

MOODY'S

INVESTORS SERVICE

RATING METHODOLOGY

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Repackaged Securities Methodology

This rating methodology replaces *Moody's Approach to Rating Repackaged Securities* published in June 2020. The methodology's title and table of contents have been revised, and we made editorial updates to enhance transparency and readability. The updates do not change our methodological approach.

Scope

In this methodology, we explain our global approach to assessing credit risks for single-tranche repackaging transactions (repacks) in which the repayment of the rated securities depends primarily on the performance of one or more rated assets and/or entities.

We discuss the framework for analyzing credit risks at the asset and liability level in a repack transaction, considering both the quantitative and qualitative factors that are likely to affect rating outcomes in this sector. We also describe our monitoring approach.

This methodology does not address tranching and resecuritizations. We rate these securities either based on our methodology addressing resecuritizations of asset-backed securities (ABS), residential mortgage-backed securities (RMBS), and commercial mortgage-backed securities (CMBS) or the relevant collateralized debt obligation (CDO) or collateralized loan obligation (CLO) methodology.¹

¹ For more information, a link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

Rating approach

The term “repack” applies to a wide range of structured instruments. Repacks may also be termed “structured notes,” particularly in the US. In its simplest form, a repack involves issuing securities by a special purpose entity (SPE) to purchase, or provide credit protection for a bond, note, loan or another financial asset (the underlying asset). In some repacks, the issuer may enter into a hedge contract with a financial institution (the counterparty) to hedge mismatches between the scheduled cash flows from its assets and the amounts it owes to investors.

We focus our quantitative analysis on the risks relating to the credit quality of the assets backing the repack and of the counterparties. We generally determine the expected loss posed to investors by adding the expected loss from underlying asset defaults with, if applicable, the expected loss from a swap counterparty default. We then translate the expected loss to a rating using Moody's Idealized Cumulative Expected Loss Rates table.² This exercise is straightforward if the repack has no swaps and a single underlying asset, as the repack's rating generally mirrors the underlying asset's rating, subject to considerations of other sources of risk, as further described in the “Structural analysis and modeling” section and “Other considerations” section.

The ratings we assign will generally reflect our quantitative analysis described in this report and include qualitative factors and other factors determined to be relevant by a rating committee.

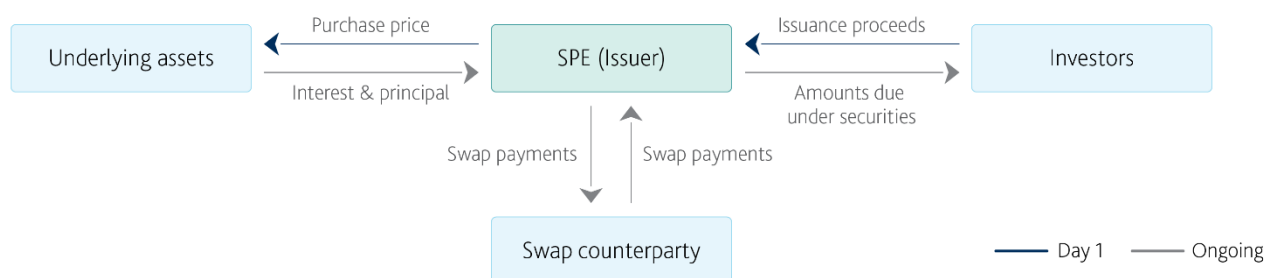
Transaction structures

In repacks where the issuer enters into a hedge contract, the hedge contract is generally a swap exchanging, for example, fixed for floating interest or flows in one currency for those in another.

Exhibit 1 shows a typical repack structure involving the purchase of underlying assets (a cash structure) combined with a hedge contract. For simple transactions with no swaps, the references to a swap counterparty should be omitted.

