MOODY'S INVESTORS SERVICE

RATING METHODOLOGY

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Moody's Approach to Rating Trade Receivables-Backed Transactions

This rating methodology replaces *Moody's Approach to Rating Trade Receivables-Backed Transactions* published in March 2019. We added a footnote for further transparency on our approach to monitoring transactions, and we made limited editorial updates. The updates do not change the substantive approach of the methodology.

1. Introduction

This report describes our global approach to rating transactions backed by trade receivable obligations.[1] It applies to both term ratings and to transactions funded in commercial paper conduits.

In our credit analysis of trade receivables transactions, we take into account the unique characteristics of this asset class and consider the risks that affect collateral performance. Credit analysis for a trade receivables transaction must consider business, asset, operational, legal and sovereign risks.

When applying this methodology, a rating committee will consider these and additional qualitative and quantitative factors that they deem relevant when determining ratings for trade receivables transactions, taking into account characteristics associated with each transaction.

THIS METHODOLOGY WAS UPDATED ON FEBRUARY 9, 2022. WE HAVE REMOVED REFERENCES TO BRAZIL IN FOOTNOTES 2 AND 5.

[1] The approach mainly applies to trade receivables-backed transactions where the originator is a single corporate company or a family of corporate entities with the same ultimate parent and receivables are originated in the course of the corporate business with its clients.

Definition and Description of Trade Receivables

Trade receivables are short-term, non-interest-bearing debt arising from sales of goods or services from a corporation (the seller or originator) to its corporate customers (the obligors). Because they are non-interest-bearing, they must be purchased at a discount to cover carrying costs. They have the following distinctive characteristics:

» They are business-to-business assets. There are typically no consumer obligors in a trade receivable pool.

» They are unsecured claims on the obligors. Unlike an equipment lease or a consumer auto loan, there is no underlying hard asset that can be repossessed in the event of non-payment.

» They are non-interest bearing. Yield is created by funding at a discount, and there is no spread to enhance the deal. Generally, there is no financial penalty to late payment,[2] and even if there is, it may not be rigorously enforced; rather, the incentive to payment is the ability to continue to purchase products from the seller.

2. Asset Analysis

2.1 Business Risk

Trade receivables transactions differ significantly due to industry, company and product characteristics. Industries differ with respect to operational conventions, which can affect receivables terms and payment rates. Companies differ with respect to market position, diversification and funding sources, which can affect performance and stability of the receivables portfolio. Products differ in many dimensions which can affect payment, default and dilution rates. As discussed below, all of these factors will directly affect the credit analysis. The first step in analyzing a trade receivable transaction is to develop a thorough understanding of the industry, company and products involved.

The industry, financial condition and fortunes of the seller have a significant impact on trade receivables' performance in two ways. First, a trade receivables transaction funds a revolving pool of obligations that will likely be replenished many times over the life of the transaction. Much of the risk is due to future not past business. Second, trade receivables typically do not accrue interest for late payment. One of the strongest customer payment incentives is the need for future product from the seller. In both cases, a well-run seller with a good product in an expanding industry is a better credit risk. These factors will have a qualitative impact on our interpretation of the data received, on the stress levels used in the quantitative analysis and on the overall rating assessment.

The seller's financial structure may be an additional source of risk. A seller that is highly dependent on trade receivables as its sole or primary source of corporate funding is likely to be less stable than a seller with more diversified finances. Deterioration in the receivables portfolio in this case would more rapidly lead to financial distress or bankruptcy.

Overall, the business risk and credit worthiness of the seller may be a constraining factor on the maximum achievable rating of a trade receivables transaction.

[2] In many industries, there are customary incentives, such as a discount for early payment, which are treated as a dilutive item. There are also some jurisdictions where there are penalties for late payment and no reason why penalties or interest might not be included in trade contracts in a particular transaction.

2.2 Asset-Performance Analysis

Transaction sponsors should expect to provide three to five years of data on receivables performance, including aging, roll-forward, pro forma borrowing base and pro forma reserves. Where obligor concentrations are significant, a history of those concentrations and separate performance data for large obligors should also be available.

When we model the transaction, described in "Transaction analysis" below, we use as main inputs the obligor default rate, the dilution rate and the payment rate derived from our asset analysis.

Obligor Default Risk

Defining default on trade receivables. A receivable may be uncollectible because of default or bankruptcy of the obligor. While trade receivables have specified payment terms, late payment is common and failure to pay on the specified payment date is not considered a default. Sellers usually have policies that determine when receivables are referred to more vigorous collection procedures and when they are charged-off. We review sales, servicing, collection and charge-off policies in order to understand how these affect the realization of the receivables.

Calculating the default rate. Typically, the default rate is calculated from the sum of an aging bucket (e.g., 91-120 days past due) and written off receivables. The denominator used is receivables outstanding, but the specific value will depend on an examination of the data. If the transaction is in a steady state, that is, the outstandings are relatively constant, then the current receivables balance can be used. If the receivables balance is growing, declining or shows cyclicality, then the denominator should be lagged a number of months at least equal to the time it takes receivables to age out, the lag chosen being the one that results in the most stable default and dilution rate series. If the transaction turns very quickly — in less than 30 days — it may be more appropriate to use sales or a combination of sales and the current receivables balance.

- The aging table presents the total receivables each period in a series of buckets relating to how long the receivable has been outstanding. This may be done on an invoice date or a due date basis, and should correspond to the terms used to set enhancement and triggers in the transaction documents. Most often, receivables are presented on a due date basis, so each month one would see how many receivables are current, how many are 1-30 days past due, 31-60 days past due, and so forth. The number of aging buckets presented should match the needs of the securitization, so if a technical default is defined as more than 90 days past due, there should be a 91-120 days past due bucket to measure the amount passing into default each month. There is usually a last cumulative bucket— in this example, ">120 days past due" — at the end of the table. Note that later aging data can be beneficial to the analysis. In this case, a separate 121-150 days past due bucket might show that a large percentage of the 91-120 days past due items pay down (or not), something that would not be apparent if they were lumped into a cumulative bucket. If late repayment is consistent with the practices of the industry and the seller's credit and collection policies, and if available data shows consistent payment rates from later aging buckets, we may adjust the estimate of loss used when modeling the transaction.
- The roll forward table shows how the total receivables balance evolves from one period to the next. The first column is the total receivables balance at the beginning of the month (the previous month's end-of-month balance). During the month, there are collections, new sales, dilutions, write-offs and other adjustments. Appropriately summing these items should lead to the end-of-month balance.

