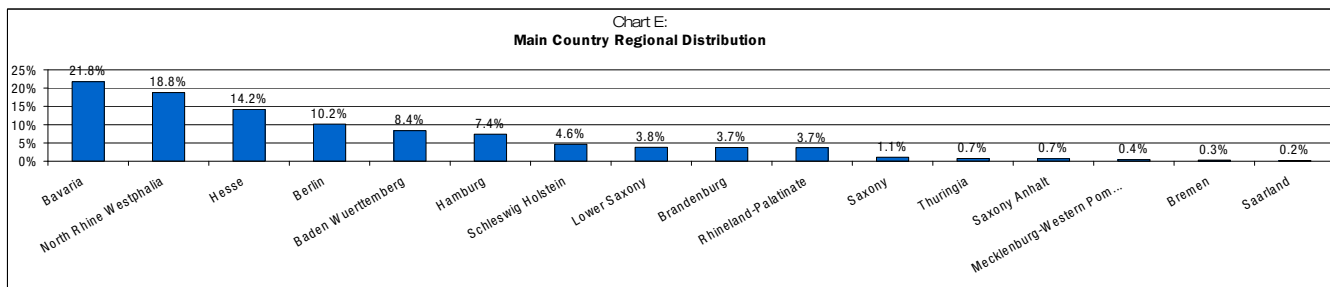
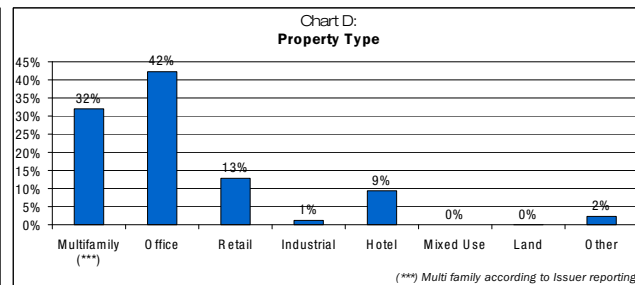
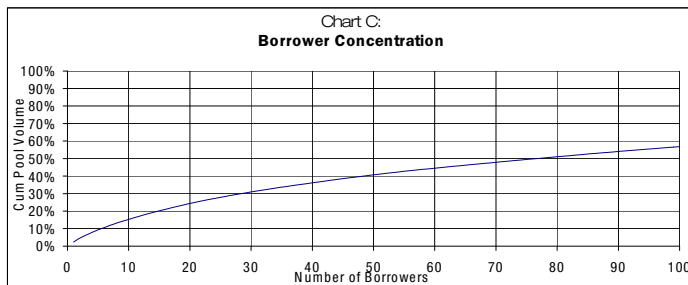
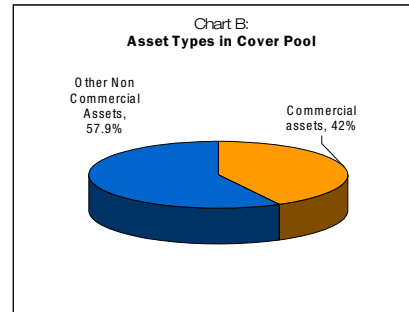
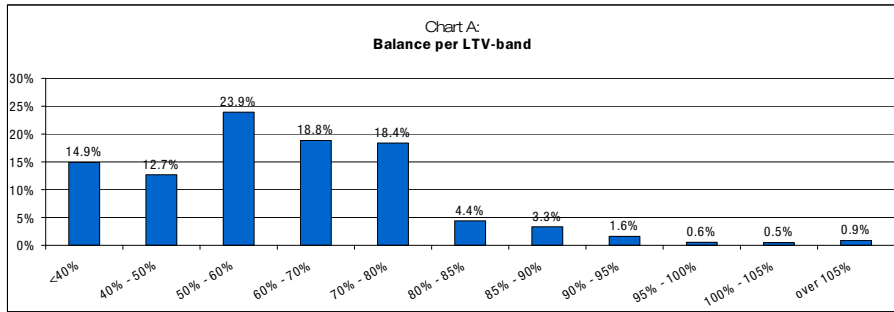
Asset Type	Commercial
Asset balance :	6,333,265,529
Average loan balance :	1,288,821
Number of loans :	4,914
Number of borrowers :	3,206
Number of properties :	n/d
Largest 10 loans :	14.6%
Largest 10 borrowers :	15.3%
WA Remaining Term (in months) :	59.4
WA Seasoning (in months) :	49.0
Main Countries :	Germany
	USA
	UK

