
Methodology

Rating European Trade Receivables Securitisation Transactions

DBRS Morningstar
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Related Research

For a list of the Structured Finance related methodologies for our principal Structured Finance asset class methodologies that may be used during the rating process, please see the DBRS Morningstar Global Structured Finance Related Methodologies document on www.dbbrsmorningstar.com. Please note that not every related methodology listed under a principal Structured Finance asset class methodology may be used to rate or monitor an individual structured finance or debt obligation.

Key Updates in this Methodology

For key updates in this methodology, please refer to the press release titled *DBRS Morningstar Publishes Updated Rating European Trade Receivables Securitisation Transactions Methodology* dated 9 November 2020.

Scope and Limitations

A methodology sets forth the key analytical considerations and applicable analytics used when DBRS Morningstar assigns or monitors credit ratings or other opinions. DBRS Morningstar applies approved methodologies in the evaluation of a structured finance transaction or debt obligation. Quantitative and qualitative factors set forth in a methodology or in a combination of methodologies are evaluated by a DBRS Morningstar rating committee or discussion group that exercises analytical judgment and considers the regulatory environment, market standards and customary practices in addition to other factors deemed relevant to the analysis.

As part of the evaluation process, DBRS Morningstar may opine as to whether a sponsor's proposed capital structure supports the assignment of a given rating(s), the loss level(s) the capital structure is able to withstand or the rating level(s) supported by a sponsor's proposed capital structure. Once completed, this process facilitates the assignment of a DBRS Morningstar rating, at a given rating level.

In cases when an applicable methodology does not address one or more elements of a structured finance transaction or obligation, or such element(s) differs from the expectations contemplated when an applicable methodology was approved, DBRS Morningstar may apply analytical judgment in the determination of any related analytical factor, assumption, rating or other opinion. For a methodology that incorporates the use of a predictive model, DBRS Morningstar may also depart from the rating stress(es) implied by the predictive model. DBRS Morningstar typically expects there to be a substantial likelihood that a reasonable investor or other user of the credit rating(s) would consider a three-notch or more deviation from the rating stress(es) implied by the predictive model to be a significant factor in evaluating the rating(s). When a rating committee determines a material deviation, DBRS Morningstar discloses the material deviation and its analytical judgment for the material deviation.

Executive Summary

Trade receivables are amounts billed by a business to its customers when it delivers goods or services to them in the ordinary course of business. Since the cash lent from these receivables is typically not due for at least 30 days, companies utilise securitisation as a way to manage cash flow and receive their financing back sooner. A securitisation typically garners a higher rating than the seller's credit rating thereby enabling the seller more efficient access to liquidity. The receivables' cash flows are legally segregated and protected from other creditors in the event of a bankruptcy. The capital raised from the proceeds of a trade receivable securitisation can be used to originate more assets, to reduce outstanding higher-cost debt or to provide for other working capital needs.

Two key features of trade receivables are that they are short term and non-interest bearing. There are more characteristics of trade receivables that will be covered in the Eligibility Criteria section in Appendix 1 in this report. These receivables arise as per a sale from the seller (typically a corporation) to the obligor (typically a corporate customer).

Short-Term Receivables – The receivables turn fast, typically days sales outstanding (DSO) are under 60 days. The short-term nature of this asset class is a strength in that if material triggers are breached and an amortisation is invoked, the losses are limited to a defined time period. This is known as the loss horizon. Conversely, the short-term nature of this asset class presents risks that must be mitigated, in particular commingling risk.

Non-Interest-Bearing Receivables – Trade receivables do not accrue interest. They reside on a balance sheet over time at the same balance until they are paid or charged off. The investors of securitised trade receivables, however, expect interest to accrue on their investment. The interest is covered when trade receivable securitisations overcollateralise receivables and/or receivables are sold at a discount. For example, the investor may advance EUR 80 while the eligible trade receivables are EUR 100. The advance rate, made up of a number of credit enhancement reserves, in this case, would be 80%, while the overcollateralisation on the eligible receivables would be 20%. More specific to interest rate coverage within this advance rate is an interest rate reserve specifically designed to cover the interest element of what the investor expects with respect to yield.

Risks in Trade Receivable Securitisations

DBRS Morningstar believes that the risks inherent in trade receivable securitisations can be categorised as follows:

- Credit risk;
- Liquidity risk;
- Legal risk; and
- Operational risk.