EXHIBIT 1

Typical cash structure

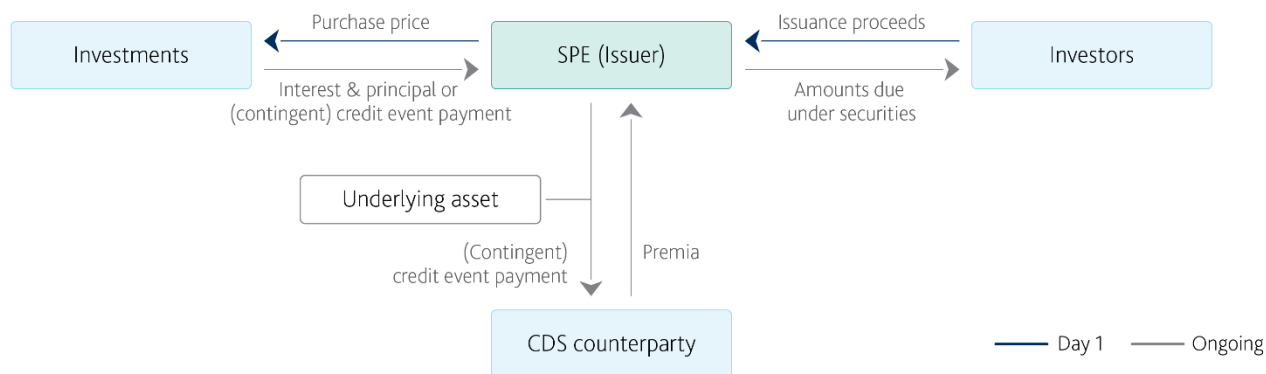


Source: Moody's Investors Service

In transactions where the issuer provides credit protection, it typically uses the proceeds of issuance to acquire investments, such as highly rated government bonds with the same maturity as the repackaged securities. The investments collateralize the issuer's obligations as protection seller under a credit default swap (CDS) referencing the underlying asset. Exhibit 2 shows the typical structure of a transaction involving a CDS (a synthetic structure).

² For more information, see the discussion of Idealized Probabilities of Default and Expected Losses in *Rating Symbols and Definitions* (a link can be found in the “Moody's related publications” section) and in the “Loss benchmarks” section.

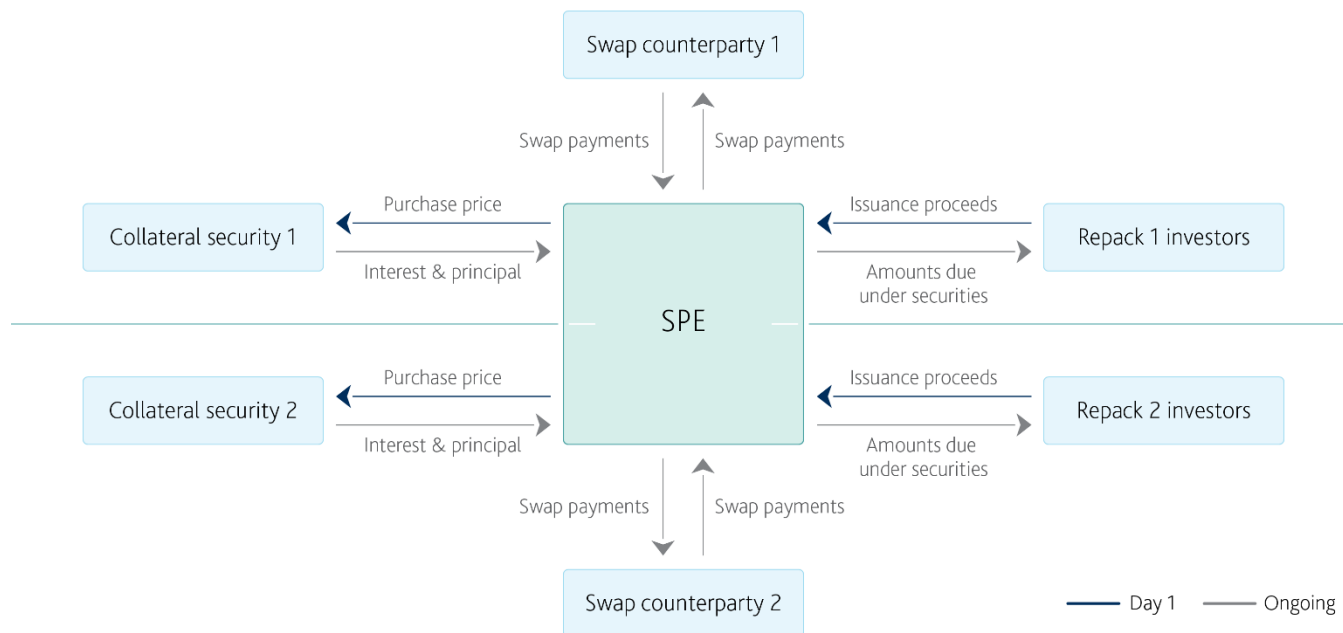
EXHIBIT 2

Typical synthetic structure

Source: Moody's Investors Service

An issuer may issue repackaged securities in connection with either a standalone transaction or multiple transactions under a program. Exhibit 3 shows the typical structure of a simple program with two repack transactions.

