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# Trade Receivable Securitization Methodology

Industry Study

Securitized



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## UPDATE ON THE TRADE RECEIVABLES MARKET

Trade receivables were among the first assets to be securitized in the ABS market. The number of these transactions has grown at a steady rate ever since and, on a North American basis, outstandings totalled over \$90 billion as of December 31, 2003. To date, the majority of all trade receivables transactions that have been executed have been funded through multi-seller commercial paper conduits, in part reflecting a matching of the funding time frame with that of the asset life. Although most of the recent attention in the ABS market is directed towards newer public

transactions such as CMBS, credit card ABS, and auto-backed ABS, the scope of the trade receivables market is very significant. By the end of December 2003, a significant portion of the largest industrial companies in North America had engaged in trade receivables transactions, the vast majority of which are major household names. While this asset class will not likely witness high rates of growth, it is and will continue to be a steady component of the funding strategy of a wide variety of companies across all industries.

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## CONTENTS OF THIS METHODOLOGY

This document describes the methodology used by DBRS when analyzing a trade receivables securitization transaction, with an explanation of the analytical reasoning behind certain structuring methods, and the basis for

computing key variables. Our emphasis focuses on the approach taken and the major considerations involved, keeping in mind that a large number of qualitative factors influence every transaction.

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## SUMMARY OF TERMS

*Administrator:* The sponsor of the Special Purpose Vehicle (SPV). The Administrator attends to day-to-day administration of the SPV, such as arranging for funding, negotiating new transactions, distributing servicer reports to stakeholders, and handling duties such as those related to the enforcement of the governing documentation.

*Obligor:* The entity responsible for the payment of a Receivable. All Obligor that are affiliated are deemed to be a single Obligor.

*Receivable:* The right to receive payment under a contract between the Seller and the Obligor in respect of goods and/or services provided by the Seller to the Obligor.

*Seller:* The company selling the Receivables to the SPV either directly or through an intermediate vehicle.

*Servicer:* The company responsible for underwriting, administering, maintaining, and collecting the trade receivables that have been sold to the SPV.

*SPV:* The SPV or conduit that acquires the Receivables (either directly or via a co-ownership interest in a pool of Receivables) and advances funds to the Seller in consideration for the Receivables. In Canada these are usually trusts, and in the U.S. they are special purpose finance companies.

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## OVERVIEW

The following summary of strengths and challenges illustrate some of the key rating considerations for a trade receivables transaction.

### Strengths:

- (1) Fast Receivable turnover limits the duration of the exposure by the SPV.
- (2) The vast majority of trade receivables transactions involve investment-grade Sellers that are experienced administrators of Receivables portfolios.
- (3) Assets of this nature usually experience very low loss rates.

### Challenges:

- (1) Obligor and/or geographic concentrations exist in most trade receivables transactions.
- (2) Dilutions and other non-cash adjustments to the Receivable balance can be significant and difficult to predict.
- (3) Receivables are generally non-interest bearing and the transaction must be structured to absorb debt servicing costs.
- (4) The assets involved are unsecured.
- (5) The revolving nature of most trade receivables transactions requires reliance on the Seller's business practices and credit and collection policies.

- (6) The SPV and DBRS rely on the Servicer to provide accurate, timely, and comprehensive reporting. Ongoing independent verification of Receivables portfolio performance is difficult to obtain.

Risks such as losses, obligor concentration, dilution, and interest costs can be addressed with structural limits, reserves, and indemnities established through the analysis of historical portfolio performance metrics and by utilizing dynamic reserving methodologies. Reserves are structured to adjust to reflect the change in performance of the related inputs such as losses, dilutions, or interest costs.

The unsecured nature of the Receivables and the exposure to the Seller's credit and collection policies are mitigated by some of the key strengths of trade receivables transactions: fast turnover, strong Seller creditworthiness, and low absolute loss rates. Fast turnover means short exposure to poor portfolio performance, for example, deteriorating asset value in an increasing loss scenario. Combined with portfolio performance metrics that are intended to be triggered early in the portfolio decline, the fast turnover should result in the repayment of outstanding funding prior to the collectible value of the assets supporting the transaction being less than that of the funding used to purchase them.

In addition, Seller creditworthiness tests enhance the liquidity profile of the Sellers, providing additional sources of funds to finance their trade receivables portfolios should the program wind up as a result of a Termination Event. These tests also reduce the probability that the program will experience the volatile portfolio performance that could result from a Seller's insolvency. To date, the vast majority of all trade receivables transactions rated by DBRS have been structured to an R-1 (high) level. These programs generally share the following structural characteristics:

- (1) Strong, stable, investment-grade quality Sellers;
- (2) Conservative levels of credit enhancement to mitigate multiple risk sources;
- (3) Stringent eligibility criteria;
- (4) Appropriate concentration limits;
- (5) True sale of the Receivables and a first priority perfected security interest; and
- (6) Limited cash commingling of collections with other corporate funds.

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## TRANSACTION STRUCTURE

### Bankruptcy Remote Treatment

It is a requirement of DBRS that the transaction from the Seller to the SPV achieve bankruptcy remote, true sale, treatment with a first priority perfected security interest, supported by a legal opinion from a reputable law firm. This is important as it separates the Receivables that underpin the transaction from the legal entity of the Seller to prevent these assets from being captured within the estate should the Seller go bankrupt. The Canadian legal framework for a true sale can be characterized as focusing on form over substance. In Canada, bankruptcy remote treatment can be accomplished by a direct sale of an interest in the Receivables from the Seller to the SPV. This structure is often referred to as a one-step transaction.

In the U.S., the legal framework to achieve a bankruptcy remote structure is more focused on the substance of the transaction rather than the form of the transaction. To create a bankruptcy remote structure, Sellers first set up a 100% owned subsidiary, a special purpose company to avoid substantive consolidation risk in bankruptcy, to which they transfer whole Receivables at a discount. This entity then issues a note, either structured as a loan or as a sale with recourse, for the required amount of funding for the Receivables to the SPV. Because the Receivables are in a separate legal entity, they are considered bankruptcy remote from the Seller for U.S. legal purposes. This structure is often referred to as a two-step transaction.

### Revolving Provisions and Structure Types

Transactions can be structured in two ways: a discrete purchase of a list of specified Receivables, or a co-ownership interest in a pool of Receivables. Where discrete purchases of Receivables are made, collections in respect of purchased Receivables are re-invested daily in additional Receivables to maintain the total amount of funding at a stable level. Should the Seller choose to change the level of funding to match growing or shrinking Receivables balances under this structure, the Seller would typically provide a notice to the Administrator requesting this and would either direct collections to the SPV to reduce program outstandings or sell additional Receivables to the SPV as appropriate, usually on a settlement day.

