

Moody's Key Aspects of Pfandbrief Analysis

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Im Zuge der Finanzmarktkrise schaut auch Moody's beim Rating von Covered Bonds kritischer auf die Liquidität des Deckungsstocks. Dass die Ratingagentur ihre Anforderungen entsprechend verschärfte, traf bei Pfandbriefemittenten nicht nur auf Verständnis, denn auch für Hypothekendarlehen wurden deutlich höhere Überdeckungen verlangt, um auch künftig das bestmögliche Rating zu erhalten. Umso mehr loben die Autoren, dass das 2009 novellierte Pfandbriefgesetz vorschreibt, 180 Tage vor Fälligkeit der Pfandbriefe genügend Liquidität zur Bedienung der Gläubigerforderungen bereitzuhalten. (Red.)

Moody's rating for a covered bond, which applies for German Pfandbriefe, is determined by applying a two-step process:

- **Moody's EL Model:** This determines a rating based on a largely quantitative calculation of expected loss taking into account both the issuer's credit strength and the value of the cover pool following "Issuer Default" (ie: removal of support from the issuer group); and

- **Timely Payment Indicator (TPI):** This may cap the rating arrived at using the EL Model by applying the framework of rating caps based on the issuer's rating and the TPI assigned to the programme. The TPI assigned will reflect the probability of timely payments continuing on the covered bonds following Issuer Default.

Moody's EL Model – overview

The covered bond rating is primarily determined by its expected loss under Moody's EL Model. This calculates the probability of Issuer Default and the subsequent losses (if any) to the covered bonds. Following Issuer Default, the value of the cover pool, and therefore any losses, will be determined assuming a stressed environment. The key factors affecting the value of the cover pool include:

- The credit quality of the collateral in the cover pool;
- Refinancing risk in the event that funds need to be raised to finance the cover pool following Issuer Default; and

- Any interest rate and currency risks that the cover pool is exposed to.

For a covered bond, Moody's EL Model calculates the probability of Issuer Default (based on the issuer's senior unsecured rating), and the subsequent loss (if any) on the cover pool, on a month-by-month basis from issue to final maturity. The results are then summed and discounted back to present value to give the overall expected loss on the covered bond.

Role of the issuer

During the life of the covered bond, the EL Model calculates the probability of Issuer Default based on the senior unsecured rating of the issuer. If the issuer is performing, there should be no loss to covered bond holders. Moody's EL Model also takes into account various issuer and issuer group-related benefits in addition to the senior unsecured rating of the issuer. For instance, the issuer will normally actively manage the cover pool to the benefit of the covered bond holders. This may include replacing defaulted assets with performing assets or replacing high LTV loans with lower LTV loans, particularly where required by law. For this reason, Moody's sees the

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role of the issuer as more important than that of a simple guarantor.

Value of the cover pool

(I) **Credit Quality of the cover pool:** The credit quality of the cover pool is determined by calculating the amount of losses on cover pool assets that Moody's assumes will accrue after Issuer Default as a result of asset defaults or impairments. It is measured by the "Collateral Score" (which approximates to Aaa enhancement – so the lower the Collateral Score the better quality the pool). Factors that determine the Collateral Score vary, but for mortgage loans they will normally include the presence and quality of affordability underwriting, the range and distribution of LTV ratios, and the quality of property valuations. The factors most relevant for public sector loans include the credit strength of the public sector borrowers and concentration levels. Of course, the quality of the cover pool may vary over time as issuers typically have the discretion to add and remove assets, but Moody's recalculates the Collateral Score for most programmes on a quarterly basis to monitor this.

(II) **Refinancing the Cover Pool:** Following Issuer Default, the timely payment of principal under the covered bonds may rely on funds being raised against the cover pool. This is because the expected maturity of the assets in the cover pool is generally longer than that of the covered bonds and therefore Moody's EL Model assumes that funds must be raised against the cover pool, most likely at a discount to the notional value of the cover pool.

The refinancing environment for the assets at this time is likely to be stressed and this is taken into account in the level of discount built into the overall enhancement modelled for a given rating level. This enhancement is based on three factors:

- (a) The level of discount (referred to as refinancing margin);
- (b) The portion of the cover pool exposed to refinancing risk; and
- (c) The average life of the refinancing risk.