EXHIBIT 3

Typical program structure

Source: Moody's Investors Service

Asset-level analysis and related modeling

Cash structure without a swap

In our analysis of cash structures without swaps due to no potential currency or interest rate mismatches, we typically determine the expected loss on an underlying asset by reference to its rating. In instances where an underlying asset benefits, for example, from a guarantee, we determine, when relevant, the expected loss on an underlying asset by reference to the guarantor's rating.³

When a repack securitization is backed by multiple underlying assets, we determine the expected loss on the underlying assets by deriving their weighted average expected loss (Wael). We use the results of the Wael in conjunction with the approach described in the "Loss benchmarks" section below.⁴

Cash structure with a swap

We generally focus our quantitative analysis for cash structures with swaps on two key sources of risk: (1) underlying asset default risk, and (2) swap counterparty risk. With both risks, loss severity is typically determined by losses on the liquidation of an underlying asset and the potential payment or receipt of swap termination payments.

In general, if an underlying asset defaults, the defaulted asset will be sold, the transaction will be unwound in accordance with the transaction documents and a swap termination event will occur. Depending on the swap's market value at the relevant time, we anticipate that the swap counterparty will either elect to stop its scheduled payments to the issuer or claim a termination payment against the issuer, which will generally rank senior to investors. We discuss termination payments in more detail below.

If the swap counterparty defaults, the issuer may become unhedged, in which case we also assume the transaction will be unwound. We consider any termination payment the issuer will receive from the defaulted counterparty.

Appendix A provides further details on our analysis for hedged repacks and Appendix B provides a quantitative example of such analysis.

Synthetic structure

In a synthetic structure, losses to investors may result from a default of (1) an underlying asset, (2) any investments held by the issuer, or (3) the CDS counterparty.

We generally assume that if the CDS counterparty or an investment defaults, the CDS will terminate, and the issuer may be required to make a substantial termination payment. Therefore, unless such payment ranks below amounts due to investors, and this subordination is highly likely to be enforceable in the relevant jurisdiction, we may cap the rating of the securities in the manner described in our approach to rating corporate synthetic CDOs (CSOs).⁵

In determining the severity of losses for a synthetic structure, we generally apply the same principles as in our approach to rating CSOs.

Additional considerations

We may use a model called CDOROM™ to evaluate, using Monte Carlo simulation, losses on underlying assets when we rate certain repack transactions. Each Monte Carlo scenario simulates defaults and recovery rates for each underlying asset to derive losses.

³ For more information, see our methodology on guarantees, letters of credit and other forms of credit substitution. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

⁴ For more information, see the discussion of Idealized Probabilities of Default and Expected Losses in Rating Symbols and Definitions (a link can be found in the "Moody's related publications" section) and in the "Loss benchmarks" section.

⁵ For more information, see our methodology for rating CSOs. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

Structural analysis and modeling

The key elements of our structural analysis are set out below. We do not consider all elements for each repack, as, for example, most repacks do not contain swaps and are not synthetics.

Matching payments

Any mismatch – either in terms of timing or amount – between the payments an issuer is expected to receive (assuming its assets and counterparties do not default) and those it is required to make may lead to a default on repackaged securities. We therefore assess (1) how payment dates are aligned, taking account of potential asset prepayments, clearing times and grace periods; (2) the liquidity of any investments the issuer will need to sell on or before scheduled payment dates; and (3) whether the issuer has any unhedged exposures to movements in market rates.

