

Methodology

*Rating Canadian Auto
Lease Securitizations*

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Insight beyond the rating.

CONTACT INFORMATION

Tim O'Neil

Vice President
Canadian Structured Finance
Tel. +1 416 597 7477
toneil@dbrs.com

Jamie Feehely

Managing Director
Canadian Structured Finance
Tel. +1 416 597 7312
jfeehely@dbrs.com

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Introduction

There have been a number of market developments since the last update of the DBRS methodology for rating Canadian auto leasing securitization in January 2009 that have affected the auto lease securitization market in Canada, including the following:

- A significant decrease in the availability of lease financing.
- The re-emergence of lease-like loan products (buyer's choice financing programs).
- Increased regulatory oversight.
- The growing acceptance by investors of monthly pay amortizing bonds.
- A decrease in the number of auto finance companies accessing the securitization market.
- An increase in the size of the average securitization transaction pool.
- Continued stable delinquency and loss performance statistics through a global financial crisis that included the bankruptcy and re-emergence of Chrysler LLC and General Motors Company.

While leasing continues to be a popular alternative for consumers, the availability of lease financing has decreased significantly since mid-2008 as mounting losses on vehicle turn-ins forced manufacturers and finance companies to re-think their participation in the auto leasing market. Some no longer offered lease financing to customers, while others significantly modified the residual value determination process in order to lower loss severity from high turn-in rates as used-vehicle values were negatively affected by a strong Canadian dollar and historically high fuel costs. Following GMAC Inc.'s transition to Ally Financial Inc. (Ally) in 2009, Ally, as a regulated financial institution, is no longer permitted to offer lease financing to its customers in Canada through Ally Credit Canada Limited (Ally Canada).

The regulatory restrictions on Ally Canada to offer lease financing to its customers has led to the re-emergence of buyer's choice programs in the Canadian auto financing market. Depending on the specific details of the buyer's choice program, DBRS will approach the transactions as a lease transaction to the extent that there is a risk or "put option" on the contract that allows the vehicle to be returned to the seller at a pre-determined date. An additional challenge to rating buyer's choice programs arises from the lack of historical data available to infer meaningful performance assumptions, resulting in the application of more conservative assumptions when evaluating transaction enhancement proposals.

The collateral backing auto ABS continues to be made up of consumer leases to prime-rated obligors (with very little super-prime or sub-prime participation in the Canadian securitization market) on numerous vehicle types. The value of the underlying collateral in the used market continues to fluctuate as it is affected by the global forces of supply, demand, oil prices and, in Canada, foreign exchange rates.

Regulatory oversight by Canadian and U.S. regulators has affected all stakeholders, with additional disclosure and reporting requirements being placed on issuers, underwriters and credit rating agencies in an effort to increase transparency in ABS transactions. The Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act) has resulted in additional disclosure and processes affecting public securitization transactions rated by DBRS in Canada, including the requirement to comply with the U.S. Securities and Exchange Commission (SEC) Rule 17g-5 and Rule 17g-7 specifically. Undoubtedly, this area will continue to evolve in the years to come.



The following describes the DBRS rating approach for retail auto lease transactions. The approach is designed with the goal of maintaining rating stability through a complete economic cycle. The methodology is divided into four main sections:

- **Background Information:** Auto lease financing in Canada.
- **Portfolio Review:** The analytical process, including review of the originator/seller and its historical auto lease performance.
- **Lease Pool Review:** Specific review of the composition of the pool in estimating a base-case cumulative credit and residual value loss expectation.
- **Additional Structural Considerations:** Includes a discussion on minimum rating criteria, excess spread and other structural considerations that affect the rating assessment.

Although all auto finance securitizations are somewhat linked to the health of the captive finance company (as it generally performs the servicing role), auto lease transactions are more reliant on the related auto manufacturer and servicer than auto loan transactions because of the large exposure in the transactions related to residual value (see the tables on page 19 and on page 21).

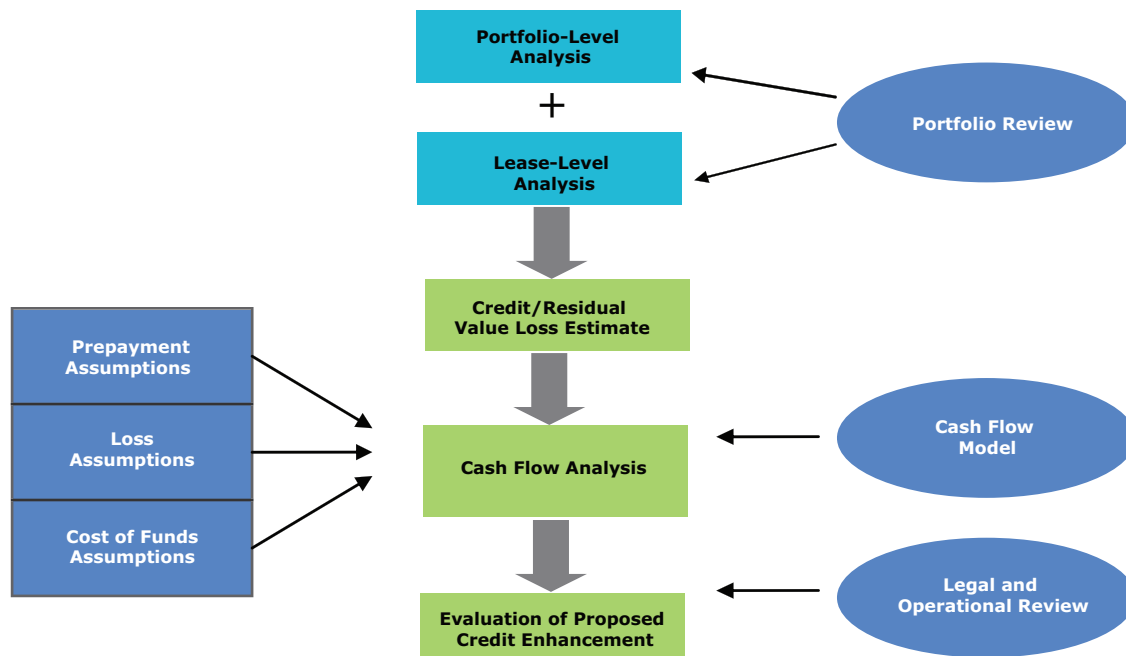
Against this backdrop, DBRS has updated its auto lease methodology and has made only minor changes as the performance and robustness of the approach to rating securitizations backed by auto lease portfolios has continued to support rating stability, even through the lowest points of the recent economic cycle.