When trade receivables transactions are structured using the co-ownership interest structure, the SPV acquires a co-ownership interest in a pool of eligible Receivables. The SPV then becomes entitled to a percentage allocation of

collections. The allocation is based on the percentage co-ownership interest acquired by the SPV multiplied by the total pool balance. For example, if the co-ownership interest was half of a pool at a given point in time, one-half of all collections would be allocated to the SPV for the relevant settlement period. Co-ownership structures must be constructed to ensure that the allocation of losses attributable to ineligible Receivables does not result in a consumption of the transaction's credit enhancement and are allocated to the Seller's interest only. Allocation of losses in respect of purchased, eligible Receivables is expected.

For purchases of discrete pools of Receivables, the ability to identify Receivables and related proceeds is important in maintaining a perfected security interest in the Receivables. As a result, Receivables are identified according to predetermined specifications on a periodic basis and/or upon the occurrence of a termination event. Monthly, the Seller may be required to identify certain eligible Receivables as being the property of the SPV. One method sometimes used is to list all eligible Receivables by outstanding amount and beginning from largest to smallest, identify Receivables as purchased by the SPV until the aggregate dollar amount of such Receivables equals the amount required by the SPV. For co-ownership interests, no specific identification is carried out other than identifying all the Receivables that comprise the pool in respect of which the SPV has a co-ownership interest.

Older structures tend to use the discrete purchase structure exclusively, while newer structures are a mix of discrete purchases and the co-ownership structure. Provided that all other elements to the transactions (including supporting opinions) are satisfactory and qualitatively equal, DBRS does not have a particular preference for one structure versus the other.

One potential weakness of the discrete purchase structures that provide for automatic reinvestment of collections in new Receivables is that the specific owned Receivables are not usually identified on a regular, ongoing basis and the structures tend to rely on the occurrence of Termination Events before actual Receivables are specifically identified. If the Seller were to become insolvent, the tagging of Receivables owned by the SPV could potentially attract litigation. One potential legal risk of the co-ownership

structure is that the manner in which co-ownership structures allocate cash flows at times favours the SPV over the Seller. This theoretically represents a slightly higher risk that the sale could be challenged in court, potentially adversely affecting the SPV's priority over the Receivables.

### Receivables Types

Trade receivables portfolio performances are often quite different across industries and even between companies within the same industry. For example, one Seller in an industry could sell raw materials, while another in the same industry could sell value-added products. Customers for pure commodities tend to be more volatile and cyclical in their payment pattern, partially reflecting their ability to change providers. A Seller's strategic positioning in its marketplace and practices within the industry (and sometimes for a particular geographic region) provide for considerable variation in credit policies. In addition, the very nature of the Receivable may vary considerably. Some Receivables are for goods, others may be for services, and both types have certain intrinsic value to the Obligor. In addition, the payment terms may vary by customer and business line, ranging from very short terms such as ten days from shipment of product to a deferred receivable with a fixed payment date related to the seasonal nature of an industry. Most Receivables must be billed prior to securitization, but some structures provide for securitization based on accrual of Receivables depending on the billing cycle. Each of these considerations brings structural and enhancement implications to a transaction.

### Eligibility Criteria

The fundamentals of any trade receivables securitization are that the sale and assignment of the Receivables are valid, that the obligations of the Obligor are enforceable, and Receivables were originated and are serviced in accordance with the credit and collections policies of the Seller. In addition, trade receivables transactions tend to only purchase Receivables that are current and meet predetermined obligor and other concentration limits. To provide assurance that the securitized 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 Eligibility Criteria, although more may apply depending on the risks that may be specific to transaction. On each sale of Receivables, the Seller is required to represent and warrant that the Receivables comply with these Eligibility Criteria:

- (1) **Restrictions on the Obligor's place of business:**  
Receivables relating to Obligors situated in other countries are frequently included, but steps to perfect the SPV's security interest in all jurisdictions that represent more than 2% of the transaction must be taken. Opinions are required in the jurisdiction in which the Seller or Sellers have their head office.
- (2) **The Obligor is not an affiliate of the Seller:**  
For the purposes of an AAA/R-1 (high) securitization structure, bankruptcy remoteness requires an assumption that affiliates of the Seller go bankrupt at the same time as the Seller. As a consequence, receivables from Obligors that are affiliates of the Seller are only occasionally tolerated on a limited basis and then only for highly rated Sellers. They are subject to Seller ratings tests that would declare these Receivables ineligible if the Seller is rated at a certain level (usually in the BBB range).
- (3) **The Receivable is not delinquent or defaulted:**  
Since the likelihood of full collection of Receivables diminishes as Receivables increase in age, programs typically do not permit the purchase of delinquent or defaulted Receivables. The definitions of delinquency and defaulted are usually intended to produce measures that reflect the Seller's customary payment terms. For example, for certain industrial companies, Obligors do not customarily pay for a minimum of 30 days from invoice date as a means of financing their purchases. Some other companies, in the oil and gas or wholesale food industries, usually get paid in a matter of weeks and sometimes days. Typically, a Receivable is deemed to be delinquent at the stage where the Seller recognizes the need to contact the Obligor regarding the lack of timely payment. A Receivable is usually deemed to be in default if payment has not been received one or two payment cycles following the delinquency date.
- (4) **The Receivable constitutes an account, as defined in the UCC or PPSA, and is not evidenced by an instrument or chattel paper:**  
The first requirement is necessary because Receivables can be perfected through registration under the UCC or PPSA, while other types of Receivables require possession. Under certain circumstances, Receivables evidenced by an instrument or chattel paper that could be acquired by another party could potentially subordinate the interest of the SPV in those Receivables.
- (5) **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 Obligor must be the party legally required to make payments related to the Receivable to reduce risks related to the right of offset that might otherwise be claimed, for example, if it were created as part of an exchange of commodity inputs.

- (6) **The Receivable is payable in full, is not subject to offset rights, arises under a legal, valid, and binding contract that is fully assignable by the Seller and has been earned by the Seller:**

The existence of a valid contract to pay the full amount must be unquestioned and the Seller makes the representation that the contract is binding upon the Obligor. Provisions in the invoice that contractually provide for offsets or a reduction in the amount owed or that prohibit assignment are unacceptable. Certain government Receivables cannot be assigned without the consent of the government authority and as such are generally not eligible.