Expenses

In repack transactions, all cash flows the issuers receive from underlying assets are normally applied to make pass-through payments to swap counterparties and investors. Therefore, an issuer's ordinary operating expenses (e.g., service provider fees), and any extraordinary expenses (e.g., costs of litigation) must typically be met from another source, such as an undertaking to pay all expenses by a suitably rated third party or a dedicated fund established at closing. We consider whether an issuer will have sufficient funds to pay its expenses and the potential consequences for rated securities if it does not. A lack of funds to pay expenses will not necessarily have negative consequences; for example, if a service provider agrees to suitable limited recourse, it may be obliged to perform even if it is not paid. When repack expenses are paid from a dedicated fund that is funded at closing, we consider transaction expense coverage over the entire life of the repack transaction. The longer the maturity, the higher the potential uncertainty on the level of future expenses e.g., due to inflation.

Definition of credit event

We review the definition of "credit event" to determine how it compares to our definition of default. For example, a repack might define a credit event as a restructuring that we do not consider a default under our rating definition. We may apply stresses in our analysis to account for such definition differences.⁶

Swap termination risk

The termination of an interest rate or currency swap contract or of a CDS can have negative consequences for an issuer, such as the loss of hedging (or premium payments) or a senior-ranking termination payment owed to the counterparty ahead of payment due to investors. We therefore review the events of default and termination events in each swap agreement and assess the probability of their occurrence. If it is difficult to predict the likelihood of such an event materializing, e.g., if a senior-ranking termination payment is owed when there is a prepayment of the underlying asset, we may be unable to reliably assess the expected loss on the repack securitization and therefore unable to assign a rating. For example, if the relevant provisions of the ISDA Master Agreement are applied and modified in line with our swap framework,⁷ we generally assume that the risk of termination (excluding termination resulting from a failure to pay or counterparty default) is negligible.

Loss benchmarks

In rating repackaged securities in which we derive an expected loss, we select loss benchmarks referencing the Idealized Expected Loss table⁸ using the Symmetric Range, in which the lower-bound of loss consistent with a rating category is the midpoint (strictly, the geometric mean) between the Idealized Expected Loss of the rating category and the Idealized Expected Loss of the next higher rating category. The upper-bound of loss is analogously determined as the geometric mean between the Idealized Expected Loss of the rating category and the

⁶ For more information, see our methodology for rating corporate synthetic CDOs. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

⁷ For more information, see our cross-sector methodology for assessing counterparty risks in structured finance. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

⁸ For more information, see the discussion of Idealized Probabilities of Default and Expected Losses in *Rating Symbols and Definitions*. A link can be found in the "Moody's related publications" section.

Idealized Expected Loss of the next lower rating category. Mathematically, the benchmark boundary is computed as an equal 50/50 weighting on a logarithmic scale. That is, the benchmark boundaries of loss appropriate for evaluating rating category R are given by:

EXHIBIT 4

$$[1] \text{ Rating Lower Bound}_R = \exp\{0.5 \cdot \log(\text{Idealized Expected Loss}_{R-1}) + 0.5 \cdot \log(\text{Idealized Expected Loss}_R)\}$$

$$[2] \text{ Rating Upper Bound}_R = \exp\{0.5 \cdot \log(\text{Idealized Expected Loss}_R) + 0.5 \cdot \log(\text{Idealized Expected Loss}_{R+1})\}$$

Where:

- » *Rating Lower Bound_R* means the lowest Idealized Expected Loss associated with rating R and the expected loss range of rating R is inclusive of the *Rating Lower Bound_R*;
- » *Rating Upper Bound_R* means the highest Idealized Expected Loss associated with rating R and the expected loss range of rating R is exclusive of the *Rating Upper Bound_R*;
- » $R-1$ means the rating just above R ;
- » $R+1$ means the rating just below R .
- » The Rating Lower Bound for Aaa is 0% and the Rating Upper Bound for C is 100%. These are not derived using the formula.

Source: Moody's Investors Service

Other considerations

Other counterparty risks

In addition to swap and the CDS counterparty risks, we consider other various counterparty-related risks at different stages throughout our credit analysis. More specifically, the risks we consider include account bank, investment and operational risks.⁹ Based on our review, we may adjust our assumptions, inputs or model results. If information is limited, we may also adjust the rating level.

True sale

If an issuer purchases an underlying asset, it may be exposed to the risk of clawback or re-characterization. In certain cases, depending on the jurisdiction and transaction features, we may review true sale opinions to assess this risk.