APPLICATION OF CANADIAN AUTO LEASE METHODOLOGY

The following diagram describes the overall process used by DBRS to analyze a Canadian auto lease transaction.

- DBRS conducts portfolio-level and lease-level analysis in order to establish a base-case expected cumulative credit and residual value loss.
- DBRS performs a cash flow analysis using a proprietary financial model that incorporates assumptions regarding prepayments, default rates, recoveries and cost of funds in order to assess the adequacy of the proposed credit enhancement supporting each rating level.
- The legal and operational aspects of the transaction are reviewed and taken into consideration in addition to the enhancement proposal.

DBRS Rating Process for Canadian Auto Lease Transactions



Background Information

AUTO LEASE CONTRACTS

A closed-end vehicle lease is a contract between two parties, a lessor and a lessee, in which the lessee agrees and is obligated to make periodic payments (referred to here as monthly lease payments) to the lessor in exchange for the right to use a vehicle for a specified term and mileage. This contract also grants the lessee the right to purchase the vehicle at the end of the lease term for a predetermined price, typically known as the contracted residual value. In exchange for granting the lessee the right to use the vehicle, the lessor receives a series of periodic payments over the term of the lease in its capacity as lender/owner and, at the end of the term, the lessor receives one of two assets: either cash equal to the contracted residual value or the vehicle itself, depending on the lessee's choice to exercise the purchase option.

Open-end leases are also available in the Canadian market and are more often seen in the fleet-leasing industry. An open-end lease is one in which the contracted residual value is guaranteed by the lessee. From a risk perspective, open-end leases transfer the residual value risk at the end of the lease from the lessor to the lessee. Notwithstanding the differences in residual value risk, the DBRS methodology for rating auto lease portfolios can be applied to a portfolio of closed-end leases or a portfolio of open-end leases.

BENEFITS OF LEASING

Since the mid-1990s, leasing has become an accepted financing alternative for consumers interested in acquiring the right to have access to a vehicle without the requirement of ownership. Leasing has also provided attractive financing for businesses and corporations interested in acquiring the use of a larger number of vehicles (referred to as fleet leasing) for use by their employees. Several characteristics unique to leasing have contributed to the acceptance of this alternative form of automobile ownership:

- **Affordability:** Monthly lease payments usually compare favourably with loan payments (assuming similar underlying variables including length of contract, vehicle value and financing costs) since each lease payment is structured in such a way that customers only pay for the value of their vehicles while they are using it.
- **Optionality:** The lower contracted monthly payments also provide optionality to the consumer with respect to the unfinanced portion of the car since a lease also grants the lessee the option to purchase the vehicle at the end of the lease term. The end-of-lease purchase price, or contracted residual value, is set at the inception of the lease, based on estimations of the vehicle's future value. At the end of the contract period, the consumer has the choice to exercise this purchase option or return the vehicle to the lessor without penalty or obligation beyond the terms of the agreement (which typically include costs associated with excess wear and tear as well as excess mileage). This option is preferred by many consumers, particularly those who want access to a newer vehicle on a more frequent basis.
- **Tax Advantages (Business):** In Canada, businesses that lease vehicles can sometimes receive greater tax deductions than they otherwise would from the capital cost allowance (CCA) deduction that comes with vehicle purchases. This is simply because the monthly payment is greater than the CCA allowable limit, which is based on the useful life of a vehicle, which is typically longer than the term of the lease contract.
- **Tax Deferral – Canada:** In Canada, sales taxes, including the provincial sales tax (PST), goods and services tax (GST) or harmonized sales tax (HST), are only applied to the down payment and monthly payments. As such, the taxes paid over the life of a lease are considerably less than those for an identical vehicle purchase. This is due to the lower payments associated with leases (i.e., the contracted residual value is not taxed unless the purchase option is exercised; the costs of financing the contracted residual value, however, are taxed but on the monthly payments rather than up front). Accordingly, all consumers are effectively able to defer sales taxes on the contracted residual value indefinitely.

Lease Mechanics and Inherent Risks

HOW A LEASE WORKS

Within the framework described above, it is important to understand the determinants of the lease payment, which depend on the same four factors used as a basis for any financing: interest costs, term or duration of the lease, initial principal and ending principal. The lease payment, however, is best thought of as a sum of payments on two distinct principal amounts: the amortizing portion of the lease and the contracted residual value.

The first principal amount, the amortizing portion, is the total value financed (i.e., the total cost of vehicle less any down payment) over and above the contracted residual value. This portion of the lease behaves like a loan as its payments are structured to amortize this value to zero by the end of the lease term.

The second of these principal amounts, the contracted residual value of the lease, is constant (i.e., non-amortizing) over the term of the lease. Each period, the lessor receives a payment representing interest on this principal amount. The principal itself is essentially a bullet obligation that the consumer has the option of paying in full at the end of term, either in the form of cash or by returning the vehicle.

Accordingly, the monthly lease payment is the sum of the required payments on these two principal amounts, as calculated based on the characteristics of the lease. Additionally, at any point, the net book value of the lease is the sum of the contracted residual value and the outstanding principal on the amortizing portion of the lease. Since the contracted residual value does not amortize throughout the lease, there is a floor on the book value of the lease.