- (7) **The Receivable is denominated and payable in a specific currency:**

Receivables are expected to be in a specific currency and if such assumption is not true, exposure to exchange rate movement exists. Other currencies are acceptable provided that the notes that have been issued to fund such Receivables are in the same currency, a swap is entered into, or a reserve is created to protect against the related foreign exchange rate volatility risks. Small variances in currency can be tolerated, but enhancement levels are adjusted.

- (8) **The Receivable does not contravene applicable laws, rules, or regulations:**

This requirement ensures the Obligor does not have a legal right to refuse to pay the Receivable.

- (9) **The Receivable has payment terms requiring payment in a timely fashion:**

This requirement ensures the Obligor must pay the Receivable in full within a reasonable period of time. A 30-day time period is commonly used, although longer time periods are acceptable provided they are consistently enforced, have historically been observed, and the Seller can accurately report based on these time periods. A longer payment cycle may require additional interest reserves to protect against the higher cost of funding these receivables during the collection cycle. Shorter payment cycles are also used when appropriate for certain Sellers and Receivables.

- (10) **The Receivable satisfies in all material aspects all applicable requirements of the Seller's credit and collection policy:**

Due diligence and reliance on the Seller's historical data presume consistent application of the Seller's credit and collection policy. The credit and collection policy should state, among other things, key criteria such as:

- (a) The Seller's philosophy and approach towards extending credit. Some Sellers are in industries where Receivables payment dates routinely get extended.
- (b) The credit underwriting policy for Obligors, including how limits are established, frequency reviewed, and policy on sales over the credit limit.

- (c) The steps taken to collect and recover delinquent amounts.
- (d) When and how Receivables are written off.
- (e) How rebates, discounts, and disputes are managed.
- (f) Risk management guidelines.

- (11) **The Receivable is not the subject of any disputes, counterclaims, repurchase obligations, or set off:**

The terms of the Receivable cannot permit the Obligor to legally set off its requirement to pay the Receivable against a liability of the Seller. Similarly, if the Seller has an obligation to repurchase the goods related to the Receivable if certain events occur, then the Obligor's requirement to pay the Receivable in full could be compromised if the Seller does not perform its obligation.

- (12) **The Obligor of the Receivable is not defaulted or delinquent on Receivables that comprise more than a small percentage of the aggregate Receivables owing by that Obligor:**

DBRS will generally not permit the purchase of Receivables of an Obligor where that Obligor has significant levels of Receivables that are delinquent or defaulted, even if such Receivables are not purchased by the SPV. The primary concern is that delinquency may be an indication of more serious problems, such as financial difficulty. In this case, there would be a risk that the Obligor could ultimately fail to pay any of its outstanding Receivables or only pay its most delinquent Receivables. This would disadvantage the SPV, which only acquired the non-delinquent Receivables, as most systems allocate payment to the most delinquent Receivables first. It is also possible that the delinquent Receivables are the subject of a dispute between the Obligor and the Seller. Both these possibilities increase the likelihood of credit losses or dilutions in such Receivables. As a result, notwithstanding the contractual rights of the SPV, these situations are best avoided. DBRS does not generally permit SPVs to purchase any Receivables that relate to an Obligor if that Obligor has defaulted Receivables outstanding that comprise more than 10% of the aggregate Receivables relating to that Obligor.

If at any time it is determined that the purchased Receivables did not meet the above 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. As very little credit is given for the Seller's ability to repurchase ineligible Receivables (even though only investment-grade Sellers are typically considered for trade receivables securitization), a specific maximum funding level is required in many cases.

#### **Indemnities**

Trade Receivables transactions require the Seller to indemnify the SPV against certain risks. Although comfort based on the indemnities disappears if the Seller becomes

bankrupt, these indemnities provide extra assurance that the Seller is responsible for its own actions and/or omissions in the transaction, beyond the remedies that would be in place upon the occurrence of a termination event. A typical indemnity package would indemnify the SPV from any damages, losses, claims, liabilities, and expenses (including legal expenses) arising from any of the following:

- (1) Receivable not being an Eligible Receivable when transferred to the SPV.
- (2) Receivables to the SPV in respect of any Obligor exceeds the concentration limit applicable to that Obligor at the time of the transfer.
- (3) Reliance by the SPV on a covenant or representation and warranty made by the Seller that was untrue in any material respect when made.
- (4) Failure on the part of the Seller to comply with applicable laws with respect to the Receivables.
- (5) Adverse claims on the Receivables.
- (6) Disputes, discounts, offset, or defence of an Obligor against payment other than the result of an Obligor bankruptcy.
- (7) Claims of product liability, personal injury, or property damage to the goods related to any Receivable.
- (8) Failure to perform duties as required in the transaction documents.
- (9) Taxes of any kind that may be imposed on the SPV in connection with the acquisition of Receivables from the Seller.
- (10) All collections on account of purchased Receivables to be held by the Seller/Servicer in trust for the SPV, even if commingled with corporate funds.
- (11) Amounts relating to interest rate or currency volatility not otherwise covered in the structure.

### **Cash Commingling**

The cash management structures available to companies differ by geography. In Canada, most payments are received directly by the Servicer and are then deposited into a current account that forms part of their overall cash management system. Very few companies employ lock box arrangements with banks. This is the reverse of the U.S. situation, where most companies have a lock box arrangement with one or more banks into which Obligors send amounts owing. In instances where a Servicer is investment grade, DBRS will usually allow commingling of funds between settlement dates. Generally, the transaction structure will require the SPV to be able to control the cash flow upon certain events, such as a downgrade of the Servicer below investment grade. If this were to occur, the SPV would have the right to execute a lock box letter requiring the amounts deposited to the lock boxes to be transferred to the SPV and not released to the Seller. Where current accounts are used, DBRS will require that funds be segregated and transferred directly to the SPV by the Servicer within one or two days of receipt from the Obligor. The intent of the different structures is to isolate the commingling risk of the Servicer within the context of the specifics of each financial system.

### **Maximum Funding Level**

For lower-rated Sellers, typically below A (low), DBRS requires that they maintain total eligible Receivables balances of 110% or more of purchased Receivables. The additional 10% is available to the SPV to replace ineligible Receivables purchased by the SPV and supports the Seller's required indemnity relating to the sale of only eligible assets. These extra Receivables are included to provide the SPV with an entitlement to replacement assets should the Seller's representations and warranties regarding the eligibility of sold Receivables prove to have been incorrect when made and they would be substituted for the purchased ineligible Receivables. These Receivables are intended to be available to substitute for ineligible receivables only and are not to cover credit losses. If indications are that ineligible Receivables occasionally or continuously comprise a large fraction of the overall Receivables balance, an additional amount in excess of 10% may be warranted. For a seller rated A (low) or higher, DBRS would consider a lower support level provided that such a rating is maintained.