Credit Risk

Many trade transactions are rated within the context of an asset-backed commercial paper (ABCP) conduit. In this context, the credit is assessed considering that liquidity facilities cover many seller risks such as dilution and carrying costs. Outside ABCP conduits, trade deals are rated to a term or stand-alone standard.

The key analytical factors for both include, but are not limited to, the following:

- Eligibility criteria characteristics;
- The history of delinquencies and defaults;
- The historical payment characteristics (e.g., seasonality);
- Payment and collection intra-month patterns;
- Commingling risk and frequency of sweeps;
- Obligor concentrations;
- Terms of the trade securitisation;
- The originator's credit risk profile;
- The quality of the servicer;
- Any services provided by the originator pre- or post -sale in connection with the sale of goods;
- Seller-customer relationship;
- Underwriting procedures and policies;
- The quality of the data;
- Idiosyncratic factors specific to the particular industry within the realm of trade receivables; and
- Industry competition.

Revolving Nature of Trade Receivable Deals

As a result of the short-term nature and fast payment rate of the assets, trade receivable securitisations typically revolve.¹ A revolving transaction continually finances its receivables until the date at which the reinvestment period terminates. Trade receivables are typically funded through an ABCP conduit, but occasionally may be funded through term asset-backed securities (ABS).

1. On rare occasions, there could be a static discrete pool of trade receivable assets that could be securitised. In those instances, DBRS Morningstar will ascertain the maximum amortisation period or loss horizon and in general, size the reserves as per the methodology in this report.

Principal payments from old collateral finance the purchase of new collateral on an ongoing basis. During the revolving stage, interest is covered via overcollateralisation. Transactions of this nature can theoretically finance their receivables indefinitely. Trade receivable assets in revolving transactions are expected to conform to specific eligibility criteria that are reviewed by DBRS Morningstar.²

Generally, revolving transactions are characterised by having amortisation triggers that are typically monitored monthly but can also be monitored more frequently. These triggers are generally in place to ensure that the transaction has the appropriate credit enhancement on an ongoing monthly or reporting period basis, and in some cases to prevent new purchases if certain (rating and/or insolvency-related) events occur. If breached and left uncured, an amortisation of the transaction will occur. The reserves built into the advance rate are specifically sized for the maximum amortisation period that can occur, also known as the loss horizon (see page 6).

Topping Up the Reserve in Revolving Transactions

The most prevalent monthly credit trigger in a trade receivable revolving transaction is known as the borrowing base test, which assesses whether the assets and the credit enhancement are sufficient for the assigned rating(s). Any depletion of the credit enhancement resulting from asset deterioration is typically cured by the seller in the form of contributing more receivables to the transaction such that the credit enhancement is effectively replenished. This process of restoring the necessary credit enhancement each month or reporting period is called topping up the reserve. If the reserve is not topped up, the transaction will wind down as an amortisation event will be triggered.

Ascertaining the Loss Horizon in Revolving Transactions

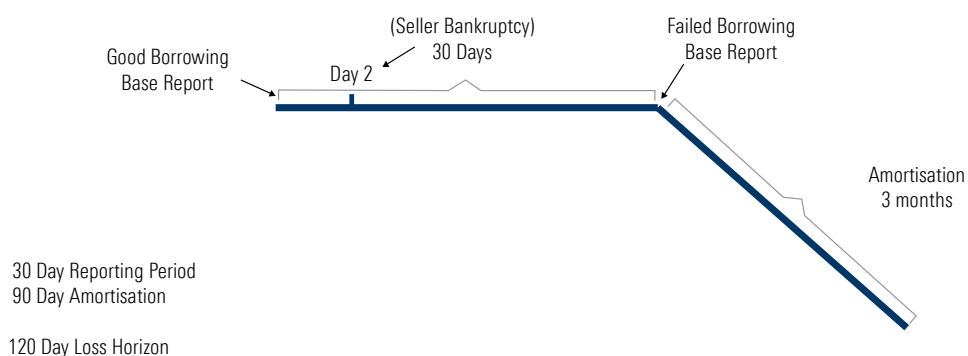
The key to accurately evaluating the sufficiency of credit enhancement in a trade receivable transaction focuses on the loss horizon, which is the maximum time during which the transaction's collateral can experience losses.

For revolving transactions, as noted above, the credit enhancement is typically topped up on a monthly basis. Therefore, revolving pools in effect have a "fresh start" each month or reporting period because the credit enhancement is restored (or reduced) to its requisite level. If the credit enhancement is not topped up, the deal is precluded from purchasing new assets and from issuing new liabilities supported by the transaction (in the case of ABCP-funded receivables), thus causing the transaction to amortise.