HOW A LEASE AND A LOAN COMPARE

It is important to outline the calculations for the lease-versus-loan decision that most consumers face and highlight the benefits and drawbacks of each option. This can be achieved by considering the hypothetical vehicle purchased in Ontario below.

Sample Vehicle Purchase

Pre-Tax Price	\$30,000
Term	48 months
Finance Rate	5.75%
Contracted Residual Value	40% or \$12,000
Taxes (Ontario HST)	13%
Down Payment	\$0 for Lease and Loan Options

For the loan, the required monthly payment is \$792.26, which over 48 months will amortize \$33,900 of principal (\$30,000 + 13% taxes) and also cover \$4,128.61 of interest charges at the assumed rate of 5.75%. In exchange for these cumulative payments, the consumer who chooses the loan option would have no further obligations owing for the vehicle at the end of the loan term.

With the lease option, pre-tax monthly payments of \$540.33 are sufficient to amortize \$18,000 of principal, pay for \$2,983.78 of taxes and cover \$4,952.18 of interest costs for both the amortizing portion of the loan and the interest costs of carrying the remaining \$12,000 of contracted residual value. In exchange for these cumulative payments, the consumer who chooses the lease option would have the option to purchase the vehicle outright for \$12,000 plus \$1,560 of applicable taxes at the end of the lease term.



Based on these calculations, some important conclusions can be drawn:

- For two identical vehicles, assuming that they are financed over the same term and interest rate, the lease option will always require a lower monthly payment than the loan option.
- If a consumer's end goal is to own the vehicle, the lease option will almost always require a greater total outlay of cash than the loan option. The exception to this is when the financing rate is zero. It is important to note that the higher cost of ownership through a lease stems from financing costs and the slightly higher tax payments that must be made if the option to purchase is exercised. Accordingly, the difference in the aggregate cost of ownership between loans and leases approaches zero as rates are increasingly subvented.
- The purchase with loan financing requires the consumer to pay all applicable taxes at the outset of the transaction. For the lease, the customer only pays taxation charges on the value of each monthly payment and defers the remaining tax liability to the final payment required if the option to purchase is exercised.

RISKS TO THE LESSOR

Credit Risk

Since a vehicle lease is simply a credit obligation supported by physical collateral, the lessor's exposure is the difference between the book value of the outstanding obligation and the net market value of the vehicle supporting the obligation. From the lessor's perspective, key characteristics of leases versus loans are the following:

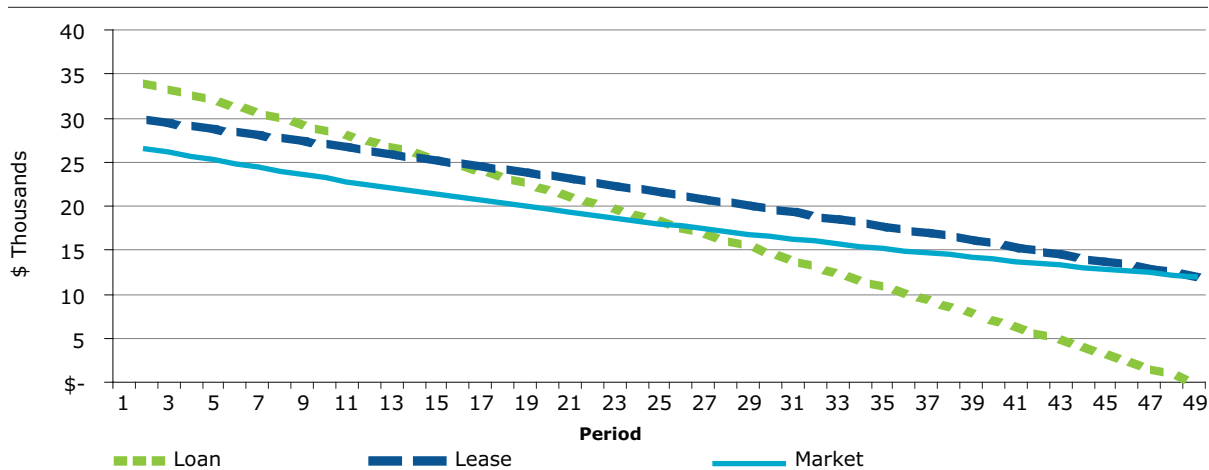
- **Loan – Outstanding Principal:** At the outset of a loan transaction, the total cost of the vehicle (including taxes) must be assessed. In keeping with the previous example, this cost is \$33,900. Since there is no down payment in this example, the loan principal must also be \$33,900. Over the course of 48 months, the loan is scheduled to fully amortize the principal.
- **Lease – Outstanding Principal:** A lease transaction is different in that taxes are only applied to payments being rendered. If there is no down payment, as in this example, then there are no tax costs up front. Accordingly, the initial lease principal is \$30,000 compared with \$33,900 for the loan. Over the course of 48 months, the lease is scheduled to amortize the principal to the contracted residual value (\$12,000).

Although the loan begins with a higher principal balance than the lease, the loan fully amortizes, implying that there must be a point at which a crossover occurs. At this crossover point, the outstanding lease principal is greater than the outstanding loan principal. In the example above, that point occurs in month 15 (see the graph below); therefore, it can be said that from month 15 onward, the lessor has greater exposure to loss on a leased vehicle than on a vehicle financed through a loan.

The final element of this analysis is the net market value of the asset, which supports either obligation. Since the market value of the vehicle is independent of how it is financed, it can be inferred that each obligation is supported by an equally valued asset at any time during the term. Accordingly, the loan carries a higher potential loss severity during the first 14 months, while the potential loss severity is greater for the lease beginning in month 15 through to the end of the term.