### **Insured Receivables**

Some Sellers have portfolios of Receivables that are insured against Obligor default. For strong Sellers, DBRS views this as a positive and will generally give some credit for the insurance as a mitigant for credit losses. However, servicing, interest, dilution, and eligibility reserves still need to be in place, as insurers do not cover these types of losses. Insurance is not equivalent to a credit wrap and payment is usually contingent on the Seller fulfilling numerous covenants and conditions precedent in the policy. The requirements for standard notice periods, producing evidence as to the creation of the Receivable and the risk that contract disputes lead to the denial of claim, have typically been the most significant barriers to reliance on insurance as a full substitute for credit enhancement.

The amount of credit DBRS will give to insured Receivables depends on the nature of the coverage of the insurance policy, the insurer's rating and historical claims-paying track record, as well as the nature of Obligor risk within the pool (for example, Obligors that are subject to significant political risk would be viewed as more problematic unless such insurance is specifically designed to cover such risks). Some insurance policies are very closely tied to the health of the Seller and may become nearly worthless if the Seller becomes insolvent. DBRS will not ascribe any value to such policies. Other considerations when determining what value, if any, include allowance and timing of deductible amounts and any co-insurance provisions in the policy. DBRS does not typically view credit-insured Receivables as a suitable substitute for an investment-grade Seller.

## TERMINATION EVENTS

Trade receivables securitization programs typically revolve until termination, usually related to the occurrence of one of the following:

- (1) Maturity of the Receivables purchase facility, or
- (2) A Termination Event.

The maturity of a facility results in the orderly liquidation of the Receivables portfolio occurring at the agreed to maturity date of the program. In this instance, the Seller usually has decided that the securitized Receivables should be funded using alternate means instead of renewing the securitization program and the program can either amortize with the collection of the outstanding Receivables or be repurchased by the Seller if both parties agree.

Termination Events, however, are indicative of significant problems in the transaction. They are structured to monitor expected performance, can be related to the components of credit enhancement, and protect the SPV against negative changes in performance usually related either to the Receivables portfolio or to the Seller. The focus when drafting Termination Events should be on events that materially re-characterize the transaction, thereby significantly changing structural assumptions.

To reflect the separate risks related to the Seller and the portfolio performance, DBRS has provided two reference lists of Termination Events. Additional Termination Events related to the specifics of each transaction are not uncommon.

### Seller-Related Termination Events

Typical Seller-related Termination Events would include:

- (1) Failure to make payments when due (subject to very short cure periods).
- (2) Untrue representation or warranty under the purchase agreement.
- (3) Failure to perform or observe purchase agreement covenants or conditions.
- (4) Seller insolvency or similar bankruptcy-related event.
- (5) Cross-default to debt or material financing agreement.
- (6) Failure to maintain required rating levels on the part of the Seller. Most transactions have rating triggers established at the investment-grade level.
- (7) Failure to provide a portfolio report, usually on a monthly basis.

In addition, if the Seller also acts in the capacity of Servicer, the breach of any of these events would allow for the Administrator of the SPV to declare a Servicer Termination Event. This would allow it to appoint another entity to act in the capacity of Servicer of the Receivables portfolio. As well, Servicer Termination Events are often linked to most other Termination Events. This puts considerably more pressure on the Servicer to continue to perform within tight guidelines and not deviate from historical performance standards.

### Portfolio-Related Termination Events

DBRS requires a number of portfolio-related tests that are intended to monitor the performance and underlying value of the assets in the portfolio. Specific numeric measures are established to reflect significant portfolio changes relative to historical metrics and are intended to capture a deterioration in the transaction structure and an increased potential for loss by the SPV. Toward this end, certain of the portfolio tests will track factors which impact the level and value of the credit enhancement embedded in the transaction. Typically transactions would contain the following Termination Events:

- (1) The value of the Receivables falls below the value of notes issued by the SPV plus the sum of the related credit enhancement reserves.
- (2) Portfolio performance tests are not maintained. Depending on the transaction, these will include tests which incorporate:
  - (a) *Losses or deemed losses*  
This calculation would incorporate all Receivables related to an Obligor that has become insolvent plus all Receivables entering a specified aging period of delinquency beyond which the likelihood of 100% collection is significantly reduced.
  - (b) *Aging*  
Overall delinquency level that is significantly outside of the normal expected aging profile.
  - (c) *Dilution*  
Non-cash adjustments reflecting changes to the value of the Receivable are made subsequent to the initial record of sale. These generally relate to discounts, returns, retroactive price adjustments and disputes, or other processes which reduce or eliminate amounts owing other than due to collections or losses.
  - (d) *Collection*.  
Often measured by day's sales outstanding. This reflects the anticipated time frame to convert the Receivables in the portfolio into cash to allow for the repayment in the underlying funding source.
- (3) Termination events under the applicable Liquidity or Credit Enhancement Agreements occur or notice of non-renewal is received from a provider. This clause causes the portfolio to amortize immediately when the availability of Liquidity or Credit Enhancement to support the issuance of ABCP has been compromised.
- (4) Notice of termination has been provided by either the SPV or the Seller, and any related cure period has elapsed since such notice was delivered.

The occurrence of one or more Termination Events results in an amortization of the program prior to the prescribed maturity date. Following such an occurrence, all collections relating to the securitized assets to which the SPV is entitled are diverted through controlled accounts or lock boxes to reduce outstanding funding and additional purchases of Receivables are halted.

### **Seller/Service Bankruptcy**

As trade receivables securitization programs reviewed by DBRS are typically rated at a level higher than the rating of the Seller, the structure used must effectively insulate investors from the credit risk of the Seller. The ratings methodology assumes that Sellers enter bankruptcy and are unable to originate new Receivables or service the existing pool of Receivables. To address this possibility, Receivables originated by the Seller must be sold on a true-sale, bankruptcy-remote basis to the SPV. This sale must incorporate a first priority perfected security interest in the Receivables, supported by legal opinions. The opinions will typically state that:

- (1) Documents are enforceable;
- (2) The transfer took place on a bankruptcy-remote, true-sale basis; and
- (3) The SPV has a first priority perfected security interest in the Receivables.