Standard charge-off policies. We view positively an objective test in the underwriting policy to dictate the write-off requirement. Similarly firm standards based on delinquency and default should determine which receivables are eligible for purchase and which count towards the borrowing base, as described in "Transaction analysis" below.

Recoveries on defaulted trade receivables. Recoveries on defaulted trade credits will depend on the industry, the obligor and the importance of continued supply to the obligor's business. There will usually be a delay in payments, at least until a court can review and approve any payments. Smaller companies typically have less options afforded to them and may therefore proceed from filing insolvency proceedings to liquidation in a shorter period of time. For highly rated transactions, we generally do not afford significant benefit to the amount of recoveries forecasted to be received from the liquidated estate of a bankrupt obligor, owing to the high degree of uncertainty surrounding the amount of the distribution to unsecured creditors. This analysis will depend in part on the industry in question, the obligors and the quality of the data available on collections.

Credit insurance. Sellers may arrange for credit insurance from a third party to cover the risk of default by trade obligors. The benefit of credit insurance will depend on the ability and willingness of the insurer to make payment on claims. The ability is determined by the credit strength of the insurer. The willingness will depend on the terms of the insurance agreement and the claims evaluation and payment policy of the insurer, as evidenced by past performance. We will evaluate these factors in order to determine the amount of support provided by a credit insurance policy.[3]

Dilution and Setoff

Dilution is the reduction in the face amount of a receivable for reasons other than payment or charge-off. The reasons for dilution are often specific to an industry or business. Common examples of dilution include:

- billing errors, which may decrease or increase the face amount of the receivables
- return of goods sold, which will depend on the product and the seller's return policies
- adjustments for damaged goods, incorrectly performed services or services that may not be performed because of seller insolvency
- discounts for early payment, volume purchases or sales incentives
- credits for specific activities, such as co-advertising where a buyer may include product-specific material in the buyer's advertising
- setoff against other business relationships with the seller (e.g., when the seller not only sells to but also purchases goods from a customer)

There may be additional sources of dilution specific to an industry or business.

We take dilution into account in modeling the behavior of the receivables. However, in the normal course of business, the securitization has recourse to the seller for all dilutive items. As these were never "good receivables" in the first place, the seller must reimburse all recognized dilution. Dilution should not present a risk unless the seller does not have the resources to make good on these claims.

In our calculation of the dilution, the denominator used is receivables outstanding, but the specific value will depend on an examination of the data. As for the default rate analysis, we may use a denominator lagged by a number of months equal to the time it takes receivables to dilute out.

Some dilution may be easily predicted or provided for, such as an offered discount for early payment. Other forms of dilution may be determined statistically from receivables performance data, such as the rate of returns or the likelihood that customers will reach purchase volumes required for certain discounts.

[3] For more information, see Appendix 2.

Certain types of receivables are more susceptible to dilution. Unearned receivables and executory contracts have a greater chance of disputes, errors in estimation costs or cancellation of an order. Furthermore, an obligor of a bankrupt seller may apply to have an executory contract voided, thereby cancelling the corresponding receivable. Government receivables may become seriously diluted because the government may choose to set off its obligation to pay the seller against other claims that the government may have against the seller, such as taxes. Bill and hold receivables (when the obligor is billed for merchandise stored at the seller's premises) are typically more susceptible to returns and disputes than those receivables where the product is shipped.

Dilution may also be disguised as delinquency. For example, credit for returned or damaged goods may be subject to dispute, and the receivables may be carried as uncollected. They will appear as past due receivables. How and when dilution is recognized can vary by firm and industry, and may vary because of the status of the firm as the firm cannot borrow against diluted or delinquent receivables. For example, a firm that is struggling may be reluctant to recognize dilution if it reduces the amount of financing provided by the securitization, or if high dilution rates may trigger an early wind-down. High delinquencies may also trigger an early wind-down, so this will depend on the terms of the securitization. Still, this is another reason for close attention to the seller's financial status, policies and procedures, to the characteristics of the product being sold, and to the practices of the industry.

The amount of dilution may significantly increase because of seasonal factors or upon the seller's insolvency. For example, a large sales increase during the December holidays results in a spike in returned merchandise in late December and subsequent months. Similarly, while most sales contracts typically forbid setoff of the amount due against amounts owed to the buyer by the seller, most buyers will set off any amounts due from a bankrupt or near-bankrupt seller until their own receivables have been paid.

Dilution may be more variable and more difficult to predict in stress situations, owing to all of the factors that can influence it. The reduction in collections resulting from dilution is often greater than the reduction resulting from defaults. Understanding and correctly analyzing dilution may be the more important issue in determining the credit quality of a trade receivables transaction. Dilution triggers that result in increased enhancement or early termination of the transaction may mitigate this risk.

Payment Rate

The payment rate is calculated from collections.[4] Note this practice differs from the use of days sales outstanding (DSO), a measure of turnover based on sales. We are more concerned with the rate at which existing receivables pay down than the rate at which new sales are made (though in a stable business they will be approximately equal over time).

The degree of symbiosis between seller and buyer will affect the payment rate. Trade contracts typically do not impose finance charges for late payment,[5] reducing the incentive for obligors to pay on time. The seller may not stop shipping goods to obligors who are severely delinquent on trade receivable debt if they expect payment eventually, and the seller may value the long-term business relationship with the obligor. At the same time, an obligor who is highly dependent on the product or the seller may have an incentive to pay promptly in order to ensure continued supply. A buyer may be particularly reliant on unique product, a highly engineered product or a product with few sellers. If these factors change, the payment rate may change.

[4] Some models of trade receivables use a sales-based measure, DSO, to measure turnover in the portfolio. However, DSO measures how quickly the receivables can be replaced by new sales. The payment rate, based on collections, measures how quickly cash is received from receivables outstanding. This rate is the more relevant measure when the deal is in amortization.

[5] As noted before, in some jurisdictions, there is often a penalty for the late payment of trade receivables.

The obligor's sales cycle may influence the time of payment, as the obligor may not have the funds to pay the seller until the seller's product is incorporated in the obligor's product, that product is sold, and the obligor collects from its customers. While payment terms usually reflect the obligor's sales cycle, changing business conditions may slow that cycle and lead to longer payment delays.

In those cases where there is no finance charge, there is no coverage for additional interest on the securitization if collections are delayed. Payment rate data can provide insight into normal collection time. Understanding the product can provide insight into how the payment rate might change under changing business conditions. Transactions may also have payment rate triggers that lead to increased interest coverage, early termination or other mitigants.