The graph below illustrates how the three values (outstanding loan, outstanding lease and net market value) compare over time. To approximate the market value of the vehicle, DBRS assumes a 15% immediate decline in value (off-the-lot value) and a constant rate of decline thereafter. For the purpose of this example, we can assume that the residual value set at \$12,000 is a correct approximation of the asset value after 48 months (although this scenario is often not the case).

Risk to Lenders: Gap in Value



Based on this graph, several conclusions can be drawn:

- Initially, a loan exposes a lender to more risk than a lease (month 1 to month 14 in this example).
- For the majority of the term, a lessor faces the greater risk (crossover occurs at month 15).
- Over the term, a loan is scheduled to provide the consumer with an equity position (i.e., market value of the car exceeds remaining principal on the loan) in the asset (in the current example, this occurs at month 25).

The mapping of the net market value line in the graph assumes that the contracted residual value of the vehicle is set accurately. Essentially a forecast, the estimated market value at the end of the lease term is unlikely to be exact. However, as a starting point for the analysis, every finance company begins with an estimate of the asset's market value. From that point, there are several variables or strategic considerations that may influence how the contracted residual value is determined and how it can expose the lessor to incremental risks.

BENEFITS TO THE LESSOR

In determining the benefit that the lessor accrues from a transaction, a distinction must be made between the two main categories of lessors: independent finance companies, which typically have no affiliation to manufacturers, and captive finance companies owned by or affiliated with manufacturers, a relationship that can augment a group sales and production strategy. Creating a distinction between these two types of lessors is important because they can have different characteristics with respect to size, business mix, scope and strategic objectives.

Independent finance companies are typically small, local operators that rely on the performance of their portfolio of leases for profitability. As such, they typically do not compete with the larger captives and instead focus on niche segments, including vehicles for which no manufacturer incentives exist, small fleets, customers who do not want fixed lease terms and specific trades. These operators commonly set residual values below expected market value in their contracts.

An automobile manufacturer's captive finance company typically tries to align its goals with the strategic objectives of the overall group (i.e., maximizing sales and profitability). Accordingly, strategies to increase sales and profitability for the group as a whole can include helping to increase sales volumes of specific low-margin models by introducing the use of financing incentives such as subvented interest rates or by subventing contracted residual values at rates that are greater than anticipated market values. These strategies have the effect of lowering the monthly payments required by the customer, with the ultimate goal of increasing sales volume for the group. The costs of such incentives are traditionally borne by the manufacturer and sometimes shared by the finance company. Nevertheless, they are critical for the purpose of assessing the risk of any pool because they influence consumer behaviour.



Portfolio Review

In analyzing auto lease securitization transactions, DBRS may assign short-term or long-term ratings to the securitization transaction rated. The DBRS short-term debt rating scale provides an opinion on the risk that an issuer will not meet its short-term financial obligations in a timely manner. Ratings are based on quantitative and qualitative considerations relevant to the issuer and the relative ranking of claims. The R-1 and R-2 rating categories are further denoted by the subcategories “high,” “middle” and “low.”

The DBRS long-term rating scale provides an opinion on the risk of default. That is, the risk that an issuer will fail to satisfy its financial obligations in accordance with the terms under which an obligation has been issued. Ratings are based on quantitative and qualitative considerations relevant to the issuer and the relative ranking of claims. All rating categories other than AAA and D also contain the subcategories “high” and “low.” The absence of either a “high” or “low” designation indicates the rating is in the middle of the category.

CREDIT LOSS ANALYSIS

Note: The following is an abridged version of the process DBRS follows to arrive at an estimated base case cumulative credit loss. Please refer to the DBRS methodology *Rating Canadian Auto Loan Securitizations* for a complete discussion.

Originator Review

The portfolio review includes an in-depth analysis of the originator (seller/servicer) covering macroeconomic and microeconomic issues, including its access to funding; underwriting standards, such as its credit and collection policies and specific offerings of the seller with respect to loan and lease programs; vehicle valuation; credit and residual value loss analysis; prepayments; seasoning; servicing; interest rates; delinquencies; repossession rates; turn-in rates; and recoveries. The originator’s credit rating, parent company support and management are also reviewed to measure the capabilities of the seller as an originator and servicer of a securitization transaction.

Historical Portfolio Analysis

In arriving at a base-case expected cumulative credit loss for a specific pool of assets that will be securitized, DBRS relies on a minimum of three to five years of historical experience. DBRS’s analysis of credit risk begins with the historical information on the rate of delinquencies, defaults, gross losses, net losses and repossession that a particular finance company has experienced in its lease portfolios. Consideration is also given to the composition of the pool in terms of new versus used, make, model and term of the lease contract. DBRS also reviews the concentration of vehicle type within a portfolio. For example, in the event of a significant increase in gasoline prices, smaller, fuel-efficient vehicles would have significantly different loss statistics than their larger counterparts, including trucks, sport utility vehicles (SUVs) and minivans.

In assessing credit risks inherent in lease and loan portfolios, there are risk factors present in lease portfolios that do not exist in loan portfolios, including the following:

- As seen in the graph in the next section, under a lease transaction, lessors face the risk of greater losses beginning approximately in month 15 (compared with a loan transaction). The importance of this inflection point (i.e., risk of loss shifting to the lessor) becomes evident when reviewing historical statistics on the actual performance of lease and loan portfolios.
- Additionally, captive finance companies risk increased losses to their portfolios in highly competitive markets as a result of aggressive residual value setting, downward pricing pressure in the used-car market caused in part, by higher turn-in rates and lower pricing on new vehicles. These factors also influence the magnitude of losses on repossession when such action is necessary.



Conversely, there are factors that can have a positive impact on overall credit risk, including the following:

- Leases have lower initial loan-to-value (LTV) ratios, as taxes do not factor into the principal amount.
- Leases tend to be written on newer vehicles, which typically outperform used collateral from a credit and collection viewpoint.
- Leases generally attract customers with credit scores that are often better than loan obligors.