Typically Moody's assumes the life of the refinancing risk, which equates to the average remaining life of the cover pool

at the time of Issuer Default, as being a minimum of five years. The portion of the cover pool exposed to refinancing risk is normally considered to be a minimum of 50 percent. The refinancing margins are set by reference to each jurisdiction and then adjusted for individual programmes; they are, on average, around 3.4 percent for mortgage-backed programmes and 1.8 percent for public sector-backed programmes (at the time of writing).

In Moody's view, refinancing risk in Pfandbrief programmes is lower compared to other jurisdictions because of the sector support. However, it can significantly vary between programmes depending on, for example, in the case of mortgage covered bonds (Hypothekenpfandbrief), the share of commercial mortgages in the cover pool. In Moody's modelling, this leads to higher refinancing margins compared to a cover pool comprising mainly residential mortgages. In the context of refinancing risk, the planned revision of the Pfandbrief Act (expected later in 2010) aims to improve the position of the Sachwalter.

Interest rate and currency risks in the cover pool

Following an Issuer Default, investors in covered bonds may be exposed to interest rate and currency mismatches due to different durations and payment promises made on the cover pool assets and the covered bonds. Under the EL Model these mismatches are sized by taking into account:

- (a) The size of the interest rate (or currency) movement over the relevant period, for example looking at the impact of increasing and decreasing interest rates and taking the path that leads to the harshest expected loss on the bonds;
- (b) The portion of the assets with interest rate (or currency) mismatches; and
- (c) In the case of interest rate risk, the average life of the mismatch based on the assets in the cover pool (typically assumed to be a minimum of five years at point of Issuer Default).

Moody's EL Model takes into account whether there is hedging in place at the point of Issuer Default and the probability of the hedging terminating at this time or subsequently. Generally, the lower the probability of a hedge termi-

nating, the lower the risk of an interest rate or currency mismatch arising. However, Moody's has never assumed that swaps used to hedge interest rate and currency risk completely remove these risks from a covered bond.

Moody's Timely Payment Indicators (TPIs)

A Timely Payment Indicator or TPI is Moody's assessment of the likelihood that timely payment would continue to be made to covered bondholders following Issuer Default. TPIs range from "Very High" to "Very Improbable". Following Issuer Default, the Issuer can no longer be relied on to make timely payments on the bonds and bondholders must therefore rely on external support, liquidity and the legal/contractual framework of the bonds to provide for timely payment. These are the factors Moody's considers when assigning TPIs.

TPIs operate to cap the rating of a covered bond to a certain number of notches above the issuer's rating. Moody's publishes a TPI Table setting out maximum covered bond ratings for different issuer rating/TPI combinations (see Moody's rating methodology report, referenced below). As previously indicated, the rating cap under the TPI Table will always prevail if it is lower than the rating which is possible under Moody's EL Model.

When assessing TPIs, Moody's considers that following Issuer Default, the single most important risk to timely payment for most covered bonds is refinancing risk (described above). This risk is highly volatile, which is why covered bonds that are subject to material refinancing risk cannot support Moody's highest ratings unless they are also backed by a highly-rated issuer.

Other relevant factors when Moody's assesses TPI levels include continuity of servicing and cash management, risk of termination of swaps, risk of acceleration of the covered bonds, enhancement levels, the issuer's ability to change the programme (in particular to add new assets and enter into new hedging arrangements) and sovereign risk.

Moody's largely determines TPI on a jurisdiction-by-jurisdiction basis as many of the above factors are common across jurisdictions. A good example of this is where covered bonds are systemically important in a jurisdiction and would be

likely to receive support from the government or local market participants in the aftermath of an Issuer Default – this can be an important mitigant to refinancing risk. In Moody's view, the latter is benefitting German Pfandbrief programmes. Within a jurisdiction, TPIs may then be adjusted at the programme level to reflect particular features of a programme.

TPI-Positive features of the Pfandbrief legislation are, inter alia, the rules to maintain liquidity for the next 180 days and the implementation of the Sachwalter, who is independent from the insolvency administrator of the bank. German Hypothekendarlehen generally have a TPI of Probable-High and High in the case of Öffentliche Pfandbriefe. ■

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