The loss horizon is typically calculated by adding the time it takes for the assets to naturally amortise to the length of the reporting period.

2. Please refer to Appendix 1.

Measuring Loss Horizon



Source: DBRS Morningstar.

In the example above, the loss horizon adds the 30 days (the reporting period) it may take for an amortisation to occur following a seller bankruptcy during the month after the borrowing base was last topped up. After the bankruptcy, the borrowing base cannot be topped up as a result of seller bankruptcy and the transaction starts to amortise. In this example, it would take three months for the receivables to amortise completely. This information is typically observed through information within the eligibility of the receivables.

Dynamic Advance Rate

The dynamic advance rate determines the maximum percentage of eligible receivables that may be advanced against. For a trade receivable securitisation, the dynamic advance rate is typically calculated by applying a discount to the face amount of the eligible receivables. The discount is sized to cover relevant reserves that typically include, but are not limited to, a loss reserve, a dilution reserve and a carrying cost reserve. It is important to note that these reserves are fungible. In other words, one reserve may fall short in credit enhancement for "A"-level underwriting while another may make up the difference. DBRS Morningstar considers the dynamic advance rate taken as a whole. Therefore, DBRS Morningstar's viewpoint on specific reserves in this methodology should be viewed as benchmarks for particular underwriting standards.

Obligor Default Risk

Loss Reserve

DBRS Morningstar analyses the loss reserve the same way for trade deals that are within an ABCP conduit as those funded through term ABS. The loss reserve is the primary mitigant to addressing default risk, which is the risk of obligor default.

Typically, the loss reserve is the greater of the (1) dynamic loss reserve or (2) concentration floor reserve.

Dynamic Loss Reserve

The dynamic loss reserve is generally in the form of dynamic overcollateralisation and is typically a function of three components:

- The loss stress factor (multiplied by);
- The default ratio (multiplied by); and
- The loss horizon ratio.

The Loss Stress Factor

The stress factors used to help determine the dynamic portion of the default reserves are generally:

- 2.50 (AAA standard);
- 2.25 (AA standard);
- 2.00 ("A" standard); and
- 1.75 (BBB standard).

Generally, DBRS Morningstar views the above stress factors as minimum benchmarks. It should be noted that, unmitigated, negative qualitative factors may result in higher stress factors for each rating level.

The Default Ratio

The nomenclature used in this methodology is "default ratio" but it should be noted that many transactions use differing terms. Essentially, the default ratio is generally described as the highest three-month rolling average losses for any monthly period over the 12 preceding monthly periods. The average losses are a fraction of the monthly defaults divided by the sales that originated them. It is important to properly match the defaults with the month of sales that originated them.

Loss Horizon Ratio

The loss horizon concept establishes the time period in which receivables were originated that would be embedded in the current month's receivables portfolio balance, based on the eligibility criteria in the transaction. The loss horizon ratio is calculated by dividing total sales for the sales period, or loss horizon, by the current eligible receivables balance.³

Concentration Floor Reserve

As outlined earlier, typically the loss reserve is the greater of the (1) dynamic loss reserve or the (2) concentration floor reserve. Concentration limits for obligors that are rated and unrated are typically built into trade receivable documents. The floor of this reserve is based on a matrix as seen below:

Rating Threshold Obligor Rating	AAA Coverage	AA Coverage	"A" Coverage	BBB Obligor Coverage
A-1+/P-1/R-1 (high, med.)	0	0	0	0
A-1/P-1/R-1 (low)	1	1	0	0
A-2/P-2/R-2	2	2	1	0
A-3/P-3/R-3	3	3	2	1
Non-Investment Grade/Unrated	5	5	4	3

3. The net eligible receivable balance is the current amount of receivables in the portfolio at any given time that have not been excluded from the borrowing base because of non-adherence to the eligibility criteria. The excluded receivables are those that no longer meet the standards of the eligibility criteria or those that have been excluded because of obligor concentration limits. These excluded receivables are still available as overcollateralisation in the deal, but are not advanced against for the borrowing base calculations. These excess concentrations represent extra enhancement in trade receivable transactions.

For example:

For an issuer of trade receivables to be rated AAA, the floor of the loss reserve would have to cover the greatest of

- The largest A-1/P-1/R-1 seller;
 - The two largest A-2/P-2/R-2 sellers;
 - The three largest A-3/P-3/R-3 sellers; or
- The five largest unrated sellers.