Historically, most captive finance company data indicate that static lease pools do not have credit loss performance that is materially different from the performance seen in loan portfolios, suggesting that, from a credit perspective, the above factors can offset each other.

Lease Pool Review

Determining an appropriate rating (short term or long term) involves a detailed review of the specific pool of assets to be securitized in addition to the portfolio review. The review process for a pool of consumer lease assets involves an analysis of the composition of the pool of assets to estimate the total potential loss arising from credit and residual value losses. The process for determining the base-case expected cumulative credit loss in the proposed pool is outlined in detail in the DBRS methodology *Rating Canadian Auto Loan Securitizations*. Briefly, the expected loss is derived from a review of the pool based on its composition. The remainder of the discussion involves the specific process DBRS follows in arriving at loss expectations for the residual value losses to which lease transactions are exposed.

RESIDUAL VALUE LOSS ANALYSIS

Residual value losses arise when the market value of the vehicle at the end of the lease is less than the contracted residual value of the vehicle. The contract residual value is set at the inception of the lease and represents the unpaid principal portion of the amount financed on the vehicle. Since one of the key features of a lease is the ability of a consumer to return the vehicle at the end of the lease rather than retain the vehicle and pay the remaining principal owing (i.e., the contract residual value), any vehicle returned to the finance company with a market value less than the contract residual value will incur a residual value loss.

Prior to analyzing the pool, DBRS will have gained an understanding of the seller's residual value setting policy through its operational and portfolio review. In setting residual values, the finance company has the following options:

- **Contracted Residual Value Is Less Than the Estimate of Market Value:** Setting the contracted residual value below what the lessor estimates the true market value of the vehicle will be at the end of the lease term has the effect of increasing the required monthly payments from the lessee. Over the term of the lease, however, the cumulative payments the lessor receives are higher and, at the end of the term, the lessee would be more likely to exercise the purchase option as the required payment would be lower than the expected market value. Although, from a risk perspective, this choice seems to be the most desirable one, it is not commonly chosen by finance companies because of the higher required monthly payments, which could reduce sales volume relative to other makes and models (which may have more aggressive residual value settings). Some smaller finance and leasing companies do, however, employ this method of residual value setting.
- **Contracted Residual Value Is Greater Than the Estimate of Market Value:** Setting a contracted residual value higher than what the estimated true market value of the vehicle will be at the end of the lease term has the effect of decreasing the required monthly payments from the lessee. Over the term of the lease, however, the cumulative payments the lessor receives will be lower and, at the end of the term, the lessee would be less likely to exercise the purchase option as the required payment would be greater than the expected market value. This choice is the least desirable from a risk perspective since it would

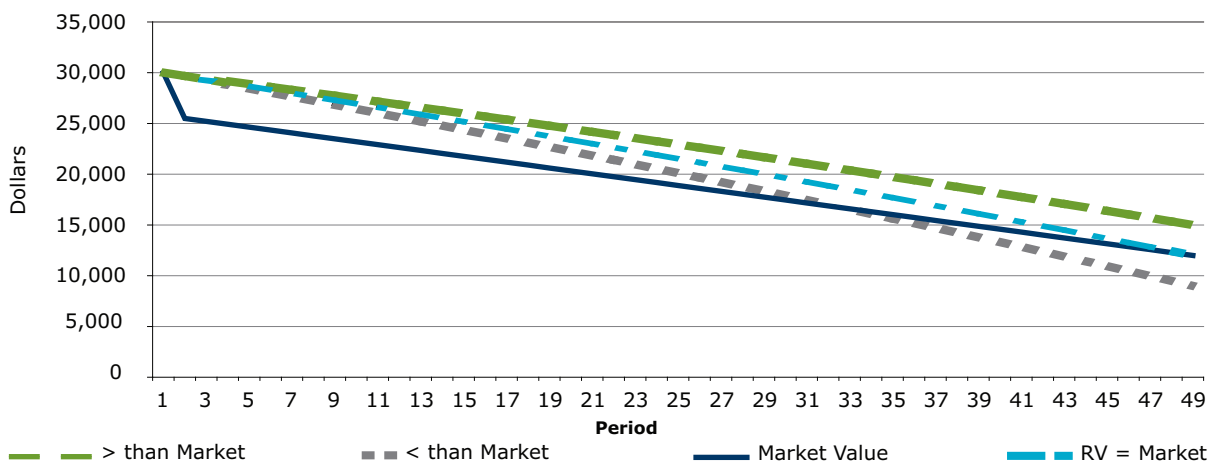


result in a greater likelihood of a residual value loss for the finance company. Practised on a large scale, this method results in a high concentration of losses to the lessor as most customers will be more likely to choose to return the vehicle.

- **Contracted Residual Value Equals Estimate of Market Value:** Setting a contracted residual value that is equal to the estimate of the true market value of the vehicle at the end of the lease term results in the intrinsically correct required monthly payments from the lessee. Over the term of the lease, the lessor would receive cumulative payments commensurate with the value of the vehicle and, at the end of the term, the lessee would theoretically be indifferent to exercising the purchase option as the required payment would be equal to the expected market value. Although this is the most desired approach, achieving it on a large scale or for an entire pool of lease assets is not considered practical given the uncertainty and potential volatility of future used-vehicle prices.

The graph below illustrates how these three residual value-setting options compare over time in the context of the lease example stated above. The base case for this example has the residual value equal to expected market value (RV = MV), where residual value is set at 40% of the initial value (\$12,000). For the case where the residual value is greater than the expected market value, the residual value is set at 50% of the initial value (\$15,000), while for the case where the residual value is less than expected market value, the residual is set at 30% (\$9,000).