Ring-fencing

When an issuer is established to issue multiple series under a program (see Exhibit 3), we assess whether the assets relating to each rated transaction are ring-fenced such that they are unavailable to contracting parties and investors under other transactions.

In some jurisdictions, transactions may achieve ring-fencing by operation of statute. For example, under the Luxembourg Securitization Law, each issuance under a program can be treated as a distinct compartment, with creditors having recourse only to the assets lodged in the compartment that generated their claim.

Alternatively, transactions may achieve ring-fencing by way of security. For example, under English law, assets subject to a fixed charge are available to secured creditors ahead of all other creditors.¹⁰

In the absence of ring-fencing, we consider – based on the program documentation and any other relevant factors – whether the aggregate amount of claims generated by any single transaction may exceed the proceeds of that transaction's assets. Program documentation may,

⁹ For more information, see our methodology for assessing counterparty risks in structured finance transactions. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

¹⁰ Even if a security arrangement achieves ring-fencing, it may not fully protect against the risk of involuntary insolvency proceedings, which can have negative effects such as a moratorium on enforcement or swap termination. We assess this risk in accordance with our cross-sector methodology for assessing bankruptcy remoteness in structured finance. For more information, a link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

for example, restrict an issuer from entering into contracts without suitable limited recourse provisions. We also assess whether the issuer's tax liabilities may negatively affect the rated transactions.

Alignment of interests

In many repack transactions, a certain "controlling" creditor is authorized to direct the trustee in taking key actions, such as declaring events of default and enforcing security over underlying assets. We generally assume that such directions will be given in the interests of investors. However, if the controlling creditor's interests are misaligned with those of investors (for example, when it is the counterparty and its authority to direct is not suitably restricted), we may account for the risk of alternative trustee directions.

Withholding taxes

We consider whether amounts payable to the issuer from the underlying assets may be paid net of withholding tax and, where relevant, assess how this may affect the issuer's ability to make payments on the rated securities.

Environmental, social and governance considerations

Environmental, social and governance (ESG) considerations may affect the ratings of securities backed by a portfolio of repackaging securities. For information about our approach to assessing ESG issues, please see our methodology that describes our general principles for assessing these risks.¹¹

Monitoring

Our approach to monitoring the ratings of outstanding repack transactions is generally similar to the approach we use to assign initial ratings, except for those elements of the methodology that become less relevant over time or are not expected to change. Certain components, such as reviews of legal structures of existing transactions or true sale opinions, are static and will generally not be re-reviewed unless circumstances warrant.

Our approach to monitoring the ratings of outstanding repack transactions tracks the ratings of underlying assets and, if applicable, counterparties such as swap providers. A change in a rating of an underlying asset or swap counterparty will trigger a review of a repack. For repacks with a swap, a review may also be conducted due to a change of the expected loss severity arising if a swap or underlying asset defaults.¹²

¹¹ A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

¹² For example, in methodologies where models are used, modeling is not relevant when it is determined that (1) a transaction is still revolving and performance has not changed from expectations, or (2) all tranches are at the highest achievable ratings and performance is at or better than expected performance, or (3) key model inputs are viewed as not having materially changed to the extent it would change outputs since the previous time a model was run, or (4) no new relevant information is available such that a model cannot be run in order to inform the rating, or (5) our analysis is limited to asset coverage ratios for transactions with undercollateralized tranches, or (6) a transaction has few remaining performing assets.