Credit Seller Risks

A DBRS Morningstar rating addresses the mitigation of the credit seller risks listed below. However, DBRS Morningstar analyses the following risks differently depending on whether the trade receivables deal is within the context of an ABCP conduit or a term transaction.

- Dilution risk;
- Carrying cost coverage; and
- Commingling risk.

Dilution Risk

Dilution risk arises when the amount invoiced is reduced because of reasons other than default or payment. Examples of dilutive items are the return of goods, fast pay rebates, volume rebates, invoice errors, product disputes over quantity, quality or delivery, advertising allowances and customer programmes, just to name a few (a transaction securitising receivables involving the provision of services, either standalone or ancillary to the sale of goods, would for example include more potential risks of dilution). Assuming the seller undergoes bankruptcy proceedings, these dilutive items represent a shortfall of funds that must be mitigated.

Generally, companies grant dilutions to remain competitive. A primary consideration to understanding dilution risk is that the characteristics of dilutive items can vary. Some dilutive items are quantifiable, like fast pay discounts. Some are more variable in nature, like the return of goods. Moreover, changes in competitive industry practice and changes in company policies can further make sizing reserves for dilutions problematic. Because of the aforementioned concerns, DBRS Morningstar views favourably a dynamic reserve to mitigate dilution risk. It should be noted that dilution risk is typically fully mitigated by liquidity facilities coverage when trade receivables deals are within the context of an ABCP conduit. Nonetheless, in this case DBRS Morningstar views a well-thought-out dilution reserve as added comfort. The following section describes the DBRS Morningstar analysis of the mitigation of dilution risk both within the context of an ABCP conduit and as a term trade receivable deal.

Please note that industries that provide services and service-intensive goods (e.g., which are delivered with the expectation and/or commitment of significant maintenance by the originator) are more likely to see dilution spikes in the event of the financial difficulties or insolvency of the originator and are therefore not considered by DBRS Morningstar to lend themselves well to trade receivable securitisation.

Dilution Risk within the Context of an ABCP Conduit

Liquidity Facilities

Similar to other credit seller risks, dilution risk may be covered by the conduit's liquidity facility. Whether by a full credit protection or a liquidity funding formula that does not reduce for dilutions, the liquidity facility provider typically assumes dilution risk. Thus, the risk to the commercial paper (CP) investor reflects the rating of the liquidity bank.

Dilution Risk Mitigation within a Term Transaction

Dilution Reserve

Outside the context of an ABCP conduit, DBRS Morningstar will review the trade receivable transaction as if it stood alone, without the benefit of a liquidity facility. It should be noted that the following is a benchmark to cover dilution risk at specific rating levels. The variability from industry to industry may dictate more efficient dilution reserves and, as such, DBRS Morningstar considers all dilution reserves to mitigate dilution risk. In DBRS Morningstar's view, a transaction with a dynamic reserve multiplied by the appropriate stress factors which captures the risks that dilution risk represents for that particular industry is favourable.

A common dilution reserve may have the following components:

- Dilution stress factor (SF);
- Dilution ratio (DR);
- Dilution volatility factor (DVF); and
- Dilution horizon (DH).

The dilution reserve in this case would be: $((SF * DR) + DVF) * DH$

The Dilution Stress Factor

The stress factors used to help determine dilution reserves are generally as follows:

- 2.50 (AAA standard)
- 2.25 (AA standard)
- 2.00 ("A" standard)
- 1.75 (BBB standard)

Dilution Ratio

Generally, the goal is to accurately match the dilutions with the sales that originated them. A 12-month rolling average is typically used in the formula above. On occasion, matching dilutions to sales that originated them is not an easy task and sometimes is not available from the sellers as dilutions are not typically tracked like defaults. An audit sample process may be used by which credit memos are analysed and tracked back to the sales that originated them.

Dilution Volatility Factor⁴

The DVF addresses volatility in a particular portfolio. Specifically, it is utilised in many deals because of the issues presented in (1) tracking dilutions back to the sales that originated them to arrive at a precisely accurate average dilution ratio and (2) ascertaining the exact dilution horizon. DBRS Morningstar examines this cushion for reasonableness relative to the history of the portfolio and commensurate to the rating level(s) of the transaction.

Dilution Horizon

The DH generally captures the likely amount of dilutions in the portfolio at any given time divided by the ending eligible receivables. This is achieved by ascertaining the average time lag between the point of sale and the point at which the dilution occurs. Because of the variance in the types of dilutions from industry to industry and within certain industries, the dilution volatility factor is analysed in conjunction with the variability of ascertaining an accurate dilution horizon.