One common mitigant to slow payment risk is a cross-aging trigger. A cross-aging trigger requires all receivables due from an obligor with a certain proportion of delinquent balances to become ineligible for purchase and possibly excluded from the eligible receivable balance.

2.3 Obligor Concentration Risk Analysis

A second approach to assess asset risk in trade receivables transactions uses the perspective of obligor default. For well-diversified pools of obligors, the more statistical approach above is adequate. For transactions with highly concentrated pools, or transactions whose eligibility criteria permit highly concentrated pools to evolve, the concentration risk needs to be evaluated directly.

Large obligor concentrations may have direct and indirect effects on a trade receivables securitization. Default or delayed payment by a large obligor will directly reduce or delay collections, possibly leading to default or increased funding costs for the transaction. This is similar to the impact of large obligor concentrations in other types of securitizations.

Indirectly, large obligors may have greater leverage over the seller and have the ability to affect the stability of the seller's business. Large customers may be able to demand better terms and get higher rebates, leading to higher dilutions. The loss of large customers may result in lower output and reduced efficiency. The seller may be less able to support and service the transaction, which could lead to early wind-down.

Concentration Limits

Trade receivables transactions typically have concentration limits as part of their receivables eligibility criteria (additional eligibility criteria described below). These concentration limits will usually vary by the credit quality of the obligor, with higher limits to better credits. There will often be "special obligor" concentration limits for important customers who do not fit within the standard limits. When large concentration limits are sought for obligors with high ratings, we will want to review the historical monthly delinquency performance of these obligors.

Concentration limits generally reflect the current distribution of obligors so that they will trigger an appropriate reassessment if the distribution changes significantly. We will consider both the current obligor portfolio and a potentially more concentrated portfolio, if such is permitted under the concentration limits, when reviewing the transaction.

Proposed obligor concentration limits are often linked to the obligor's rating based on the assumption that the obligor's payment performance with respect to the receivable will mirror the obligor's performance on its publicly rated debt. Our ratings speak only to payment performance on publicly rated debt, not to payment performance on trade obligations. Failure to pay a trade obligation will not in itself result in downgrading the short-or long-term ratings of the obligor.

Corporate credit ratings and default rates are not necessarily a good measure of the default rate on trade receivables obligations. Our rating of a corporate obligor speaks to its publicly rated debt, not to its trade obligations. A highly rated corporation may pay its trade creditors slowly or not at all, and this may have no impact on long-term or short-term ratings. In countries like the United States, where bankruptcy regimes encourage workout (Chapter 11) over liquidation (Chapter 7), a bankrupt firm that continues to operate will continue to need goods and services from its suppliers. Since suppliers are reluctant to continue selling product to customers with unpaid obligations, firms operating in bankruptcy may be permitted to pay trade creditors in preference for other creditors. As a result, collections from bankrupt obligors may be higher than expected, and the seller's receivables performance data and relationship with its obligors will have to be analyzed in order to determine actual and potential default rates.

A cross-aging trigger, discussed above as a common mitigant to slow payment risk, is also a common mitigant to high obligor concentrations. A cross-aging trigger requires all receivables due from an obligor with a certain proportion of delinquent balances to become ineligible for purchase and possibly excluded from the eligible receivable balance. A large obligor will be forced out of the pool if its delinquencies rise.

Obligor concentrations may also be limited by a group rather than individually. For example, the share of obligors in a single country (for international transactions) or state may be limited to maintain geographic distribution. Transactions also often include limits on the amount of government or foreign obligations allowed.

Depending on the transaction, additional data may be useful. For transactions with large or exceptional obligors (governments, foreign obligors), a table listing those obligors and their outstandings by period would be required. For large obligor concentrations, data on the payment history of those receivables in the form of an aging table may be appropriate.

2.4 Eligibility Criteria

Eligibility criteria serve in part to determine which receivables may be sold into the special purpose vehicle; they also determine which receivables are considered when evaluating the borrowing base, the formula that determines the amount of funds that may be advanced against the receivables (discussed in more detail under "Transaction analysis" below). Not every securitization makes this distinction.

Eligibility criteria typically limit or forbid the purchase or funding of the following types of receivables (see below). The eligibility criteria must be reviewed against the nature of the business and the inherent risks.

Eligibility criteria based on obligor's credit risk and performance:

» Delinquent (for example, those 60 or more days past due) or defaulted receivables (typically more than 90 days past due).

» Current receivables due from obligors who show significant delinquencies on other receivables ("cross aging").

Eligibility criteria based on type of receivables or obligor:

» Executory contracts in which obligations under the contract are so far unperformed and the failure to complete performance would cause a material breach.

» Unearned receivables, which are generated before shipment or delivery of goods purchased or services performed.

» Government receivables or others where the obligor may not be legally subject to normal collection procedures.

» Bill and hold receivables, where the customer wants to postpone shipping because of lack of storage space or inability to determine a shipping destination, and the seller agrees to hold the merchandise until shipping is possible.

» Receivables subject to any liens.

» Receivables due from affiliates of the seller.

Eligibility criteria aiming at limiting setoff and dilution risk:

» Receivables subject to any dispute, offset, counterclaim or defense.

2.5 Originator and Servicer Analysis

Originator Quality

In order to understand future performance, we consider the industry, the firm and the product. The industry provides the one standard to judge the firm's practices. Different industries will have different practices with respect to sales, contract terms, product cycles and different future prospects. The seller's practices may differ from the industry norm for better or for worse. A trade receivables securitization may cover only part of the seller's business, so the lines of business, subsidiaries and products involved may differ from the company as a whole. We will look at information provided by the firm, usually in cooperation with our corporate analyst, particularly if the firm has a Moody's rating. In the absence of a rating, we will internally estimate the credit quality of the firm giving due consideration to the amount and quality of data available.

If we rate the originator, the transaction arrangers sometimes propose a rating trigger, which can change operational procedures, increase enhancement levels or stop further purchases of receivables if the seller's rating declines. These mitigants will be more important for weaker sellers or for firms or industries with uncertain outlooks.

Impact of originator's bankruptcy on pool performance. We assess the likelihood of the originator's insolvency and its resulting impact on the transaction. Thus, the transaction rating will be dependent on (and may be constrained by) the originator's rating.

Source of working capital. The funding of trade receivables is a critical source of working capital to the seller of the receivables. The presence of other sources of working capital funding for a trade receivable securitization is an important part of the ratings analysis. A company that is solely dependent on trade receivables securitization for working capital — or nearly so — is in a weaker position than a company with diversified funding.