Risk to Lessor – Residual Setting

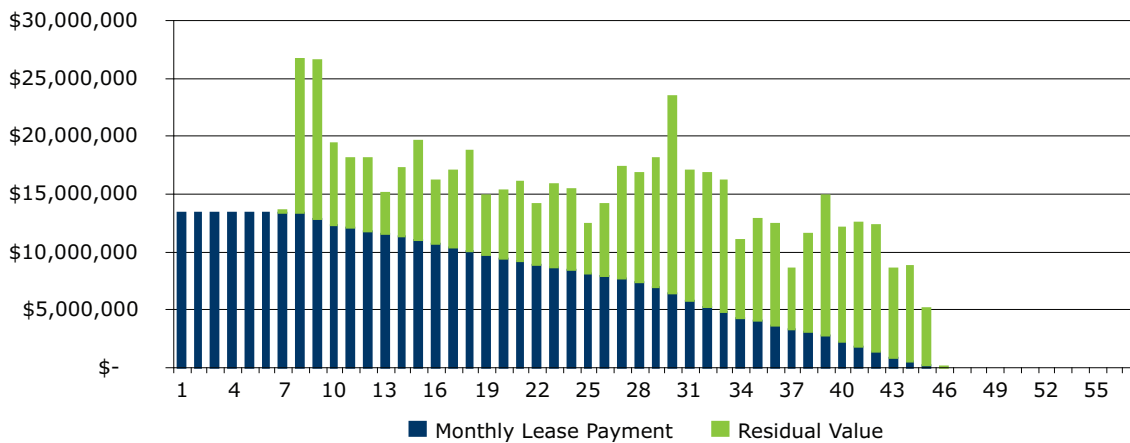


When estimating residual value risk in a proposed pool, DBRS assumes that consumers are informed of the market value of their vehicles and will act rationally based on that knowledge. By assuming rational behaviour, DBRS expects that a consumer who has the option to purchase a vehicle at less than its market value will do so. Conversely, a consumer who knows that the contracted residual value is higher than the market value of that vehicle is likely to return the vehicle to the lessor and in so doing transfers the loss to the lessor. In the case of securitized auto lease transactions, the structure would need to absorb the loss sustained under this common scenario.

The graph above represents just one vehicle. It is important to note that a securitization of a pool of consumer lease assets includes thousands of individual leases in Canada. As a result, the potential residual value loss increases as the size of the pool increases and can be quite high. As can be seen in the graph below, the structure is somewhat mitigated by the timing of the maturity of the individual leases, which are spread throughout the term of the transaction. However, the magnitude of the residual value portion of an auto lease transaction warrants a conservative approach in the rating assessment.



Cash Flow Runoff



Source: DBRS.

EXCESS WEAR AND TEAR

Additional costs that affect the marketability of the vehicle at the end of term, including excess mileage or damages, can also influence the lessee's purchase decision. Essentially, costs to cover excess wear and tear are levied only if the lessee returns the vehicle. A simple example illustrates this point. A lessee has a vehicle whose lease term is expiring and has a contracted residual value of \$12,000 and a market value of \$11,000. All else being equal, the lessee may choose to return the vehicle and purchase one on the market for \$1,000 less. If the same consumer, however, has accrued \$2,000 in charges of excess wear and tear, he or she may choose to forgo those costs by purchasing the vehicle for the \$12,000 contracted residual value.

TURN-IN RATES AND SURVIVORSHIP

A residual loss can only be incurred when a consumer returns the vehicle to the lessor at the end of the contract term. The total number of customers that return their vehicles at the end of their respective lease terms is referred to as the turn-in rate. As the turn-in rate increases, the potential loss to the lessor increases. As a result, the turn-in rate is one of the most important factors in the residual value loss analysis.

Third-Party Residual Value Analysis

Because residual values are set by the financing company, DBRS expects that the contract residual values in a proposed pool of assets for any lease transaction it rates will be benchmarked to a third-party entity, such as Automotive Leasing Guide (ALG). The starting point for determining a turn-in rate is the result of the comparison of the contracted residual values with an independent third party's vehicle-by-vehicle assessment of the residual value. The total number of vehicles in the pool that can be considered scheduled turn-ins is based on the expected negative equity position of those leases (i.e., the third-party expected residual value is less than the contracted residual value) at the end of the lease terms. Under a AAA third-party stress scenario, this number of scheduled turn-ins will typically be very close to (but not equal to) 100% of the leases, with those not scheduled to be turned in having no impact on potential losses (or gains) since we assume that they will be kept by the lessee.

Accordingly, the turn-in rate is applied to all leases for which the third-party residual value estimate in the relevant stress scenario is less than the contracted residual value.

Of those vehicles scheduled to be turned in, there is an upper bound of 100% with respect to the turn-in rate. It is DBRS's position that, particularly under a stressed scenario, a turn-in rate of 100% can never be realized because not all vehicles will make it to the end of term. Even in an unstressed environment, this would never be the case as there will always be some early terminations (e.g., arising from default-triggered repossessions), while other vehicles will inevitably be stolen, written off as a result of an accident



or see their lessees move abroad or otherwise experience lifestyle changes (e.g., new families and children) that may affect their need for a replacement vehicle. In these cases, the lease will expire prior to its scheduled termination and is unlikely to generate a meaningful loss.

Of the many factors leading to early termination, the repossession rate has the largest influence on turn-in or survivorship rates, particularly in a stress scenario where that rate is assumed to be several multiples of the historical level.

Survivorship essentially refers to the proportion of all leases on which all scheduled payments are successfully made to the end of term and where the point arrives that the lessee must choose to turn in the vehicle or exercise the purchase option. Under stressed scenarios, DBRS uses a maximum of 90% of leases that will actually survive their full term. The following table illustrates the turn-in rate applied to survivors and what that rate implies on an aggregate basis.