Carrying Cost Coverage

Carrying cost reserves are generally made up of a (1) yield reserve that incorporates interest rate risk, ongoing conduit fees, if applicable, and senior expenses and (2) reserve for the potential cost of replacement of a servicer.

Similar to other credit seller risks, such as dilution, it should be noted that this reserve represents a benchmark to cover the carrying costs of trade receivable transactions at specific rating levels. As such, DBRS Morningstar considers varying carrying cost reserves to cover this risk. Typical transactions have a dynamic reserve with the appropriate stress factor commensurate with the rating in order to effectively mitigate the risks associated with carrying costs. The following section describes the DBRS Morningstar analysis of the mitigation of carrying cost coverage both within the context of an ABCP conduit and term trade receivable deal.

Carrying Cost Coverage within the Context of an ABCP Conduit

Liquidity Facilities

Generally, DBRS Morningstar analyses transactions where the liquidity provider funds the interest accrued at the time of funding and the interest that will accrue to the maturity of the CP. Similar to other seller risks, the liquidity provider may provide full credit protection for the transaction or its liquidity funding formula may cover said interest coverage and any carrying costs. In this typical case, the risk to the CP investor is reflected in the rating of the transaction liquidity provider.

Carrying Cost Coverage within a Term Transaction

Outside of the context of an ABCP program, trade receivable transactions are viewed as if they do not have the benefit of the liquidity facility. They are analysed like a term transaction. Carrying cost reserves are generally made up of two components:

- Yield reserve; and
- Senior expense reserve.

4. A typical dilution volatility component, if needed, captures the dilution spike over the prior year and subtracts the average dilutions and then multiplies by a stress factor. The nature of the dilutions and the aforementioned tracking challenges guide this component

Interest Rate Risk

To address potential interest rate risk, a yield reserve is necessary because, as stated earlier, trade receivables do not accrue interest. Therefore, the coverage is expected to be embedded in the total advance rate. A yield reserve should consider the nominal rate on the debt issued, whether via ABCP or term notes, as well as the turnover rate of the receivables (DSO). A yield reserve for a fixed-rate transaction is relatively straightforward and noted below. For term transactions where the issuance is floating-rate, DBRS Morningstar generally uses its interest rate stresses outlined in DBRS Morningstar's *Interest Rate Stresses for European Structured Finance Transactions* methodology over the relevant amortisation period. It is important to note that the interest rate reserve is a relatively small component of the entire set of reserves that comprise the discount at which the total advance rate is calculated. Thus, DBRS Morningstar measures the interest rate component but considers it in the context of the entire advance rate.

Yield Reserve for Term Fixed-Rate Issuances

A typical yield reserve is: $((A*B*C) / 360)$, where

A = The annual coupon.

B = Days Sales Outstanding (DSO).

C = The Interest Rate Stress Factor. This is typically 1.5. But this may vary depending on the loss horizon of the transaction as well as other prevailing market factors.

Senior Expense Reserve

The Senior Expense Reserve typically comprises backup servicing fees, trustee fees and general other fees.

Backup Servicer Reserve

In most trade receivable securitisations, the seller serves as the servicer. The servicer plays an important role in generating the ongoing cash flow of the transaction (see Operational Risk section below). In term transactions, if the servicer is rated below investment grade or not rated and no other mechanisms are in place to mitigate that risk, a backup servicer may be appointed. With respect to credit, generally the greater of the cost of the current servicing fee or replacement servicing fee is expected to be in place. The reserve for a backup servicer should be reasonable with respect to comparable fees, possible market conditions and any idiosyncrasies that may be specific to a particular industry. Trade receivable deals typically wind down immediately upon a servicer interruption or disruption. This, coupled with very short loss horizons, means servicing risk is somewhat mitigated relative to other asset classes with longer exposures to losses.

Commingling Risk

Commingling risk relates to the collections that could be lost in case of a bankruptcy of the seller if the seller's funds become commingled with the securitisation funds. This risk is relatively more important in asset classes that have a quick turnover, like trade receivables, simply because the funds that could be commingled could represent a higher percentage of the receivables in the portfolio. For example, if a deal has a DSO of 25 days and securitised funds are commingled with the seller's funds for the five-day work week (i.e., being swept every Friday), assuming an even distribution of payments, the commingled funds could represent 20% of the portfolio. The shorter

the DSO and the longer the securitisation funds are commingled with the seller's funds as a procedure, the greater the commingling risk in the transaction.