In almost all trade receivables transactions, the Seller is also the Servicer of the Receivables. To address the risk of Servicer bankruptcy, structures are used to minimize commingling and to arrange for the potential transfer of servicing obligations to a backup Servicer. DBRS will usually only contemplate trade receivables transactions that involve a Seller that is investment grade, or in respect of which the Seller's obligations are fully guaranteed by an entity with such ratings. Transactions will usually be structured to provide for a termination event if the Seller breaches this rating level. Once the Seller is non-investment grade, or if other events of termination occur, the Receivables purchased by the SPV will cease to revolve and an orderly liquidation will commence. This accomplishes three things:

- (1) Provides a minimum level of comfort with respect to the credit strength backing covenants and representations and warranties provided by the Seller.
- (2) Commences the orderly liquidation of the Receivables in a timely fashion as soon as the financial strength of the Seller has been reduced to the point where an investment-grade credit rating is no longer suitable.
- (3) Reduces the commingling risk as collections are normally held "in trust" by the Servicer and reinvested on a daily basis in newly created Receivables.

Most Sellers, provided that they maintain investment-grade ratings, are permitted to hold collections in respect of securitized Receivables in unsegregated accounts. Under such circumstances, Sellers settle with the SPV on a periodic (typically monthly) basis. Where Sellers do not have investment-grade ratings, DBRS will assess the transaction on a case-by-case basis.

### **Non-Investment Grade Sellers/Service**

Most transactions that have been funded through SPVs rated by DBRS involve Receivables originated and serviced by investment-grade Seller/Service. DBRS has a strong preference towards investment-grade Sellers due to dilution risks, commingling of cash, fidelity of reporting, and the potential change to payment patterns that might occur should a Seller experience increasing financial difficulty or become insolvent. DBRS believes that a program with a termination event structured at the investment-grade threshold would, in all but the most extreme cases, allow for the collections on the Receivables to fully repay investors prior to insolvency of the Seller which would have a material impact on the collectability of the Receivables.

When structuring trade securitization transactions a considerable amount of time is spent analyzing the historical portfolio performance when sizing both the credit enhancement and determining the Termination Events. When a Seller is non-investment grade, there is increased potential for external financial pressures on the Seller to impact the portfolio performance. For example, pressure to grant additional credit to support sales efforts, change in Obligor payment patterns or the commingling of cash during financial distress, could negatively impact the position of the securitization transaction.

Some Sellers and trade Receivables pools exhibit certain characteristics that mitigate some of the above risks. For example, the use of a backup Servicer with regular access to the invoices and related records and the use of a discrete purchase mechanism, whereby receivables are purchased in batches as opposed to automatically revolving transactions, can both be structural enhancements for programs. The key issues related to the Seller centre on its ability to continue to function as an entity and the impact on the value of the related Receivable portfolio during any associated period of financial impairment. While it is possible to use enhanced reporting, more frequent settlements, and restrictive cash management practices coupled with more stringent portfolio monitoring levels, DBRS will only consider trade receivable securitization for non-investment-grade Sellers where the inherently higher risk factors can be adequately addressed.

## **DUE DILIGENCE**

Prior to the close of a transaction, DBRS will meet with senior managers of the Seller at their premises to review their business strategy, industry risks, Obligor risks, historical Receivable performance, credit and collections policies, information systems, and servicing capabilities. Additional time is typically spent discussing treatment of certain large customers, problematic business lines, pockets of risk, and other areas of concern for DBRS. The goal of the due diligence sessions 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 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, but due diligence measures, usually performed by the Administrator, provide additional assurance that the SPV will be able to enforce the obligations of the underlying Obligors.

To the extent that several divisions within the Seller underwrite and collect Receivables in a different manner, DBRS may request a meeting with these separate groups. Aging data must be provided for distinct business lines.

### **Sample Due Diligence Questions**

#### Seller Information:

- Ownership structure and transaction counterparties (Corporate Structure).
- Product lines and market trends.
- Recent or upcoming changes to company.
- Head office and other business locations.
- Key sales divisions, product descriptions, and organizational charts.
- Senior personnel — sales, credit, collections, finance.
- Audited financial statements (five years).
- Discussion of funding alternatives and “fit” of securitization.

#### Customer Information:

- Customers – nature and stability.
- Industry trends for customers.

#### Sales Process:

- Discussion on Receivables types.
- Processing orders.
- Interface between credit approval system and order delivery capabilities.

#### Risk Management Process:

- Terms and conditions of Receivables.
- Credit and collection policies and frequency of individual reviews.
- Credit approval process and limits.
- Overrides and controls.
- Separation of sales and credit functions.
- Billing process and timing of invoice issuance.
- Payment terms, application of policy, and marketplace practices.

#### Collections:

- Ongoing monitoring of Receivables.
- Application of payments received.
- Dispute resolution.
- Policy for collections on delinquencies.
- Charge-off and provisioning policies.
- Consistency of application of policy on accounts.

#### Systems:

- Integration of credit policies into system.
- Storage and disaster recovery.
- Security processes.
- Management source reports for reported portfolio data.
- Historical information sources.

### **Data Requirements**

If more than one Seller is involved, or multiple divisions are involved, DBRS will require separate data for each Seller and/or division. Similar information will be required if more than one currency is incorporated into the aggregated pool. Monthly information for the past five years should detail:

- Monthly opening and closing Receivables balance.
- Sales and collections by multiple currencies, if any.
- Portfolio aging, usually in 30-day increments to 121+ days past due.
- Gross charge-offs and recoveries.
- Dilutions and other non-cash adjustments.
- Details relating to all material Obligor concentration levels.

## CREDIT ENHANCEMENT

Credit Enhancement needs to be sized to cover off the risks detailed below:

- (1) Losses based on the greater of the Credit Loss and Obligor Concentration Reserves.
- (2) Replacement Servicer fees.
- (3) Interest expenses.
- (4) Commingling losses.
- (5) Currency exchange rate volatility (if Receivables with multiple currencies are involved).

Although dilution is not a Credit Loss and is not necessarily included in the Credit Enhancement calculation, additional Receivables need to be available to replace Receivables that were ineligible when sold. These additional Receivables are owned by the Seller and protect investors in the event that diluting items embedded in the pool reduce the value of purchased Receivables and corresponding levels of collections during an amortization period.