(* Based on original property valuation

(**) n/d : information not disclosed by issuer

Specific Loan and Borrower characteristics

Bullet loans :	46.6%
Loans in non-domestic currency :	34.2%
Interest Rate Type :	49.2% fixed rate
Performance	
Loans in arrears < 1.5 months :	0.0%
Loans in arrears ≥ 1.5 months :	0.5%
Loans in a foreclosure procedure :	0.3%
Details on LTV	
WA current LTV (*) :	59.7%
WA Indexed LTV :	n/d
Valuation type :	Lending Value
LTV Threshold :	60.0%
Junior ranks :	n/d
Prior ranks :	16.0%



Qualitative Collateral Information

All pool characteristics are actual levels (rather than assumed levels) based on reports from the Issuer.

LTV numbers reported are based on the Lending Value according to the German regulations in the Pfandbrief Act and the Lending Value Regulation.

APPENDIX 2: INCOME UNDERWRITING AND VALUATION

1. Income Underwriting

1.1	Is income always checked?	Yes.
1.2	Does this check ever rely on income stated by borrower ("limited income verification")?	Seldom, only in special circumstances
1.3	Percentage of loans in Cover Pool that have limited income verification	Less than 0.5%.
1.4	If limited income verification loans are in the Cover Pool, describe what requirements lender has in place for these loans.	Not applicable
1.5	Does income in all cases constrain the amount lent (for example through some form of Income Sufficiency Test ("IST"))?	Yes
1.6	If not, what percentage of cases are exceptions?	No exceptions.
For the purposes of any IST		
1.7	Is it confirmed income after tax is sufficient to cover both interest and principal?	Yes
1.8	If so, over what period is it assumed principal will be paid (typically on an annuity basis)? Any exceptions?	Payment of interest and principal regularly on an annuity basis over 30 years. Exceptions are possible.
1.9	Does the age of the borrower constrain the period over which principal can be amortised?	Yes
1.10	Are any stresses made to interest rates when carrying out the IST? If so, when and for what type of products?	No, but we consider a minimum of interest and principal.
1.11	Are all other debts of the borrower taken into account at point loan made?	Yes
1.12	How are living expenses of the borrower calculated? And what is the stated maximum percentage of income (or income multiple if relevant) that will be relied on to cover debt payments? (specify whether income is pre or post tax)	Expenses are based on standard indices prepared by the bank. These are published the Issuer's internal standards. Issuer's calculation grid takes into consideration the number of persons living in the household, insurance payment and other allegiances.

Other comments

2. Valuation

2.1	Are valuations based on market or lending values?	Both
2.2	Are all or the majority of valuations carried out by external valuers (with no direct ownership link to any company in the Issuer group)?	They are carried out by certified valuers of Issuer's independent appraisal subsidiary. (Exception: For standard-residential loans < €400,000, the valuation is carried out by specially trained employees of the Issuer.)
2.3	How are valuations carried out where external valuer not used?	Issuer always use internal appraisals
2.4	What qualifications are external valuers required to have?	N/A (no external valuers are used)
2.5	What qualifications are internal valuers required to have?	Certified appraiser
2.6	Do all external valuations include an internal inspection of a property?	N/A (no external valuers are used)
2.7	What exceptions?	None
2.8	Do all internal valuations include an internal inspection of a property?	Yes
2.9	What exceptions?	None

Other comments

1) Pfandbrief Act

Banks require licence from German FSA to issue Pfandbriefe

Pfandbrief issuers are regulated by the German Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht* or *BaFin*), which grants licences for *Pfandbrief* issuers (*Pfandbriefbank*). The granting of the licence for Mortgage Covered Bonds business is contingent upon the *Pfandbriefbank* meeting certain requirements under the *Pfandbrief* Act. This includes requirements on procedures and risk management systems to manage, monitor and control the risks for the Cover Pool and the issuance of *Pfandbriefe*.