It should also be noted that billing and collection/payment patterns may vary, exacerbating the risk for certain days or weeks in the month, quarter or year, and that the frequency of sweeps out of the originator or servicer account will vary.

The extent and nature (credit and/or liquidity risk) of commingling varies from jurisdiction to jurisdiction and the structural mitigants put in place (e.g. sweeps and/or redirection of payments into the purchasing special-purpose vehicle's (SPV) account) vary from country to country. In Europe, DBRS Morningstar will assess this risk on a transaction by transaction basis in light of the structural mitigants put in place and their perceived effectiveness in each relevant jurisdiction.⁵

Also, similar to how DBRS Morningstar views other seller risks, it should be noted that commingling risk is typically mitigated by liquidity facilities when trade receivables deals are within the context of an ABCP conduit. Nonetheless, in this case, DBRS Morningstar views well thought out mitigation of commingling risk as added comfort.

Liquidity Risk

Liquidity Risk for Trade Receivables within the Context of an ABCP Conduit

As mentioned above, most trade receivables transactions are analysed under the scope of an ABCP conduit. In this case, liquidity facilities generally cover the credit seller risks within the context of an ABCP conduit. The risk of liquidity not funding is directly related to the short-term credit quality of the liquidity provider who is usually the sponsor bank. Although there are usually reserves in place, the liquidity provider's rating is important when assessing the credit risk associated with a trade receivable deal that resides in an ABCP conduit.

Liquidity Risk For Term Trade Receivable Transactions

DBRS Morningstar reviews the following with regard to liquidity risk:

- The credit seller risks (no reliance on liquidity facilities);⁶
- The credit quality of the liquidity facility provider, if any;
- The asset/liability management of the servicer;
- The ability of the issuer to pay timely interest;
- The frequency of borrowing base calculations;
- Early amortisation triggers (tied to the borrowing base calculation or otherwise);
- The seasonality of receivables;
- Any possible negative carry scenarios;
- The credit quality of the seller/servicer;
- An operational risk review of the seller/servicer; and
- The servicing capabilities of the seller/servicer (also covered in the Operational Risk section).

5. Please refer to the DBRS Morningstar's *Legal Criteria for European Structured Finance Transactions* methodology.

6. Depending on various factors considered in the analysis of a term trade receivable securitisation, partial or full liquidity facilities, rated appropriately, may be necessary in order to assign a rating.

For further details on DBRS Morningstar's analysis of liquidity facilities and liquidity facility providers as transaction counterparties, please refer to DBRS Morningstar's *Legal Criteria for European Structured Finance Transactions* methodology.

Legal Risk

A common touchstone of all securitisations is the isolation of the seller's assets from the seller. For trade receivable transactions, isolating the assets from the seller is at the forefront of legal analysis. A true sale opinion, or equivalent, is expected to be delivered at every level of transfer ultimately isolating the receivables into a bankruptcy-remote vehicle that will issue securities, via ABCP or otherwise, to investors.

In Europe, the true sale analysis and its potential limitations (linked to dilutions, commingling or otherwise), in particular in an insolvency (of the originator and/or servicer) scenario, are reviewed on an individual transaction basis, based on the jurisdictions involved, the structural features of the transaction and any relevant operational considerations.

DBRS Morningstar's analysis of the isolation of assets, as well as other considerations common to all securitisations and relevant to trade receivable securitisations, is described in detail in DBRS Morningstar's *Legal Criteria for European Structured Finance Transactions* methodology.

Operational Risk Review

A servicer of trade receivables, who is usually also the seller, plays an important role in the success of a trade receivable securitisation. DBRS Morningstar conducts operational risk reviews, as necessary, depending on whether the trade securitisation is within the context of an ABCP conduit or whether it is a stand-alone term securitisation.

Operational Risk within the Context of an ABCP Conduit

DBRS Morningstar typically conducts an operational risk review of the sponsor/administrator of the CP conduit. A trade receivable securitisation within the context of an ABCP conduit typically benefits from more protections than stand-alone trade securitisations. The key protections are as follows:

- Liquidity facilities that cover many risks. These risks often have reserves in conjunction with liquidity coverage.
- Liquidity facilities that cover any timing mismatches between asset collections and liability payments.
- Programme-wide credit enhancement that is available to all deals within an ABCP conduit that suffer losses in excess of the sized reserves.

It is for these reasons that DBRS Morningstar typically relies on the sponsor/administrator's operational review of the servicer. However, DBRS Morningstar may, at its discretion, also conduct an operational risk review on the seller/servicer as it deems necessary.