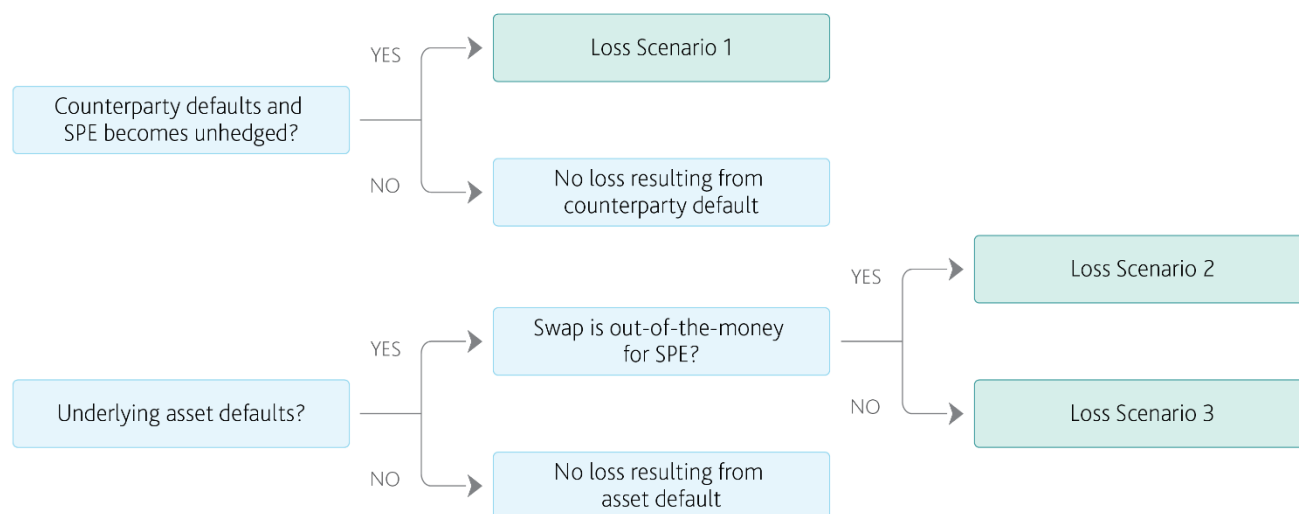
Appendix A: Quantitative analysis in hedged repacks

This appendix presents a framework for analyzing risks for cash structure repacks with swaps. The appendix describes the case of a single underlying asset but the principles also apply to transactions with multiple underlying assets. We may apply this framework when assessing the quantitative risk of repacks with swaps.

To assess underlying asset default and swap counterparty risks, we generally consider three loss scenarios, as shown in Exhibit 5.

EXHIBIT 5

Loss scenarios for typical cash structure with swaps



Source: Moody's Investors Service

We generally assume that in each loss scenario, the repackaged securities will become subject to early redemption and the issuer will liquidate the underlying asset midway through the weighted average life (WAL) of the underlying asset.

Loss Scenario 1

Loss Scenario 1 occurs if the swap counterparty defaults and, as a result, the issuer becomes unhedged. If the issuer is "out of the money" (OTM) under a defaulting swap, we assume it will remain hedged by entering into a replacement swap at no cost. Therefore, in this scenario in which the issuer becomes unhedged, the swap is necessarily "in the money" (ITM) for the issuer.

We determine the probability of Loss Scenario 1 in accordance with the relevant section of our methodology for assessing counterparty risks in structured finance, including linkage to swap counterparties.¹³ We consider a counterparty's rating and any rating trigger provisions.

The loss severity in Loss Scenario 1 is a function of two components:

- 1) The liquidation proceeds of the underlying asset relative to the notional amount of the repackaged securities; and
- 2) Any swap termination payment the issuer will receive from the defaulted swap counterparty.

¹³ For more information, see our cross-sector methodology for assessing counterparty risks in structured finance. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

The liquidation proceeds of a performing underlying asset depend on the pricing environment at the time of liquidation and may be influenced by various factors, including credit quality and liquidity. In particular, for Loss Scenario 1, we assume the liquidation proceeds may be negatively affected by any exposures to interest and/or currency rates.¹⁴ The liquidation proceeds we assume are transaction-specific, and typically range from 50%-100% of the underlying asset's notional amount.

The termination payment owed by a defaulted counterparty will depend on the swap type and tenor. We assume repack-specific termination payments that range from as little as 1%-5% of the notional to 50%, or possibly more in limited circumstances. The proportion of a termination payment that an issuer will actually receive depends on whether collateral has been posted by the counterparty under the swap and any potential recovery against the defaulted counterparty. We assume the recovery rate for any remaining unsecured claim will be in line with our usual recovery rate assumptions. We generally give benefit to collateral if the counterparty is already posting collateral or is required to do so upon it ceasing to have a counterparty risk assessment or senior unsecured rating of Baa2 or above. We further generally assume that posted collateral will cover 50% of the termination payment, although we may assume a lower or higher amount according to the applicable collateral formulae and any other relevant factors.

Loss Scenario 2

Loss Scenario 2 occurs if the underlying asset defaults at a time when the swap is OTM for the issuer.