Summary of Turn-In Rate Assumptions Applied to Lease Transactions

Rating Level	Reach End of Term	Turn-In Rate	Aggregate Turn-In Rate	Applied Turn-In Rate
AAA	90.0%	100.0%	90.0%	85.0% to 95.0%
AA	90.0%	95.0%	85.5%	80.0% to 90.0%
A	90.0%	90.0%	81.0%	75.0% to 85.0%
BBB	90.0%	85.0%	76.5%	70.0% to 85.0%

It is important to note that discussion of turn-in rates does not apply to vehicles for which the comparison of the relevant third-party residual value estimate with the contracted residual value determined that the vehicle would be retained by the lessee, even though this is relatively infrequent in current pools of leased vehicles. Additionally, historical turn-in rates can be interpreted as a good indication of how well residual values are being set by lessors, assuming that stressed turn-in rates do not incorporate a “multiples” analysis, which is common in the credit analysis of the transaction. Limited consideration is given to portfolios that have experienced very low (less than 20%) turn-in rates historically. However, this is not the norm nor do we anticipate that this trend will rise in the current economic environment.

Specific marketing programs that provide an option for the consumer to “put” the vehicle back to the finance company are one such example where lower turn-in rates are to be expected. In these instances, a review of the conditions under which the vehicle can be returned to the seller, including the third-party residual value estimate, will be considered as part of the analysis in determining an appropriate turn-in rate for the pool of leases securitized.

RESIDUAL VALUE LOSS ANALYSIS

In order to ensure that an unbiased estimate of residual value is used, the estimated market value of the vehicle at lease maturity by a recognized third-party source is used in the analysis. DBRS believes that a recognized third-party entity provides the most reliable and unbiased estimate of the market value of each vehicle as it is solely in the business of assessing these values, taking into consideration industry trends, economic conditions, production pipelines and other factors to assess the demand for and supply of various vehicles in the resale market.

The third-party source typically provides the expected market value for each vehicle if it is returned in “clean” condition and if it is returned in “average” condition. The average value is less than the clean value and is considered a more appropriate indicator of value as it is representative of the bulk of vehicles in use, accounting for reasonable mileage levels, some wear on the vehicle, nicks and scratches and other indications that affect the value of the vehicle.



Fluctuations in fundamental economic indicators can also have significant impact on the resale value of vehicles in Canada. For example, a rapid appreciation of the Canadian dollar can result in an arbitrage opportunity whereby the same vehicle in the United States is temporarily less expensive than its Canadian counterpart. This pricing arbitrage effectively suppresses used-vehicle values in Canada until the market stabilizes with price adjustments. Similarly, a rapid increase in the price of oil has the effect of reducing the resale value of large trucks and SUVs relative to the original end-of-lease value, which was assumed prior to the increase in the price of oil. As a result, economic fluctuations can lead to a decline in the price of used vehicles, which in turn leads to greater losses as more and more lessees exercise their options to return their vehicles to the lessor. As previously noted, this has the effect of concentrating the losses at the lessor level. It is precisely this type of scenario that DBRS is most concerned about when examining lease pools and applying stress factors to the critical variables in the methodology, including the process for setting residual value and the assumptions for turn-in rates.

EMBEDDED RESIDUAL VALUE LOSSES

In estimating an expected residual value loss, the third-party estimated residual value is compared with the contracted residual value. In many cases, the third-party average value is often lower than the contracted residual value, indicating that the third party expects the vehicle in question to be worth less than the contracted residual amount at lease maturity. In such a case, it is assumed that the lessee is likely to return the vehicle at the end of term (as they would be out of the money), leaving the lessor exposed to a loss on the sale of the asset. There will be some vehicles where the opposite is true; however, no netting of gains or losses is assumed by DBRS since it is assumed that lessees would exercise the purchase option, leaving only losses in the hands of the lessor.

This difference between the third-party value and the contract residual value for leases that are out of the money is referred to as an embedded loss; that is, expected losses at the outset of the transaction.

Additional Structural Considerations

REVOLVING POOLS

Revolving securitization structures feature the ability of the transaction to accommodate the periodic addition of new seasoned or unseasoned receivables in the pool. Revolving structures are more common in loan transactions and are not seen in lease transactions because of the complexity and higher risk involved in lease assets. Furthermore, the pool composition after an addition has occurred may differ from the initial portfolio, which may alter the overall risk.

PREPAYMENTS

With a financed lease vehicle, 95% to 99% of Canadian consumers pay their leases on a timely basis, in large part via pre-authorized payment options. Because the cash flow that is used to pay down a securitization is from the receipt of scheduled payments, any payments not on the schedule need to be considered. Payments that are received in advance of the scheduled payment date are called prepayments. When obligors have new cars, they may be less likely to prepay. However, voluntary prepayments result from factors such as obligors deciding to pay off early as a result of trade-ins or sales of the financed vehicles. Rate-driven re-financing takes place infrequently, except in sub-prime pools. Involuntary prepayments are due to liquidations arising from insurance claims or obligor defaults.

Prime ABS prepayment rates are the lowest among the different categories. As with the computed baseline cumulative loss curves, different characteristics exist among the various obligor pools. In Canada, pools of prime obligors exhibit prepayment rates during the earlier stage of the transaction that approximate 1% to 2% of the monthly collections, then trend slightly lower through the remaining life of the deal. In contrast, sub-prime prepayment curves show variation, typically with a sharp peak occurring early in the transaction



that significantly tapers off in the subsequent months. Since prepayment rates include both voluntary and involuntary prepayments, the higher default rates incurred by sub-prime transactions are reflected in the front-loaded nature of the prepayment curve. Subvention tends to reduce but not eliminate prepayments. In keeping with a conservative approach, DBRS generally ignores prepayments in its modeling.