Operation review. We typically conduct an on-site visit of the originator's facilities for an operation review. During an operation review, we will discuss the firm's procedures for the analysis of new obligors, setting credit limits, the approval process for new customers and limit changes, the level of consistency in the application of credit terms, the ability of the marketing department to overrule the credit department, the monitoring of obligor payment performance, and the clarity and rigor of collection procedures. The seller-provided information will be compared with the terms of the transaction. The purpose of the on-site visit is to develop an understanding of the real activity behind the documents and data, and to see if the resources available and systems in place match those needed to support and service the transaction.

Servicer Quality

While trade receivables have specified payment terms, late payment is common and failure to pay on the specified payment date is not considered a default. Sellers usually have policies that determine when receivables are referred to more vigorous collection procedures and when they are charged-off. We review sales, servicing, collection and charge-off policies in order to understand how these affect the realization of the receivables.

In most trade receivables transactions, the seller typically acts as servicer. The servicer remains responsible for managing the substitution of receivables, calculating the dynamic credit enhancement, identifying eligible receivables, maintaining fraud prevention measures, collecting receivables, reporting, monitoring arrears, writing off bad debts and other daily support activities. The seller's procedures in handling billing errors — whether it corrects overbilling by issuing credits (customers still have to pay the current bill) or re-bills the customers (current bill canceled and new bill generated) — will have a significant impact on both dilution and aging of the pool. We expect to be notified of any material change in the servicer's procedures as part of the information required to monitor the transaction.

The quality of servicing and portfolio performance may deteriorate if the seller is financially distressed. Most transactions do not wind down unless the seller is bankrupt or defaults on its obligations. The introduction of a back-up servicer is further complicated because these receivables often turn too quickly to realize the benefit of a back-up servicer after the originator is insolvent. Receivables collections may be a function of continuing business relations and the sale of products by the originator to the obligor, generally diminishing the usefulness of a back-up servicer even further.

The following are four possibilities:

» If the servicer is in bankruptcy, this generally does not imply that a large company is out of business or has materially cut back on its receivables servicing operations. Most large companies who file for insolvency operate under a restructuring status (Chapter 11 in the US). They continue to service their pre-bankruptcy receivables and continue to do business with the same obligors. In the US, most bankrupt companies obtain revolving credit loans secured by their post-Chapter 11 filing receivables to provide continued funding. If these circumstances seem like the more likely outcome for the seller in a bankruptcy, we will not assume a total interruption in servicing of the receivables in our stress analysis of the pool receivables, but we will use stressed variables brought about by an insolvency.

» Alternatively, some sellers are likely to pass through the restructuring (Chapter 11) status very quickly to liquidation (Chapter 7 in the US) or go straight to liquidation. Likely candidates for this direction are companies generating large negative operating margins, smaller companies or companies that would be going into bankruptcy for the second or third time. The consequences of insolvency being either a restructuring or liquidation are part of our qualitative assessment of trade receivable deals.

» Occasionally, if servicing requires special attention, a back-up servicer can be introduced if the servicer's financial condition declines below a certain rating level. The quickly turning nature of the receivables necessitates the switch is done significantly before an insolvency to be effective. Alternatively, enhancement levels could increase upon a downgrade of a seller to compensate for the increased possibility of adverse performance.

» In some jurisdictions, a third party, such as a bank, may always handle collections. If a third party is performing servicing, it may reduce or eliminate servicing risk. A "hot" backup servicer ready to step in immediately may be equally effective.

Data Quality[6]

We review the historical performance of the receivables pool based on information provided by the originator. As a general rule, at least three years of monthly performance data of the trade receivables is needed to provide a reasonable picture of expected performance. Trade receivables securitizations are largely managed – funding limits determined, reserves calculated, trigger status evaluated – on performance data; inability to provide sufficient data does not speak well as to the seller's ability to manage the securitization.

The information is usually presented in the form of four tables of time series data. The perimeter of the data should correspond to the perimeter of the receivables to be securitized and can be broken down by country or business lines if performance and characteristics of sub-pools vary significantly. The frequency is typically monthly, though receivables with very high payment rates may require bi-weekly or weekly data to be meaningful.

3. Transaction Analysis

3.1 Transaction Structure Analysis

Borrowing Base

The borrowing base is the set of receivables eligible for financing. The receivables eligible for the borrowing base determine whether the transaction will continue to revolve or go into wind-down. No new receivables may be purchased if there would be insufficient receivables to support the amount borrowed. If too many of the receivables sold into the portfolio go delinquent or default and are not replaced, the borrowing base will erode and the deal will wind down based simply on the quick turn of the receivables owned and the fact that they are not replaced as they pay down. Investors will be repaid from collections on all receivables in the borrowing base at the point new purchases cease. Tighter eligibility criteria can result in lower levels of enhancement by resulting in an earlier wind-down in the event of deterioration.

Calculation of the borrowing base. Eligibility for the calculation of the available borrowing base will generally exclude the following:

» defaulted receivables and, in some transactions, delinquent receivables, as defined by the documents

» the portion of any receivable reduced by dilution

» all receivables from an obligor with more than a certain percentage of delinquent or defaulted receivables (cross-aging)

» receivables from any obligor in excess of the concentration limits

Excess collections. In most cases, all of the receivables generated by the originator — even those ineligible for the borrowing base — are sold into the special purpose vehicle. And in most cases, the proceeds of ineligible receivables go first to pay down the securitization before reverting to the seller. In such cases, we will consider the likelihood and potential benefit of this additional cash flow to bondholders.

Advances, Reserves and Credit Enhancement

In the most common structure, the credit enhancement takes the form of over-collateralization (OC) where the rated notes will be capped to a percentage of the eligible receivables pool balance, "the advance rate." In practice, the OC can be achieved by various legal structures (e.g., a deferred purchase price, an unrated subordinated note, a discount ledger). Each advance rate equals 100% minus the sum of reserves for loss,

[6] For more information, see our cross-sector methodology discussing our global structured finance data quality evaluation approach. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

dilution, servicing costs and interest payments. Each reserve is often dynamic, increasing if certain measures of performance worsen.

Loss and dilution reserves. The loss reserve varies according to some measure of default, considering both the average and the worst case for some look-back period. The dilution reserve is calculated in a similar fashion. The dilution rate used may be adjusted based on knowledge of the industry and the receivables. Regularly recurring and easily predictable dilutive items may simply be deducted from the borrowing base similar to ineligible receivables. The dilution reserve will be calculated from statistics based on the less predictable dilution components.