We generally assume that the probability of Loss Scenario 2 occurring is the product of the underlying asset's default probability and the probability of a swap being OTM at the time of default, which we typically assume to be 50%.

The loss severity in Loss Scenario 2 is a function of:

- 1) The recovery proceeds of the defaulted underlying asset relative to the repackaged securities' notional amount; and
- 2) Any termination payment owed by the issuer to the non-defaulted counterparty.

The recovery proceeds of a defaulted underlying asset will depend on its loss severity and, if the repackaged securities are not denominated in the same currency as the underlying asset, the relevant foreign exchange rate at the liquidation date. We assume that the loss severity for defaulting underlying assets can range from very high values in the case of lowly rated, thin structured finance tranches to 50% or below for plain vanilla corporate collateral. Where applicable, we estimate future movements of the relevant foreign exchange rate in the same manner as for Loss Scenario 1.

We generally assume that the issuer will be required to make a swap termination payment, which we estimate in the same manner as for Loss Scenario 1. The impact of this payment on the funds available to pay investors will depend on its ranking in the issuer's payment waterfall.

Loss Scenario 3

Loss Scenario 3 occurs if the underlying asset defaults at a time when the swap is ITM for the issuer.

We generally assume that the probability of Loss Scenario 3 occurring is the product of the underlying asset's default probability and the probability of a swap being ITM at the time of default, which we typically assume to be 50%.

The loss severity in Loss Scenario 3 is a function of the recovery proceeds of the defaulted underlying asset relative to the repackaged securities' notional amount. We determine this in the same manner as for Loss Scenario 2, except that any exposure to currency movements will have a negative effect in Loss Scenario 3.

¹⁴ We size potential interest and currency rate movements using the principles described in our cross-sector methodology for assessing counterparty risks in structured finance including swap counterparties. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

We generally assume that the counterparty will choose not to terminate the swap in order to avoid making a termination payment to the issuer, and we give no value to any scheduled swap payments beyond the liquidation date. Under Section 2(a)(iii) of the ISDA Master, a non-defaulting party is not required to make scheduled payments. Moreover, even where Section 2(a)(iii) does not apply - for example, when there is no Event of Default with respect to the issuer – we generally consider that the amount of post-liquidation swap payments that will be paid to an issuer is too uncertain for us to give value for.

Appendix B: Example of quantitative analysis for a cash structure with a swap

EXHIBIT 6

Considerations for illustrative example

Underlying asset	Swap
Rating = Aa1	Probability of becoming unhedged = Aa3
Outstanding principal amount = \$100 million	Transfer trigger = Baa2; collateral trigger = A3
Bullet repayment due in 4 years	Hedges cross-currency risk
Not denominated in currency of securities	Termination payments rank senior
Bears the same floating interest rate as repackaged securities	

Source: Moody's Investors Service

Loss Scenario 1

The probability of becoming unhedged is commensurate with a rating of Aa3.¹⁵ Therefore, by reference to Moody's Idealized Cumulative Expected Default Rates table,¹⁶ the probability of Loss Scenario 1 is **0.101%**.

The loss severity is a function of:

- 1) Liquidation proceeds: The underlying asset is subject to liquidity and cross-currency risk, but not interest rate risk. We will assume a liquidity haircut in this example of 5%, thereby yielding \$95 million in cash proceeds from the sale of the non-defaulted instrument. Further, considering the underlying asset's WAL and exposure to foreign exchange volatility, we assume a 20% haircut due to cross-currency risk, yielding liquidation proceeds of \$76 million.
- 2) Termination payment owed to the issuer from the defaulted counterparty: Due to the type of swap, the termination payment is linked to the cross-currency haircut in the liquidation proceeds. We reduce this amount by giving benefit to the collateral posted and recovery against the defaulted counterparty. In our example, we give 50% benefit to collateral posted and 45% recovery for the remaining termination payment owed. This results in a total payment of \$14.5 million to the issuer from the defaulted counterparty.

Loss Scenario 2

The probability of Loss Scenario 2 equals the product of 0.021% (i.e. the Idealized Cumulative Expected Default rate for the underlying asset), and 50% = **0.0105%**.

We assume the recovery rate of the defaulted asset is 45%, yielding \$45 million in proceeds. The swap is OTM for the issuer, meaning that the issuer must make a termination payment to the non-defaulted counterparty. We will assume that the termination payment owed from the issuer to the counterparty is \$20 million.