Credit Enhancement is typically provided to the SPV on a first loss basis via overcollateralization provided by the Seller, and often on a second loss basis from a letter of credit from a highly rated financial institution. DBRS requires that the aggregate Credit Enhancement level reflect the sum of the individual enhancement levels required to cover the risk areas detailed above. Overcollateralization incorporates an additional level of Receivables, which are sold to the SPV to act as protection against losses in the portfolio that would prevent the SPV from recouping sufficient collections to repay the ABCP issued to purchase the Receivables from the Seller.

By the Seller providing overcollateralization through a contribution of Receivables, the SPV owns these reserves with no requirement to enforce against the Seller should they be needed to repay the ABCP. Third-party enhancement would usually only be drawn on to support the issued commercial paper after the reserves provided by the Seller and would typically only be acceptable at the “A” or higher attachment point.

Even though enhancement levels are sized to address each of these risks, DBRS requires that all amounts of the Credit Enhancement be available to cover off any of the embedded risks in the portfolio. For example, to the extent that interest rate increases did not fully consume the related interest reserve set aside, the remaining amount would be available to absorb credit losses. Thus, even if the credit losses exceeded R-1 (high) rating expectations, the funded notes could still be fully repaid if sufficient reserves for other risks were available. This provides additional comfort that protection will be adequate in all but the most extreme scenarios.

## Credit Loss Reserve

One of the greatest risks to a trade receivables transaction relates to the credit risk of the Obligors of the underlying Receivables. Even though a trade receivables program has been structured as a legal true sale, the SPV may experience a loss during amortization if extraordinarily high, sustained levels of Obligor default have not been sized adequately in the credit enhancement. Obligor related risk is twofold: The first risk relates to the level of loss experienced on an individual Receivable. An Obligor bankruptcy may result in significant loss levels as these Receivables are typically unsecured and recovery rates are extremely low. The second risk is that of concentration within the portfolio. Many Sellers have a few large customers that represent a sizeable percentage of their Receivables pool, increasing the potential for loss from a small number of Obligors. At the very least, it is necessary to ensure the bankruptcy of one or a few Obligors would not result in losses to the SPV, by restricting the levels of concentration based on the ratings of the Obligors.

In analyzing risks related to Obligor default, DBRS looks at the creditworthiness of the Obligors and the nature of their industry. Some trade receivables programs have financially strong, investment-grade rated Obligors, while other programs may have Obligors that are mostly unrated or non-investment grade. In addition, DBRS analyzes the Seller’s underwriting criteria and credit and collection policies to review the process used to establish limits, payment terms, and collections. Certain Sellers maintain a clear separation between credit and sales, whereas others may be more willing to allow sales decisions to influence credit granting. DBRS stress multiples are subject to increase if it appears that credit granting is not sufficiently autonomous from the desire to increase sales. The nature and common practices of the industry are also very important in determining credit risk. Certain industries are characterized by ongoing, long-term relationships in which the Obligor looks to the Seller as providing a steady stream of specialized materials. One example of this would be automotive parts. Other industries deal with pure commodities, where switching costs are lower and the Obligor composition of the Receivables may change more frequently. An example of this kind of industry would be energy Receivables.

## Concentration Limits

Limits on the concentration of any particular Obligor are often key drivers in trade receivable transactions. Almost all transactions involve some degree of concentration, and the SPV typically will only purchase Receivables that are under allowed concentration limits. Excess concentrations must be funded by the Seller, or must be covered off on a dollar-for-dollar basis by additional Credit Enhancement.

The following table provides guidelines for concentration limits based on the desired rating of the structure. The Total Enhancement is based on the first loss reserve provided by

overcollateralization from the Seller plus any second loss protection at the SPV level.

| Obligor Rating          | As a Percentage of Total Enhancement |                      |
|-------------------------|--------------------------------------|----------------------|
|                         | AAA/R-1 (high) pool                  | AA/R-1 (middle) pool |
| AAA                     | 100%                                 | 100%                 |
| AA                      | 50%                                  | 100%                 |
| A                       | 33%                                  | 50%                  |
| BBB                     | 25%                                  | 33%                  |
| BB or lower, or unrated | 17%                                  | 25%                  |

This translates into obligor concentration coverage factors (i.e. the number of Obligors at the maximum concentration

limit in any given rating category that could default simultaneously with no recoveries) as follows:

| Obligor Rating          | Number of times covered by Total Enhancement |                      |
|-------------------------|--|----------------------|
|                         | AAA/R-1 (high) pool                          | AA/R-1 (middle) pool |
| AAA                     | 1  | 1                    |
| AA                      | 2  | 1                    |
| A                       | 3  | 2                    |
| BBB                     | 4  | 3                    |
| BB or lower, or unrated | 6  | 4                    |

It must be noted that these figures are guidelines, and are subject to change based on the following:

- (1) These levels assume a diversified pool, dominated by small exposures (less than 1%) to a large number of Obligors, with a handful of Obligors that comprise a larger percentage of the pool. For pools that exhibit greater levels of concentration, a higher coverage requirement will be utilized.
- (2) If expected annual losses are substantial relative to enhancement levels, more stringent limits than those above will apply, as the general assumption for the ratios listed here is that the pool should not be expected to experience material losses in addition to losses incurred by Obligors that represent significant concentration in the pool.

Where an unrated Obligor's concentration is limited (to 2.5%, for example), and the Obligor has Eligible Receivables more than this (3.0%, for example), the SPV will typically purchase Receivables that aggregate to the concentration limit (in this case, 2.5%), with the remainder being held by the Seller. This means that the SPV's exposure to that Obligor would not exceed the concentration limit.

Based on the above, for a AAA/R-1 (high) transaction, reserves due to Obligor concentration would be calculated as follows, assuming coverage of unrated Obligor concentration was the key factor:

|                              |          |
|------------------------------|----------|
| Obligor rating level         | unrated  |
| Maximum concentration        | 2.5%     |
| Enhancement coverage (times) | <u>6</u> |
| Required Credit Enhancement  | 15.0%    |

### Credit Loss

DBRS prefers five years of monthly data when analyzing portfolio performance history. Additional data will be helpful in establishing strong collections and servicing experience. Longer data history typically results in more precise portfolio triggers, enhancement levels, and overall structuring reflecting the longer time series for comparison. Sellers with inconsistent, volatile data in higher-risk industries will be required to have a more conservative structure reflecting the portfolio performance.

Since many Sellers write off Receivables on the basis of fiscal reporting time frame rather than a consistent policy based solely on the performance of the Receivable, the most common approach to estimating losses is to calculate a proxy for loss by comparing delinquencies with sales in the period they were generated. This is then compared to a horizon ratio calculation that determines a factor of the number of months of sales that remain as uncollected receivables in the eligible pool balance.