Pfandbriefe are backed by the Cover Pool

The Mortgage Covered Bonds (*Hypothekendarpfandbrief*) constitute in each case a direct, unconditional and senior obligation of the *Pfandbriefbank*; and are secured by a pool of assets ("the Cover Pool"). In general the Cover Pool may be composed of mortgage loans secured by residential or commercial properties, including building land and new buildings under construction, which however may not exceed 10% of the Cover Pool or twice the *Pfandbriefbank*'s liable own capital (whichever is lower). The *Pfandbrief* Act requires that buildings must be insured against risks relevant to the location and type of the particular property throughout the remaining term of the loan.

The buildings serving as security for the loans that are included in the Cover Pool are subject to a conservative evaluation of property values (Lending Value or *Beleihungswert*), and *Pfandbriefe* can only be issued against 60% of this Lending Value. For more information on the lending value, please see the following sub-section of this appendix.

Geographic restriction set limits for eligible cover pool assets outside Germany

In general, the *Pfandbrief* Act sets out geographic restrictions with respect to the location of the properties that secure a mortgage loan. Such properties may not be located outside the following countries: Member States of the European Union (EU) or in another Contracting State to the Agreement on the European Economic Area (EEA), Switzerland, the United States of America (USA), Canada and Japan.

In the event of the Issuer's insolvency, Moody's believes that cover pool assets located outside Germany are less protected against claims of other creditors of the Issuer than assets located in Germany. In particular, Moody's has identified and analysed the following scenarios:

- Loans to borrowers located outside Germany or loans not governed by German law: In the case of loans not governed by German law, the borrower may be allowed to exercise set-off, thereby reducing the amount payable by such borrower.
- Loans to borrowers located outside the EEA. In addition to the risk above, Moody's understands that these cover pool assets may not be available to the covered bondholders on a priority basis because other (unsecured) creditors of the Issuer may successfully access the assets in the cover pool. This may – e.g. due to secondary proceedings being commenced under the respective domestic law – result in a lower recovery. The *Pfandbrief* Act mitigates this risk by restricting the total volume of loans from countries where the preferential right of the *Pfandbrief* holder might not be ensured to 10% ("10% limit").

The Pfandbrief issuer is obligated to maintain a minimum over-collateralisation of at least 2% on a stressed NPV calculation basis

The *Pfandbrief* Act requires that the nominal amount of the Cover Pool assets match the nominal amount of the outstanding *Pfandbriefe* (PAR test). In addition, the *Pfandbriefbank* is obliged to maintain a minimum over-collateralisation of at least 2% on a stressed NPV calculation basis (NPV test). A regulation on the NPV test (*Pfandbrief-Barwertverordnung*)⁶ published by BaFin lays out three methods for stressing the interest rate and the currency exposure in the Cover Pool in order to meet regulatory requirements: (i) the static approach, (ii) the dynamic approach and (iii) a method based on the *Pfandbrief* issuer's internal risk model, which has to be approved by BaFin.

⁶ Regulation on the Determination of the Mortgage Lending Value – in German: Verordnung über die Sicherstellung der jederzeitigen Deckung von Hypothekendarpfandbriefen, Öffentlichen Pfandbriefen und Schiffspfandbriefen nach dem Barwert und dessen Berechnung bei Pfandbriefbanken (*Pfandbrief-Barwertverordnung*) as of July 2005.

Covered Bondholders may benefit from voluntary and prescribed over-collateralisation in the Cover Pool following the commencement of *Pfandbrief* issuer insolvency proceedings. Claims of hedge counterparties rank equally with Covered Bond investors.