Most transactions have a minimum reserve to cover losses and dilution. The loss and dilution reserve may be specified as an advance rate against total receivables or as the amount of enhancement per dollar of borrowing.

Servicing reserve. The servicing reserve is usually a fixed percentage of the total receivables outstanding, not just those eligible or the amount borrowed. This is because the servicing operation must be sized to collect all outstanding receivables, not simply those supporting the securitization.

Interest reserves. The interest reserve is based on the rate promised on the securitization tranches and the amount of time it is expected to take to amortize after a cease purchase. This will depend on the payment rate of the receivables, and a multiple recognizing the uncertainty involved. If the interest rate due on the notes is a floating rate, and there are no hedging arrangements, this rate will also be stressed.

Dynamic credit enhancement. In trade receivables transactions that recalculate the reserves on an ongoing basis and adjust advance rates accordingly, the credit enhancement is dynamic. In general, if performance deteriorates slowly, enhancement levels will increase, protecting investors until the structure becomes uneconomical and winds down. However, in a case of rapid deterioration in performance, the structure may transition directly to wind down with no chance for reserves to increase. Hence, it is uncertain how much benefit to give to this feature.

Some trade receivable securitizations, however, will have fixed advance rates. Our approach to analyzing the transaction is largely unchanged in this case.

Third-party enhancement. Occasionally, all or part of the credit enhancement can take the form of credit insurance or third-party guarantee. In these cases, we will assess the conditions of availability of these credit enhancements and the credit quality of their provider in light of the rating target.

Concentrations. Reserve levels in the transaction may also respond to changes in obligor concentrations, increasing if obligor concentrations increase. This often takes the form of a requirement that enhancement cover some minimum number of obligors at different rating levels or of different sizes.

Triggers

Performance triggers protect investors by forcing a cease purchase resulting in early amortization. The high payment rate means that wind-down occurs in only a few months, providing little time for the quality of the pool to deteriorate further. There are three types of triggers.

The primary trigger is the out-of-formula or borrowing base trigger. It requires sufficient good collateral to equal the outstanding debt and the required enhancement. Because every pool will have some defaults and dilution, the seller must replenish the pool with additional good receivables to cover these deductions.

This is no different than how the seller's business works without the securitization: Products must be priced to cover costs and expected losses and still yield a profit. As long as defaults and dilution are low and within expectations, they do not present a significant problem. Our quantitative analysis relies on the borrowing base trigger.

Most deals will also have a variety of triggers tied to collateral performance measures, such as delinquency, default, dilution and payment rate. A seller may be able to keep a deal in formula, even as collateral performance is deteriorating, by providing sufficient new receivables to support the borrowing base. Collateral performance triggers limit this remedy by calling a halt when the deterioration moves beyond expectations. As noted, many trade receivable deals have dynamic credit enhancement requirements, so investor protections increase as collateral performance declines. In these cases, funding may become uneconomical, owing to high reserve requirements, before a trigger is actually hit.

Finally, many deals will have a number of administrative triggers dealing with structural issues, such as bankruptcy of the seller, change in regulation or change in tax status of the special purpose vehicle.

Most trade receivables transactions settle monthly and the triggers are measured as part of the settlement process. However, weekly or even daily settlement may be warranted for unrated or speculative-grade sellers. Some transactions have provisions for more frequent settlement if business conditions or the credit quality of the seller deteriorate.

Generally, the transaction documents will have a procedure for curing a trigger breach, if this can be done in a short period of time. They may also provide for waiving a trigger in exceptional circumstances.

Capital Structure and Waterfall

A term securitization will have one or more fixed tranches, usually in strict order of subordination. There is almost always an additional variable funding certificate (VFC) often purchased by a multi-seller ABCP conduit. This VFC funding allows the amount of funding to rise and fall with the availability of receivables as seasons or business conditions change.

Each tranche will have its own term and interest rate, the more subordinate tranches having longer terms and paying higher interest rates. The VFC is typically pari passu or nearly so with the most senior tranche. The tranches usually pay down in strict order of priority when the securitization amortizes or winds down. Each tranche will have its own advance rate, the effective advance rate being higher for the more subordinate tranches.

The transaction documents will present a precise waterfall that provides for the application of every collection to the expenses of the program and the payment of interest and principal. We aim at replicating the waterfall in the modeling of the transaction.

3.2 Cash Flow Model

The transaction-level cash flow model mirrors the actual behavior of the transaction and tests the adequacy of the reserves in the face of wind-down. A trade receivables transaction revolves until maturity or until the seller is no longer able (or sees no value) to provide new receivables. Since there is considerable cost to establishing the securitization and arranging alternate costs of funding, and since the performance of the receivables is at the heart of the seller's business, we assume that early amortization occurs with a likelihood similar to that of the seller's default. The seller might abandon the securitization short of default, owing to the expense of continuing with it, so we generally assume the probability of early amortization is a bit greater than the probability of the seller's default. If the seller has a Moody's rating, the rating has an

associated default probability, and we will assume the trade receivables transaction will go into amortization at the default probability of a rating slightly lower than that of the seller. Moody's idealized cumulative default tables provide a default distribution that can be used in the model.

Prior to amortization, as long as the seller is able to comply with its obligations, including compliance with the borrowing base, all servicing, interest and principal payments (if any) are made on a timely basis. At the point of amortization, all further payments have to be made from the pool of receivables then owned by the securitization. The model assumes the transaction is just in compliance with the required borrowing base, so that it has enough receivables to cover the principal outstanding and cover the required reserves. Each time period, some of those receivables default, some dilute, some pay down and some age until the next period. The cash from those that pay down must cover servicing costs, interest payments and any remainder repays principle. The next period, the remaining aged receivables again default, dilute or age, and the cash is distributed. Eventually, either all debt is repaid or no receivables remain, and there is a default.

Asset Stresses

Each of these rates – default, dilution, payment, reserves – is treated as a normal variable. At amortization, a random draw is made.

» *Default stress.* For default, the average is generally doubled, the standard deviation is stressed, and the draw is made from the half of the distribution above the average.

» *Dilution stress.* For dilution, the average is generally doubled, the standard deviation is stressed, and the draw is made from the half of the distribution above the average.

» *Payment rate stress.* For the payment rate, only the standard deviation is stressed, and the draw is made from the half of the distribution that is slower than average.

The stress level on the standard deviation is generally a multiple of 2 to 5. The stress level selected will depend on the type of originator and business as well as on the reliability of the data for use in evaluating the risk. A short history of available data, unexplained variability, a lower-rated seller, a longer term of the transaction, a higher rating target and the nature of the business are some of the factors that may be considered in deciding how much stress should apply.