By assumption, the cross-currency swap is OTM for the issuer in this scenario, so the currency mismatch in this structure simultaneously works to the issuer's benefit to increase the value of the assets relative to the repacked note. This increases the recovery proceeds to 1.2 * \$45 million = \$54 million.

The total loss severity in Loss Scenario 2 is therefore \$100 million - \$54 million (liquidation proceeds) + \$20 million (termination payment) = \$66 million, or **66%**.

¹⁵ As determined in accordance with our cross-sector methodology for assessing counterparty risks in structured finance including swap counterparties.

¹⁶ With a horizon of four years. For more information, see the discussion of Idealized Probabilities of Default and Expected Losses in *Rating Symbols and Definitions*. A link can be found in the "Moody's related publications" section.

Loss Scenario 3

The probability of Loss Scenario 3 equals the product of 0.021% (i.e. the Idealized Cumulative Expected Default rate for the underlying asset), and 50% = **0.0105%**. This assumes a 50% probability that the swap will be ITM at the time of default. We may adjust this assumption on a case-by-case basis, as appropriate.

We assume the recovery rate of the defaulted asset is 45%, yielding \$45 million in proceeds. Since the swap is ITM for the issuer, no termination payment to the non-defaulted counterparty will be made, but the value of the assets relative to the repackaged securities is reduced. We assume the cross-currency haircut of 20% reduces this amount to \$36 million. The total loss severity in Loss Scenario 3 is therefore \$64 million, or **64%**.

EXHIBIT 7

Expected loss

	Probability (P)	Severity (S)	Expected loss (P*S)
Loss Scenario 1	0.101%	9.5%	0.010%
Loss Scenario 2	0.0105%	66%	0.007%
Loss Scenario 3	0.0105%	64%	0.007%
TOTAL			0.023%

Source: Moody's Investors Service

We then compare the expected loss results against the loss benchmarks as described above.¹⁷

¹⁷ For more information, see the discussion of Idealized Probabilities of Default and Expected Losses in *Rating Symbols and Definitions* (a link can be found in the "Moody's related publications" section) and in the "Loss benchmarks" section.

Appendix C: Exchangeable securities

In some structured finance transactions, specified liability classes (called reference classes) may be exchanged for an exchangeable class, and the exchangeable class subsequently may be exchanged for its respective reference classes. The exchangeable class is entitled to receive the sum of interest and principal distributable on its reference classes that are exchanged for the exchangeable class; the holder of the reference classes would receive the same cash flow as a holder of the related exchangeable class. The initial certificate balance of the exchangeable class is equal to the aggregate of the initial certificate balances of its reference classes.

We use this methodology to rate exchangeable classes in cases when (1) we do not specifically model exchangeable classes as part of the liabilities of a securitization, and (2) our approach to rating exchangeable classes is not described in the relevant sector methodology.¹⁸ Because exchangeable classes are a combination of the component reference classes, we rate exchangeable notes using the WAEL of the reference classes. We use the results of the WAEL calculation in conjunction with the loss benchmarks as described above.¹⁹ In cases where the rating which we determine on the basis of the WAEL of the reference classes is more than three notches higher than the rating on the lowest-rated reference class, we would rate the exchangeable class three notches higher than the lowest-rated reference class.

¹⁸ For example, exchangeable securities related to US RMBS transactions are analyzed using our methodology for rating US RMBS. For more information, a link to our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

¹⁹ For more information, see the discussion of Idealized Probabilities of Default and Expected Losses in *Rating Symbols and Definitions* (a link can be found in the "Moody's Related Publications" section) and in the "Loss Benchmarks" section.

Moody's related publications

Credit ratings are primarily determined through the application of sector credit rating methodologies. Certain broad methodological considerations (described in one or more cross-sector rating methodologies) may also be relevant to the determination of credit ratings of issuers and instruments. A list of sector and cross-sector credit rating methodologies can be found [here](#).

For data summarizing the historical robustness and predictive power of credit ratings, please click [here](#).

For further information, please refer to *Rating Symbols and Definitions*, which include a discussion of Moody's Idealized Probabilities of Default and Expected Losses, and which is available [here](#).

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