In 2009, the amendment of the *Pfandbrief* Act introduced a requirement for the Issuer to mitigate liquidity gaps between the Cover Pool assets and outstanding Covered Bonds. On an ongoing basis, the *Pfandbrief* Act requires that for the following 180 days (rolling time window) the maximum cumulative liquidity gap needs to be covered with certain liquid assets. The liquidity gaps are calculated on the currently expected cash flows on the Cover Pool assets versus the due payments on currently outstanding Covered Bonds over the next 180 days. The *Pfandbrief* Act defines the type of instruments that are allowed to be used to cover such a liquidity position, for example cash deposits with suitable commercial banks or government bonds. These assets must be part of the Cover Pool.

Regular audits of the Cover Pool conducted by the German regulator

BaFin has established a reporting mechanism, whereby the *Pfandbriefbank* has to report key figures regarding its *Pfandbrief* programme on a regular basis. Furthermore, BaFin will conduct audits of the Cover Pool (*Deckungsstockprüfung*) on a regular basis (at least once every two years). In addition, many of the operations in respect of the Cover Pool are monitored by an independent cover pool monitor (*Treuhänder*) on an ongoing, day-to-day, basis. For example, Moody's understanding from legal and industry advisors is that no assets may be de-registered from the Cover Pool without the prior written consent of the *Treuhänder* while, prior to the issuance of a new *Pfandbrief*, the *Treuhänder* has to check that the regulatory requirements – such as the mandatory minimum over-collateralisation – will still be met following the issuance of the new Covered Bond.

The Sachwalter will take over management responsibility of the programme, and this may occur at or before the declaration of bankruptcy of the Pfandbriefbank

At the time of the declaration of bankruptcy of the *Pfandbriefbank*, or earlier if BaFin sees the need, a cover pool administrator (*Sachwalter*) will take over management responsibility of the Covered Bond programme. The *Sachwalter* will undertake to satisfy the Covered Bond holders by managing the Cover Pool and acts independently from the insolvency administrator of the *Pfandbriefbank*. Its duty of care is to the *Pfandbrief* investors and pari passu creditors such as the swap counterparties, should the swaps be registered into the Cover Pool. Having an independent cover pool administrator may reduce potential conflicts of interest between the Covered Bond investors and other creditors.

Having an independent cover pool administrator may reduce potential conflicts of interest between the Covered Bond investors and other creditors

In the event of insolvency of the *Pfandbriefbank*, the following scenarios may occur:

1. The *Sachwalter* manages to satisfy all claims of Covered Bondholders. Following its appointment, the *Sachwalter* will be responsible for managing the Cover Pool until all outstanding Covered Bonds have been repaid or transferred to another suitable *Pfandbriefbank*. In order to make timely payments, the *Sachwalter* has the right to attempt to raise funds against the Cover Pool through the sale of assets in the Cover Pool (either in part or in whole) or through bridge financing. In addition, the *Sachwalter* has the right to attempt to sell all or part of the Cover Pool as a package together with outstanding Covered Bonds, but only to another suitable *Pfandbrief* issuer.
2. The Cover Pool assets are not sufficient to satisfy all claims of Covered Bondholders. In this case, BaFin may apply for a separate insolvency proceeding for the Cover Pool. Following the initiation of an insolvency proceeding of the Cover Pool, all Covered Bonds will become due and payable and an insolvency administrator for the Cover Pool will be appointed. The insolvency administrator will distribute the proceeds stemming from the disposal of the Cover Pool assets among the Covered Bondholders and other preferred creditors on a pari passu basis. If the proceeds are not sufficient to meet all the claims of the Covered Bondholders, then the Covered Bondholders should have a senior unsecured claim against the general insolvency estate of the *Pfandbriefbank*.

In summary, the *Sachwalter* is expected to (i) run the programme until the maturity of the last Covered Bond or (ii) transfer the programme to another suitable *Pfandbriefbank*. The programme is only expected to be accelerated in the event of an insolvency of the Cover Pool. Upon acceleration, the *Pfandbrief* investors will rank on a pari passu basis.