Seller/Service Operational Risk Review for Term Trade Transactions:

DBRS Morningstar typically begins the initial operational review of the seller/service by sending a questionnaire to the company that outlines the topics to be covered during the review such as organisational charts, financial statements, underwriting guidelines and performance statistics (Appendix 2). A date is usually then scheduled to conduct an on-site visit of the company or have a call. During the on-site review and/or call, DBRS Morningstar usually meets with senior management to discuss the operations, tour the facilities and review system demonstrations, as appropriate. DBRS Morningstar assesses the information gathered through the review process, along with its surveillance data, to evaluate if seller/service is acceptable. Additional time is typically spent discussing treatment of certain large customers, problematic business lines, pockets of risk and other areas of concern for DBRS Morningstar. The goal of the operational review is to develop an understanding of the seller's tolerance for risk, management of its receivables process, including its information technology capabilities, as well as a strategic overview of its marketplace.

Part of the review undertaken by DBRS Morningstar also includes an analysis of the validity, collectability and enforceability of the receivables. All these aspects are covered by representations and warranties of the seller when the receivables are transferred to the SPV.

To the extent that different departments within the seller underwrite and collect receivables in a different manner, DBRS Morningstar may request a meeting with these different departments. In the event that DBRS Morningstar determines that a seller or service is unacceptable, it may refuse to rate the deal.

Further Considerations**Foreign Currency Risk**

Where the trade receivables purchased by a securitisation vehicle may be denominated in more than one currency and/or the debt issued is denominated in more than one currency, unless the exposure is hedged with a third party, the transaction will typically include a foreign currency reserve in the calculation of the dynamic advance rate. DBRS Morningstar assesses the sufficiency of such a foreign currency reserve by reference to its *Currency Stresses for Global Structured Finance Transactions* methodology.

Swaps/Hedging

In the event that a transaction relies on a derivative agreement to hedge interest rate or currency risk, DBRS Morningstar reviews the transaction documentation, assesses the credit quality of the counterparty relative to the DBRS Morningstar counterparty financial strength expectations and considers the impact of the hedging arrangement in the rating analysis.

For further details on the DBRS Morningstar counterparty criteria, please refer to the DBRS Morningstar *Derivative Criteria for European Structured Finance Transactions* methodology, at www.dbrsmorningstar.com.

Sovereign and Country Risk

When considering sovereign risk in structured finance rating analysis, DBRS Morningstar uses a case-by-case approach that is jurisdiction-specific and asset class-specific with the risks and protections of each transaction identified and considered. Sovereign risk can manifest in securitisations in a variety of forms, from the effect the overall economy of the region has on loan repayment behaviour of borrowers to downgrades of key transaction counterparties that may be owned, partially owned or implicitly supported by the state.

From a jurisdictional standpoint, DBRS Morningstar incorporates the probability of a sovereign default into its structured finance rating analysis by applying a sovereign-related stress component to its stress scenarios. The “stress scenario regime” manifests itself in the form of increased levels of assumed losses (higher defaults and/or lower recoveries) and higher assumed default correlations, among other assumptions, and reflects the characteristics of the types of assets securitised. For a more detailed discussion of the sovereign risk impact on Structured Finance ratings, please refer to *Appendix C: The Impact of Sovereign Ratings on Other DBRS Morningstar Credit Ratings of the Rating Sovereign Governments* methodology, available on www.dbrsmorningstar.com.

Appendix 1: Eligibility Criteria

Trade receivable transactions tend to only purchase receivables that are current and meet predetermined obligor and other concentration limits. To provide assurance that the securitised portfolio meets the criteria, the seller represents and warrants that they have examined the portfolio and it meets the agreed eligibility criteria.

A typical transaction includes the following key eligibility criteria, although more may apply depending on the risks that may be specific to the transaction. On each sale of receivables, the seller typically represents and warrants that the receivables comply with the eligibility criteria. Some key eligibility criteria are as follows:

- The obligor is not an affiliate of the seller.
- The receivable is not delinquent or defaulted.
- The receivable is for goods and services already rendered in full and payment in full is not dependent on the performance on the delivery of further goods or the performance of further services.
- The receivable represents an extension of credit by the seller in the ordinary course of business to an obligor payable in cash by that obligor.
- The receivable is payable in full, is not subject to offset rights, arises under a legal, valid and binding contract and is fully assignable by the seller.
- The receivable is denominated and payable in a specific currency; hedges or other mitigations must be in place if foreign exchange or sovereign risk is present in the deal.
- The receivable does not contravene applicable laws, rules or regulations.
- The receivable has payment terms consistent with the relevant legal documents.
- The receivable satisfies, in all material aspects, all applicable requirements of the seller's credit and collection policy.
- The receivable will not cause the seller to breach any representations and warranties as dictated in the relevant legal documents.
- The receivable is not the subject of any disputes, counterclaims, repurchase obligations or set-off.
- The obligor of the receivable has not defaulted or been delinquent on receivables that comprise more than a small percentage of the aggregate receivables owed by that obligor.
- The sale of receivable does not cause any breach of any concentration limits set forth in the relevant legal documents.

If at any time it is determined that the purchased receivables did not meet the eligibility criteria at the time they were purchased, the seller will be obligated to either repurchase such receivables at face value or substitute eligible receivables of an equivalent amount into the SPV. Any breach of this will cause an amortisation of the deal.

Appendix 2: Sample Operational Risk Review Questions for Trade Receivables Transactions

Company and Management

- Review the firm's history, ownership and financial profile.
- Management stability and depth.
- Provide an organisational chart.
- Provide a chart showing family of corporate entities.
- Review track record, goals and strategies.
- Describe your strategy for executing successful business plan.
- Has the business plan changed since its inception?
- Overall funding profile – outline term debt and the maturities. Discuss the covenants for each facility (e.g., financial covenants, performance or ratings based). Have the covenants ever been breached?
- Discuss any strategic initiatives that might affect financial condition.
- Have there been any losses caused by litigation and/or claims within the last two years?
- Securitisation history/plans.

Market Position

- Who do you consider to be your chief competition and why?
- How has your market position changed since your entry into the business?
- Why has it changed? How do you expect it will change in the future?
- What do you consider your competitive advantages/disadvantages?
- What distinguishes you from the competition?

Target Markets

- Who is your primary target market?
- Why did you select this target market?
- How has sales trended? What is your expectation for growth?

Origination/Underwriting

- How is product sourced and underwritten?
- Are underwriting methods determined/controlled/monitored centrally or regionally?
- Are any credit scoring models used? Is there more than one model used for different purposes? Are models proprietary? How often does validation occur?
- Discuss payment terms.
- Discuss exception/override process.
- How does the firm compete for business (e.g., fast turnaround or lower documentation requirements)?
- What fraud prevention techniques are used?

Staffing and Training

- Hiring and retention strategies.
- Employee performance and monitoring procedures.
- Turnover rates.
- Training processes.
- Functions outsourced.
- Training of offshore staff.
- Contingency planning.

Servicing

- Write-off procedures/outline timeframes for charging-off accounts.
- How has write-off been trending?
- Has the write-off policy or procedure changed? If so, why?
- Correspondence and dispute resolution.
- Discuss collection strategies for early-, middle-, and late-stage collections.
- Discuss policies regarding loan modifications, deferrals or extensions.
- Discuss significant changes (past or planned) in procedures or emphasis regarding work-out strategies or timelines.
- What are strategies for borrower contact and assessment of ability/willingness to pay?
- Discuss cash management processing including controls and suspense management. Do you use incentives to entice collections?
- Billing and payment processing.
- Payment methods used (checks, electronic funds transfer, other).
- Discuss bankruptcy procedures.

Dilutions

- What is the makeup of dilutions?
- Discuss biggest percentage item of dilutions?
- How do you track dilutions?
- Describe how dilutions are separated from receivables aging.
- How have dilutions trended?

Commingling

- Describe the mitigation of commingling risk.

Internal Audit/Quality Control

- Overview of internal audit/quality control practices.
- Any significant internal audit findings.
- Internal audit reporting structure.
- Internal systems and controls reporting and auditing.

Compliance/External Audit

- Overview of compliance controls (legal, regulatory, etc.).
- Discuss any current, pending or recently concluded litigation and/or regulatory actions of a material nature, including but not limited to any class action lawsuits, which would impact on the company's ability to originate or service.
- External systems and controls auditing and/or quality certifications.

Technology/Information Systems

- Describe the computer systems you have in place for receivables tracking.
- Describe systems in place for asset/liability management.
- What emergency backup systems are in place and where are they?
- Core servicing system strengths and weaknesses.
- Website availability and usage.
- Discuss disaster recovery plans and success of last test.
- Storage and access (i.e., company intranet, shared drive, hardcopy, etc.).
- Future initiatives.

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