Monte Carlo Simulation

A Monte Carlo simulation is run using the five primary random variables: timing of amortization, default rate, dilution rate, payment rate and level of reserves (if there are multiple tranches of debt, multiple reserve ratios will be modeled). The model intentionally ignores the correlation between the level of reserves and the performance of the receivables in transactions with dynamic credit enhancement formulas. However, if the receivables performance deteriorates slowly, at the point of amortization, there would be high levels of reserves and losses would be unlikely. This would correspond to the Monte Carlo trials where the drawn values of the random variables are close to the mean. If the deal deteriorates rapidly – the most risky scenario – the level of reserves may not have time to adapt as the seller may be unable to provide additional receivables or support to the transaction. This would correspond to Monte Carlo trials where the drawn values of the random variables are far from the mean. The correspondence is not perfect, but it is a reasonable approximation to the risks we expect to see in the transaction.

The model also links the rating of the seller to the risk of the transaction. For highly rated sellers, there is little risk of a wind-down. However, even in these cases and regardless of the model results, a well-structured transaction will have sufficient OC to cover the observed losses and dilution.

Derivation of the Model Output

In each trial, the payments to each tranche of debt are tabulated and the net present value of the loss is calculated. The average of the net present value of the loss over all of the trials is an estimate of the expected loss of the transaction, and the frequency of default is an estimate of the probability of default. These can be compared to the values in Moody's Idealized Default and Expected Loss[7] tables for various rating levels and maturities to derive a model output.

The model result is only one factor in the rating analysis. We consider it along with the other concerns mentioned – business risk, data quality, obligor concentration – to form our opinion.

3.3 Modeling Concentration Risk

Moody's CDOROM™ (CDOROM) is one tool that we can use to model less granular pools based on the Gaussian copula concept with the use of Monte Carlo simulations. It will help measure obligor concentration risk directly. Large, named obligors can be entered into the portfolio with their permitted share of the eligible receivables. The remaining pool can be entered as a series of obligors with shares either equal to the maximum permitted under the eligibility criteria or with shares approximating the current distribution of obligors in the actual receivables portfolio. A rating level needs to be assigned to unrated obligors. For large, named obligors, a credit estimate may be appropriate.[8] For the "small" obligors used to fill out the portfolio, usually a low, non-investment grade rating is selected. However, some attention should be paid to the actual default rate of the portfolio: The effective default rate used in the simulation should reflect a stress over the measured default rate, but should not be overly punitive.

The recovery rate assumption should also be adjusted to reflect how the receivables would be treated by an obligor in default. As noted above, receivables are not corporate bonds, and recoveries on trade receivables from companies that enter bankruptcy can be quite high, often 100%. If the company is not liquidated and the product purchased is essential to its continuing business, outstanding bills will have to be paid before more products are purchased from the seller. This is recognized by the bankruptcy process in many jurisdictions. In the US, a bankrupt obligor will often arrange "debtor in possession" (DIP) financing from its banks to repay its outstanding creditors. Of course, the smaller the obligor, the more likely it will go into liquidation with low or no recoveries. The recovery rates used will be based on a consideration of the industry, the type of product, the bankruptcy regime and the obligor.

We consider both the actual obligor concentrations observed and the potential obligor concentrations permitted by guidelines written into the transaction documents. Eligibility criteria that permit high concentrations that the seller never expects to reach in practice may have a negative impact on the rating.

We generally use the standard correlation assumptions for corporate obligors in CDOROM, though these may be adjusted based on the composition of the obligor pool or the structure of the business.

[7] 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.

[8] For more information, see our cross-sector methodology that describes our use of credit estimates. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

3.4 Additional Analysis

Legal Risks

The legal risks in a trade receivables transaction are similar to those in other securitizations. We assess protections against voluntary and involuntary bankruptcy, and whether the assets are isolated from the estate of the seller through a true sale or equivalent mechanism.

The usual legal risks are enforceability, non-consolidation, true sale and perfection opinions – these are the US terms but equivalents exist in most jurisdictions. The structure of the transaction should mitigate these risks. In some jurisdictions, mitigating these risks may be achieved by force of law; in others, we may look for legal opinions that explain how the transaction covers these risks. For example, in the US, in public term trade receivables transactions, we routinely receive legal opinions. We may not look for these opinions for transactions funded in US ABCP conduits since liquidity providers assume these legal risks. In all cases, the legal risks must be covered for the life of the transaction, not simply at closing.

Bankruptcy of the originator. Our legal analysis of the potential bankruptcy of the originator is an assessment of the following key factors, as they apply in each jurisdiction:

» Whether the originator has actually sold the receivables (in what is often referred to as a "true sale").

» Whether a court would consolidate the owner of the assets (e.g., the securitization trust) with the originator, in the event of the originator's bankruptcy (often referred to as "substantive consolidation").

» Whether the securitization trustee can enforce its ownership or security interest in the collateral once the originator has filed for bankruptcy protection (referred to as "perfection" of the security or ownership interest).

Our legal analysis of these risks depends on the jurisdiction and applicable securitization laws.

Commingling risk. The assets in a trade receivables transaction may turn quickly, often within one to two months. The amount of cash and therefore risk can pile up quickly when payments received from obligors and due to the securitization pass through the seller's accounts. If left unresolved, cash commingling could result in the loss of a significant portion of the enhancement and rated debt proceeds.

We review the cash collection process, as well as the location, ownership and charges over all accounts used in the securitization. In addition, we review the control the originator has over the accounts, whether any funds not related to the securitization pass through the accounts, and the timing of transfers of funds to other accounts.

Certain transactions allow daily utilization of collections to purchase new receivables, thereby limiting the build-up of comingling risk by supplying replacement collateral.

If it is apparent that funds are likely to be commingled, even if only for a few days, we will forecast the amount of collections that could be lost and assess the rating impact of the proposed structure. The payment rate of the collections is the key determinant in ascertaining the appropriate amount of enhancement necessary. The second determinant is the length of time funds will flow to or through the seller and not directly to the securitization.

Multijurisdictional transactions. Some US and many European and Asian trade receivables transactions include affiliates of the seller and obligors from many different jurisdictions. This may complicate the legal aspects of the transaction, if different rules apply to the issues discussed above, such as bankruptcy remoteness, true sale and enforceability. Different laws within the seller's jurisdictions dictate different

structures for asset transfer, preference risk, withholding tax or other structural risks and accounting treatment.