Assuming the Seller can provide data as set out above, enforces 30 day payment terms for invoices, and operates in an industry where 90 day delinquency often leads to charge-offs, DBRS would calculate a proxy for potential loss rate in a particular month by dividing the amount in the 91-120 days outstanding bucket, plus charge-offs, by the sales for the month four months prior to that month.

The second part of the calculation compares the level of eligible Receivables with the sales volumes over the time frame in which they were created. For example, assuming 30-day payment terms, if Receivables were eligible up until they were 60 days past due, then three months of sales are embedded in the eligible pool of Receivables. The total level of sales for the three months would be divided by the



total of the current, one to 30 days past due and 31 to 60 days past due Receivables.

This methodology compares the level of Receivables migrating through the designated aging bucket determined to be the best predictor of future losses, with sales and the time frame to collect, in the period that those Receivables were created. It is more difficult to rely on open-ended buckets (for example, “change in the level 91 days or greater”) because Receivables that became defaulted in that month are indistinguishable from other factors that might cause the value in that aging bracket to change and in fact could cause a reduction in this calculation. For example, misapplied credit notes or resolved disputes could effectively understate this calculation.

Using this method, to review data over a period of years provides indicative levels of the percentage of sales that become defaulted relative to the sales in the month of their origination. By using an aging bucket such as 90 days past due as the proxy for loss, DBRS is attempting to measure an aging profile in which the majority of future losses will be represented.

The 90-day test is not universally applicable. Some Receivables, such as those relating to perishable food and

oil, are paid in very short time frames – in many cases, within seven to 15 days. For such transactions, DBRS would make appropriate adjustments, using a time frame for deemed defaults that would reflect the normal payment patterns experienced by the Seller. DBRS is looking for a time frame of non-payment that goes beyond the occasional seasonal fluctuation. The time frame ultimately selected should be one that represents a true risk that the related Receivable will ultimately become defaulted with a potential for loss.

To determine which aging bucket is a suitable proxy for loss, DBRS takes the maximum time of delinquency that could take place without causing the Receivable to become ineligible, and adds that to the standard payment terms. In aggregate, it is common that this time frame ranges from 60 to 90 days past due. Looking at historical data, DBRS would determine these amounts and apply the loss rate calculated using the above methodology to calculate the potential amount of losses that would be expected in a wind-down scenario. This would be repeated for each month for which sufficient data was available. DBRS would then multiply by a stress factor in accordance with the table below based on the required transactional rating:

|               | AAA/R-1 (high) | AA/R-1 (middle) | A/R-1 (low) |
|---------------|----------------|-----------------|-------------|
| Stress Factor | 4x – 5x        | 3x – 4x         | 2x – 3x     |

$$\frac{91-120 \text{ Days past due} + \text{charge-offs}}{\text{Sales 4 months prior}} \times \frac{\text{Sales previous 3 months}}{\text{Eligible Receivables (3 months)}} \times \text{Stress Factor}$$

This calculation would translate into the following reserve requirements:

|                                  |                |
|----------------------------------|----------------|
| 91-120 days past due receivables | \$525,000      |
| Charge-offs in period            | \$75,000       |
| Sales 4 months prior             | \$150,000,000  |
| Combined sales previous 3 months | -\$550,000,000 |
| Eligible receivables-            | \$200,000,000  |
| Stress factor                    | 5x             |

$$\frac{\$525,000 + \$75,000}{\$150,000,000} \times \frac{\$550,000,000}{\$200,000,000} \times 5$$

Required enhancement = 5.50%

Based on the above calculations, the highest result over the past 12 months would then become the Credit Loss calculation. This conservative time frame is used to ensure that a full cycle passes to capture any seasonality effects that may have had an impact on the reserve calculation prior to reverting to a subsequent lower Credit Loss level.

The stress factor ranges account for the qualitative considerations necessary in trade receivables transactions: stability and health of the industry of the Seller and the Seller’s major customers, Obligor diversity and the Seller’s record of collections, and stable credit policies determine where in this range stress multiples are established. In

addition, the stress factors used for trade receivables transaction are typically less punitive than those used for amortizing assets such as loans. This lower stress level recognizes the short-term nature of most trade receivables and the resulting short time frame that would be available for Receivables performance to deteriorate as well as the other Eligibility Criteria applied to these transactions.

Certain Sellers operate in industries where long delinquencies are common and are accepted as an industry practice, and Receivables are charged off in accordance with more qualitative policies as opposed to aging. In these situations, DBRS may take charge-offs for a given month

and divide by an adjusted loss horizon reflecting the period of origination. The result penalizes the Seller for the lack of predictability of charge-offs in relation to sales figures and also for the possibility that in termination, the Receivables pool purchased by the SPV owns an abundance of these higher risk Receivables.

There are Sellers in certain industries that have had extremely low levels of losses, or that have levels of losses that would be expected to rise significantly if the Seller were to experience financial difficulties. For such situations, DBRS may require a minimum floor credit loss level that exceeds the level calculated using a proxy for loss as described previously.

The process described previously requires considerable time to understand and appreciate the credit risks to which the SPV may be exposed. In a number of cases, this approach must be considered in conjunction with risks associated with Sellers due to concentration issues, specific industry risks (of either the Seller or Obligors), or other considerations that are unique to the Seller. Rated transactions need to be adjusted to meet these challenges, which may materially affect calculated protection levels.

#### Credit Loss Reserve Calculation

When determining the level of Credit Enhancement required for Credit Loss Reserve, DBRS will take the greater of the amount calculated based on Obligor Concentration (15.0%) and Credit Losses (5.5%) including any amounts set as a floor level of enhancement. For the given example, the Credit Loss Reserve would be 15.0%.

#### Replacement Servicer Reserves

DBRS requires amounts to pay for replacement servicing fees be added to the Credit Enhancement required to protect against losses. The amount required for replacement servicing fees would be the market rate for servicing the Receivables involved, typically assumed to be 1% of the face value of the Receivables. The servicing fee must be funded up front (with cash or Receivables). In Canada, Receivables are sold on a fully serviced basis while in the U.S., payment is made by the Finance LLC to the Seller for the servicing of the portfolio.