Commingling risk: payments and receivables on the Cover Pool assets are not separated prior to the appointment of the Sachwalter

Set-off risk is mitigated by the operation of the Pfandbrief Act

Prior to the declaration of bankruptcy of the *Pfandbriefbank*, payments made from the Cover Pool assets are collected on a cash account, but not necessarily all cash flows on Cover Pool assets are separated from all other cash collections made by the *Pfandbriefbank*. Upon the appointment of the *Sachwalter*, the latter would have to separate these cash flows before payment is made to Covered Bondholders.

Moody's understanding from legal and industry advisors with respect to Covered Bonds governed by the *Pfandbrief Act* is that set-off risk for loans registered in the Cover Pool, made under German law and located in Germany is excluded by the operation of the *Pfandbrief Act*.

2) Lending Value Regulation

Lending Value concept

With respect to the valuation of a property serving as security for the mortgage loan (Cover Pool asset), Moody's understands that the *Pfandbrief Act* requires the following:

- The valuation has to be conducted by an appraiser, acting independently from the credit decision. This may be an internal or external appraiser, who must have adequate expertise and experience.
- As a rule, the property to be valued must be inspected as part of the valuation procedure. Moody's understands that exceptions to this rule are permitted if the loan amount is lower than €400,000.
- The Lending Value⁷ is primarily based on the long-term and sustainable aspects of the property under normal circumstances in the property market in the region where the specific property is situated. In any case, the Lending Value must not exceed the Market Value of the property.

While the Lending Value is defined by the *Pfandbrief Act* in general, BaFin published the "Regulation on the Determination of the Mortgage Lending Value (*Beleihungswertermittlungsverordnung* or *BelWertV*)⁸, which gives details of regulatory requirements of how the Lending Value has to be calculated for certain property types.

Methods to determine the lending value

Moody's understands that there are three methods to determine the Lending Value.

- i) Income Method ("*Ertragswertverfahren*"): The net income of the property, which is expected to be generated in the long run and on a sustainable basis (based on current market conditions in the region where the property is situated), is discounted. The *BelWertV* details a number of property-specific factors for the calculation of – for example – minimum and maximum discount factors, limits for assumptions regarding the economically useful life of the property as well as minimum amounts regarding administration and maintenance costs when the net income stemming from the property is determined.
- ii) Cost Method ("*Sachwertverfahren*"): The Lending Value of the building reflects long-run and sustainable aspects of a building including (but not limited to) the construction costs of the property and mandatory haircuts. The construction costs must be appropriate for the region and the property type. Depreciation of the value of the building ("*Wertminderung wegen Alter*") needs to be taken into consideration, as well as the current and possible alternative uses ("*Drittverwendungsfähigkeit*") of the property under normal conditions of the specific regional market.
- iii) Comparison Method ("*Vergleichswertverfahren*"): This method is applicable *inter alia* to apartments and houses, and only in addition to the above-mentioned approaches in order to double-check the results. It is based on market data (i.e. observed transactions) for similar properties with respect, for example, to location, fixtures and fittings, property type (ideally in the same region). In addition, a safety margin of at least 10% must be deducted.

Moody's understands that, as a general rule, the Income Method usually drives the Lending Value of a property. In case the value based on the Income Method exceeds 20% of the Cost Approach or Comparison Approach, the sustainability of the income generated by the property has to be double-checked.

⁷ The value resulting from a prudent assessment of the future marketability of the property.

⁸ In German: Verordnung über die Ermittlung der Beleihungswerte von Grundstücken nach §16 Abs. 1 und 2 des Pfandbriefgesetzes (*Beleihungswertermittlungsverordnung, BelWertV*) as of May 2006.

SF174529

CREDIT RATINGS ARE MIS'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MIS DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. CREDIT RATINGS DO NOT CONSTITUTE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS ARE NOT RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. CREDIT RATINGS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MIS ISSUES ITS CREDIT RATINGS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

© Copyright 2009, Moody's Investors Service, Inc. and/or its licensors and affiliates (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 and financial reporting analysis observations, 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.

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 approximately \$2,400,000. Moody's Corporation (MCO) and its wholly-owned credit rating agency subsidiary, Moody's Investors Service (MIS), also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually on Moody's website at www.moody's.com under the heading "Shareholder Relations – Corporate Governance – Director and Shareholder Affiliation Policy."