For example, one subsidiary may not benefit from another seller's reserves – that is, there is no or limited cross-collateralization – because true sale treatment may be jeopardized. Centralized enhancement may have to be combined with local reserves, complicating the analysis. Even if cross-collateralization is available, currency fluctuations may reduce its effectiveness if no common currency is involved and/or appropriate hedging is not in place.

Sovereign Risk

The country in which the transaction's assets, originator or issuer is located could introduce systemic economic, legal or political risks to the transaction that could affect its ability to pay investors as promised. We usually incorporate such risks into the analysis by applying our local currency rating ceilings in accordance with our sovereign ceiling methodology.[9]

In addition, sovereign risk may be introduced when the seller and obligor are located in different countries or customarily use different currencies. The obligor may be unable to obtain foreign currency, or may be unable to obtain the full amount needed to repay the seller. If the obligor pays in his own currency, the seller may not be able to convert those funds into the currency of the securitization. Even if outstanding receivables are repaid in a timely fashion, the seller may see a reduced market for its goods and this may harm the profitability and eventually the credit quality of the firm. In these cases, we will take into account the sovereign ratings and ceilings and the likelihood of disruption.

4. Monitoring

We generally apply the key components of the approach described in this report when monitoring transactions, except for those elements of the methodology that become less relevant over time, such as the review of a legal structure that does not change over time. We also typically receive extensive data on transaction-specific performance that we use to monitor transactions.

We typically receive a seller report each month on the status of the transaction.[10] The seller report will show the calculation of the borrowing base to determine if there are sufficient eligible receivables to support the rated debt outstanding. It will also present the recent history for each performance metrics that may constitute a performance trigger – usually delinquency, defaults, dilutions and payment rate – as well as actual debtor concentration levels and indicate whether any breach has occurred. The report will also state the status of other events that result in a change in status or force early amortization under the transaction documents.

If such performance metrics are trending within the range of our current expectations, we may not run any model. However, if we observed a significant change in metrics or performance trends outside of our range of assumptions, we would undertake a more detailed review. This detailed review would first focus on the fundamentals such as the seller's business and then to the extent relevant on a remodeling of the

[9] For more information, see our cross-sector methodology that describes our approach to sovereign risk. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

[10] For more information, see our cross-sector methodology discussing our global structured finance data quality evaluation approach. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

transaction with new expectations.[11]

A change in the credit strength or ratings of the originator/seller, servicer and other transaction parties, are monitored and may trigger a detailed review. In case we are notified of revisions to origination, collection or dilution policies and procedures affecting the receivables portfolio or a change in economic or industry conditions, we may also revise our assumptions.

5. Loss Benchmarks

In evaluating the model output for trade receivables-backed transactions, we select loss benchmarks referencing the Idealized Expected Loss table[12] using the Standard Asymmetric Range, in which the lower-bound of loss consistent with a given rating category is computed as an 80/20 weighted average on a logarithmic scale of the Idealized Expected Loss of the next higher rating category and the Idealized Expected Loss of the given rating category, respectively. For initial ratings and upgrade rating actions, the upper-bound of loss consistent with a given rating category is computed as an 80/20 weighted average on a logarithmic scale of the Idealized Expected Loss of the given rating category and the Idealized Expected Loss of the next lower rating category, respectively. When monitoring a rating for downgrade, the upper-bound of loss is computed as a 50/50 weighted average on a logarithmic scale. That is, the benchmark boundaries of loss appropriate for evaluating rating category R are given by:

[1] $$Rating\ Lower\ Bound_R = exp\{0.8 \cdot \log(Idealized\ Expected\ Loss_{R-1}) + 0.2 \cdot log(Idealized\ Expected\ Loss_R)\}$$

[2] $$Initial\ Rating\ Upper\ Bound_R = exp\{0.8 \cdot \log(Idealized\ Expected\ Loss_R) + 0.2 \cdot log(Idealized\ Expected\ Loss_{R+1})\}$$

[3] $$Current\ Rating\ Upper\ Bound_R = exp\{0.5 \cdot \log(Idealized\ Expected\ Loss_R) + 0.5 \cdot log(Idealized\ Expected\ Loss_{R+1})\}$$

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 $Rating\ Lower\ Bound_R$.

» $Initial\ Rating\ Upper\ Bound_R$ means the highest Idealized Expected Loss associated with rating R that is either initially assigned or upgraded and the expected loss range of rating R is exclusive of the $Rating\ Upper\ Bound_R$.

» $Current\ Rating\ Upper\ Bound_R$ means the highest Idealized Expected Loss associated with rating R that is currently outstanding and the expected loss range of rating R is exclusive of the $Rating\ Upper\ Bound_R$.

[11] 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.

[12] 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.

- *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.

Appendix 1: Special Considerations for Transactions Financed with ABCP

Funding through an ABCP conduit provides the (indirect) investors in a trade receivables transaction with protections that they likely would not have if they purchased a trade receivables term security. Conduit funding provides investors with several benefits:

» The conduit sponsor provides an additional layer of transaction supervision and management, reviewing performance and monitoring triggers. The conduit sponsor has a strong incentive to perform well as the sponsor could suffer significant financial and reputational risk if the transaction experiences problems.

» Conduit liquidity facilities often absorb risks — such as dilution, seller recourse and seller insolvency — that investors would face in a term transaction. Some liquidity facilities are designed with additional protection features such as a "short tail" (removing the transaction from the conduit quickly under certain conditions) that reduce risk further.

» Many multi-seller conduits have program level credit enhancement that provides a second layer of protection to conduit investors. Program level credit enhancement is often quite large when compared to the size of a typical trade receivables transaction.

This needs to be balanced against a potential disadvantage:

» The liquidity facility borrowing base typically advances against non-defaulted receivables, where default is typically defined as a receivable past due a certain number of days, usually 90 days, from a bankrupt obligor and written off pursuant to the company's policies. Therefore limited credit would be given to later collections as the liquidity facility borrowing base will tend to "crystallize" losses at this point.

Analysis for Trade Receivables Transactions Funded in ABCP Conduit

We start by assessing the credit quality of the transaction on a standalone basis without the benefit of the structural features mentioned above. We then consider the impact of each benefit in turn. For example, sponsor supervision may remove concerns raised by a low rated or unrated servicer that, under our operational risk guidelines, would limit the rating of the transaction. The benefit of the liquidity facility may be assessed as reducing losses due to dilution directly, and limiting defaults from obligors due to the short tail. Finally, the benefit of program credit enhancement may be applied directly as additional enhancement when modeling the transaction or the conduit may be modeled as a portfolio using the program credit enhancement as credit support.