Servicer reserve = 1.00%

#### Interest Expense Reserve

Trade receivable transactions are typically structured to provide for a discounting of the Receivables based on the expected funding cost of the SPV. For an initial purchase, the Administrator of the SPV would typically take the face value of the Receivables, subtract the overcollateralization reserve to arrive at the amount of Receivables being funded, and then subtract an interest reserve based on estimates of funding cost and DSO. Each month thereafter, the Administrator would adjust this amount based on variances in portfolio performance and expected funding cost.

In establishing the reserve for interest expenses, DBRS assumes that the program will terminate, the existing funding discount is insufficient to cover interest expenses during the amortization period because the DSO would grow significantly, and that interest rates increase significantly.

Stress testing for interest rate risk at the AAA/R-1 (high) level requires reserves that are sufficient to account for the anticipated change in cost of funds during the amortization phase. Typical calculations would consider interest rate increases by a factor of 1.5x over the then-funding rate and for a DSO to increase by 1.25x the most recent history.

This would lead to an interest reserve as follows:

|           |      |
|-----------|------|
| ABCP rate | 2.5% |
| DSO       | 40   |

Interest reserve =  $2.5\% \times 1.5 \times 40/365 \times 1.25 = 0.51\%$

#### Currency Reserve

To the extent that Receivables are originated in multiple currencies, the SPV must set up a currency reserve to protect against the expected volatility of the exchange rate between the currency of origination and that of funding if they are different. This reserve should cover three standard deviations of the mean volatility for the respective currency exchange rate during a month compared with a period equivalent to the collection time frame as represented by each month's then-DSO. Alternate or additional currency hedging products such as swaps or forwards will also be considered depending on the applicability for each transaction. As well, indemnities from highly rated Sellers (A (low) or better) will be considered as a risk mitigant. It would be expressed as a percentage of Eligible Receivables. This would lead to a currency reserve as follows:

|                       |               |
|-----------------------|---------------|
| € receivables         | €10,000,000   |
| € standard deviations | 10% per month |
| DSO                   | 40            |
| Eligible receivables  | \$200,000,000 |

€ receivable x 3 SD volatility x DSO

$\frac{€10,000,000 \times 10\% \times 40/30}{\$200,000,000} = 0.67\%$

### Total Enhancement Requirements

When the total of credit losses, replacement servicing expenses, interest expenses, and currency losses are added together, DBRS determines total Credit Enhancement requirements. While the total calculation is derived from each individual component, overall, the total reserve levels must be available to cover off all of these risks.

Based on the sample reserve calculations, the Total Enhancement would be:

|                              |        |
|------------------------------|--------|
| Credit Loss Reserve          | 15.00% |
| Replacement Servicer Reserve | 1.00%  |
| Interest Expense Reserve     | 0.51%  |
| Currency Reserve             | 0.67%  |
| Total Credit Enhancement     | 16.18% |

In recognition that Receivables performance can vary widely from month to month and migrate over time, DBRS usually requires the use of a dynamic Credit Enhancement reserve, which will adjust according to the performance of the portfolio. This mechanism requires the overcollateralization determined to cover credit losses to

grow as losses grow, or reduce as the performance of the portfolio improves. The time frame for loss comparison is the most recent 12-month performance, so the Credit Loss Reserve will adjust upwards quickly as a portfolio begins to deteriorate, but will not reduce until a full annual cycle has occurred to ensure that the higher level of credit loss was a one-time anomaly rather than a shift in the portfolio performance.

For example, if the Credit Loss Reserve was established as a 5x multiple of 2% loss ratio (for a total of 10%), which was the highest level of credit losses, the enhancement mechanism might call for a floor of this amount, with a similar 5x multiple applied to all credit losses going forward. That is, if losses in future months were to exceed 2%, to an amount of 3%, enhancement would build to cover this risk to the same multiple, to 15%. When replacement servicer fees, interest expenses, and currency reserves totalling 4% were included, this would bring total Credit Enhancement from 14% to 19% until losses returned to lower historical performance levels.

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### DILUTION RESERVE

Many Sellers experience dilution in their Receivable pools. Volume rebates, early payment discounts, disputes over quality/quantity/delivery, and retroactive price adjustments are common sources of dilution. Dilutions are a very important consideration in trade receivables transactions because the premise for the securitization is sufficient protection for the notes, assuming bankruptcy of the Seller. Since dilutions reduce the amount of Receivables to which the SPV is entitled, it is essential to provide the SPV with access to additional Receivables in the event that dilutions reduce the value of Receivables owned by the SPV. For a typical transaction where Receivables revolve, dilutions are dealt with through “deemed collections” provisions. For any Receivable that is diminished, retroactively discounted, or where amounts due have otherwise been reduced, the amount of the Receivable is a “deemed collection” by the Seller and payment is required to be remitted to the SPV.

Sizing the dilution reserve presents some challenges because dilution levels can be volatile. Certain types of dilutions, such as volume rebates, can be readily estimated and are usually predictable. As a result, stress multiples for such considerations are modest. Other dilutions, such as those related to price adjustments due to swings in the commodities market, and discounts due to late shipment or unsatisfactory quality, are neither predictable nor stable.

They may be linked to weakness in the Seller’s industry overall, Seller-specific factors such as the opening of a new production facility, or other events that are not under the control of the Seller. As a result, stress multiples for such dilutions are much higher. For a Seller with stable and predictable dilution patterns, DBRS would take monthly dilution data and divide by the sales for the previous month that reflects the month in which the diluting sales occurred, stressed at a two times level on a trailing 12-month basis. For Sellers with more volatile dilutions, DBRS will use three times the highest dilution percentage. Adding this to the level of predictable dilutions stressed to a modest level will result in the required dilution reserve.

If dilutions have historically been stable, depending on the magnitude of potential dilutions in relation to total enhancement levels, the nature of the Receivables and Obligors, and other risks of the transaction, DBRS may allow an indemnity against dilutions to take the place of a funded dilution reserve for Sellers rated A (low) or higher. When combined with the Maximum Funding calculation described earlier, this ensures that sufficient coverage against non-cash adjustments exists in the transaction that the SPV will have access to unadjusted Receivables during an amortization.

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### SUMMARY

DBRS’s approach to trade receivables securitization is to identify and quantify the risks associated with this asset class. Broadly speaking, they relate to two separate areas: the performance of the pool of assets and the Seller’s capability as Servicer. By focusing on how these risks impact each other, ensuring that appropriate measures exist

to monitor the pool performance, and employing a dynamic reserve that adjusts with the portfolio performance, DBRS believes the methodology employed to structure trade receivables transactions will significantly enhance the likelihood of full repayment of funds deployed by the SPVs to enter into these transactions.