Appendix 2: Credit Insurance Policies in Trade Receivables-Backed Transactions

In addition to overcollateralization or other forms of credit enhancement, trade receivables-backed transactions may have credit insurance to protect the portfolio of receivables from losses related to debtor default. The insured party, typically the originator or the purchaser of the receivables, pays a premium in exchange for a guarantee that the insurance provider will cover specific losses if the debtor defaults. Credit insurance is common in European transactions, less so in other regions and rare in the United States.

In rating trade receivables transaction, we determine whether or not the applicable insurance coverage effectively reduces losses. To this end, we consider the credit quality of the insurer, the contractual definition of claims under the policy, the conditions allowing for a payment of a claim, the insurer's history of paying claims and the relationship between the insurer and the originator. We adjust the level of required credit enhancement to support a particular rating accordingly. We also analyze the residual risk that the insurance policy does not cover and factor it into our ratings analysis.

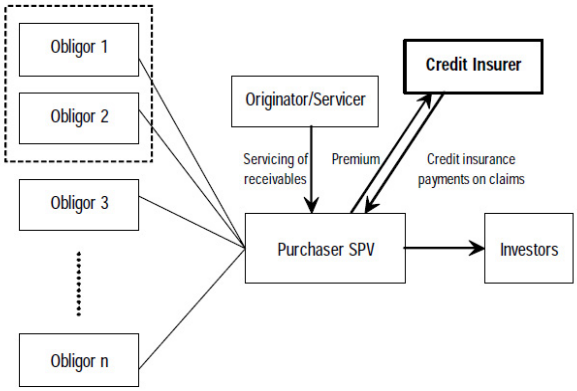
Typical Contractual Procedures and Obligations

General Mechanism

A credit insurance policy is an insurance contract that provides protection against the risk of default of the debtor of a receivable. Under a credit insurance contract, either the originator of the receivables or the purchaser, as the insured party, pays a premium, and the insurance provider (the credit insurer) agrees to pay the beneficiary of the insurance contract (usually the purchaser of the receivables) a specified portion of any losses it may incur if the debtor defaults on a valid claim of the insurance holder. The right to make a claim will usually arise when the debtor is insolvent or has failed to make a payment within a certain period of time after the issuance of the receivable invoice. Exhibit 1 shows a typical transaction structure that includes a credit insurer.

EXHIBIT 1

Simplified Transaction Structure Including a Credit Insurer



Source: Moody's Investors Service

The credit insurer can calculate the amount to be paid under a claim in different ways, as put forth in the insurance documents. Various possible formulae for determining this amount range from a fixed percentage of the receivable's face value (e.g., the insurer pays 90% of the face amount of defaulted receivables) to an amount exceeding a certain threshold (e.g., with a threshold of 40, a receivable of 100 would be indemnified for an amount of 60). The insurance policy usually includes a maximum aggregate amount payable per year, above which the insurer is not obliged to pay any additional claim. Depending on the formula and scope of the insurance, additional forms of credit enhancement may be necessary to provide protections in line with the target rating.

Insured Obligations

The insurer will normally only meet claims from receivables that it has agreed to insure. In most cases, the insurer reviews the portfolio under consideration and limits the receivables eligible for coverage to those with certain characteristics. Typically, all eligible receivables will receive coverage up to the maximum allowable under the policy. In some cases, however, in order to keep its risk exposure below the individual coverage limit, an insurer will stipulate that the insured party collect payments from a particular debtor before selling any new receivables to the purchaser.

The insurer may impose further restrictions on its coverage of a pool of receivables, most often the following:

» Concentration limits on obligor size, usually specified in a matrix with better-rated obligors allowed higher limits.

» Geographical limits, which determine the concentration of receivables from particular countries, regions or postal zones.

» Industry limits, which determine the levels of industry diversity in the insured pool.

In some cases the insurance documents may identify specific debtors, most often in situations where pools of receivables contain particularly high concentrations and the insured party is using credit insurance to reduce the high levels of credit enhancement needed to cover the risk of one debtor defaulting.

Insured Parties

The insured party of a credit insurance contract in a securitization can be either the originator of the receivables, in which case the insurance contract is in place before securitization, or the transaction's special-purpose vehicle (SPV), that purchases the receivables from the originator. If the former, the insurer would identify the SPV as the beneficiary of the insurance policy as part of the securitization. Alternatively, the originator and the SPV can be co-insured under the same contract, in which case they will each receive insurance payment for their respective claims under their respective receivables. This latter arrangement occurs when the originator is not selling all receivables to the securitization.

The insured party usually pays the insurance premium and receives the insurance payment in the event of a claim, unless the insurance agreement contains a delegation mechanism. In some cases the servicer of the receivables makes the claim, even though the servicer is not necessarily the insured party. The servicer would file the claim when the SPV is the insured party and the originator continues to perform the servicing on the transferred receivables.

Conditions to the Insurance Policy

To make a claim against an insurance policy on a defaulted receivable, the insured party usually has to comply with specific procedures. The following requirements are the most common:

» The insured must submit the claim within a specified time after the occurrence of a default (e.g., number of days past the invoice issue date or due date or insolvency of the debtors).

» The insured party must have paid its premium.

» The insured party must notify the insurer of any material information regarding a debtor or the pool of receivables that may affect the likelihood of a claim.

» The insured party must warn the insurer when a receivable is unpaid for a specified number of days (before the default definition under the insurance contract) or when a debtor becomes insolvent.

- A debtor who has failed to pay when due or is otherwise distressed will not normally be eligible for insurance coverage.
- A disputed receivable will not normally be eligible for insurance coverage while the dispute is unresolved.

The insurer typically has the option to review each claim and reject those that it believes do not meet the terms of the policy. There is also often a contractual delay between the time the claim is presented and the time payment is made to allow for this review.

Benefit of Credit Insurance: Reducing Credit Enhancement

Trade receivables ABS transactions with credit insurance usually require a lower level of credit enhancement to receive or maintain a specific rating. In our analysis of the potential benefit that may derive from a transaction's insurance coverage, we would focus on the following transaction characteristics:

- Credit quality of the credit insurer
- Definition of the claim
- Delay in payment from the insurer
- Coverage limit per debtor
- Aggregate limit
- Obligations of the insured party
- Outs to payment under the policy
- Termination of the insurance contract

As a final step in our assessment of how beneficial a credit enhancement reduction is to a transaction, we analyze any residual risk not covered by the insurance contract.

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 includes discussion of Moody's Idealized Probabilities of Default and Expected Losses, and which is available here.

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