PORTFOLIO YIELD – INTEREST RATES, SUBVENTION AND EXCESS SPREAD

Most auto lease originators provide fixed-rate leases to obligors to finance their automobiles. As noted earlier, lessors incorporate a variety of risk-based strategies to underwrite leases. These strategies often include risk-based pricing, where lessors charge higher rates to obligors that represent additional risk. Historical experience has shown that obligors that borrow to finance used vehicles exhibit performance that suggests that the borrowers, on average, are riskier in both frequency and severity of default than obligors borrowing to finance new vehicles; therefore, the originator may charge higher rates.

Conversely, leases to prime obligors often have subvented rates offered by auto manufacturers to stimulate sales. Any lease offered to an auto finance consumer at a rate that is lower than the prevailing or prime rate otherwise charged to its customers is referred to as a subvented lease. The interest rate on the underlying lease included in a securitized portfolio is a key consideration in determining portfolio risk.

If a subvented lease is included in a securitized portfolio, negative interest rate carry is a likely result since the interest rate on the notes issued to investors will be higher than zero. DBRS reviews the negative carry on a contract-by-contract basis regardless of whether the weighted-average annual percentage rate (APR) on a given portfolio is greater than the cost of borrowing on the issued notes. To avoid the occurrence of negative interest rate spread, subvented contracts included in a securitization pool are discounted at a predetermined rate that is high enough to generate positive cash flow on a monthly basis to cover the cost of funds of the notes, potential replacement servicer fees and other expenses and, in some cases, to generate additional excess interest rate spread available to cover credit and residual value losses.

DBRS considers it important to evaluate the discount rate applied to the portfolio to ensure that future yield on the assets is not advanced prior to it being earned. This occurs when the yield on a contract is higher than the discount rate applied to the pool of assets being securitized. DBRS expects the discount rate applied to a portfolio of vehicle leases for the purposes of calculating the present value of the assets (and, therefore, the amount of notes that can be issued to investors) to be the higher of the discount rate used to create interest on low-yielding assets or the rate on the individual leases in the pool to be securitized.

An alternative option to compensate for insufficient yield on a lease portfolio is to include additional assets to create a yield supplement overcollateralization amount (YSOC), whereby the cash flow generated from the additional leases is sufficient to provide additional cash on a monthly basis to offset the lower-yielding subvented contracts.

In modeling these pools, it is important to make a distinction between the discounted value and the book value. The book value (i.e., the aggregate principal amount of leases outstanding prior to discounting) is used by DBRS to determine the rate of delinquencies and defaults. This value represents the amount of credit at risk for a given transaction, whereas using the discounted value in this case would artificially deflate the loss and delinquency figures and not be a true reflection of the risks inherent in the pool.

Excess spread arises when the interest rate earned on the collateral in the underlying asset pool is greater than the sum of the expenses and funding costs. To the extent that excess spread generates enough cash flow to cover issuer expenses (including any hedging costs) on a monthly basis, any surplus is available to be applied to absorb cash flow shortfalls arising from delinquencies and collateral losses. The DBRS analysis of the additional liquidity excess spread provided to the transaction depends on the structure presented.



While excess spread can be instrumental in helping offset losses in the securitized pool, it is often the case that the excess spread that is not required to cover any cash shortfalls on a monthly basis is released to the lessor, and as a result, it cannot be given 100% credit in the overall enhancement structure. As a result of the combination of credit losses and prepayments that occur throughout the life of the pool, DBRS only gives limited credit to excess interest rate spread unless there is a structural mechanic in the transaction that prevents the release of monthly excess spread to the lessor.

Excess spread is often used not only to absorb losses on a monthly basis, but it is also used to build or replenish any shortfalls in the cash account. The amount of excess spread available to replenish the cash account varies each month and it is affected by factors such as delinquencies, defaults, recoveries and prepayments.

If excess spread is retained in the structure, DBRS will allocate credit to excess spread to the extent that it is available after deducting a provision for replacement servicer fees. However, in most transactions, excess spread that is not applied to cover any cash shortfalls on a monthly basis is released to the lessor and, therefore, is not available to cover any future shortfalls. In this scenario, DBRS will only allocate credit to excess spread for the first 12 months of the transaction given that losses typically do not begin to accumulate until month 12. It should also be noted that excess spread deteriorates quickly in modeling scenarios when defaults and prepayments are incorporated into the analysis.

In summary, the amount of excess spread available is an important determinant of overall enhancement levels and the forms of enhancement used, mainly due to the fact that monthly stressed credit losses will effectively erode most or all available spread, thereby preventing the return of any excess cash to the lessor or the rebuilding of the cash account if it has been depleted to cover interest expenses or losses. Generally, in a lease securitization, excess spread is available to be paid out to the lessor provided losses do not reach a predetermined level. This structural mechanic means that excess spread cannot be accumulated in the cash account to compensate for months when the amount of excess collections is affected by rising interest costs or losses.

HEDGING

As is the case in many securitization transactions, the process of funding retail auto leases introduces a number of risk elements that require structuring support in order to appropriately mitigate the risks, including fixed-rate/floating-rate mismatches, banker's acceptance/commercial paper (BA/CP) basis risk mismatches, prepayment risk and counterparty risk. For the most part, retail auto leases are fixed-rate monthly pay leases; a mismatch occurs when the securitized assets are offered through a conduit issuing floating-rate ABCP or variable-rate notes in the case of public term securitizations or ABS. A common structural solution to mitigate this risk is to use external interest rate hedges that offset the mismatch between the fixed-rate contracts and the floating-rate notes. Hedge arrangements must be in place at closing of the lease securitization transaction to ensure this potential risk is mitigated for the duration of the transaction. The use of hedges introduces counterparty risk and basis risk.

DBRS criteria ensures that the hedge counterparty meets a minimum rating threshold commensurate with the rating of the notes being issued. Additionally, basis risk (arising from the difference between the reference rate on the CP and the reference rate on the hedge or the BA rate) can be mitigated through either cost-of-funds interest rate swaps or through additional enhancement.

Fast pay/slow pay risk, otherwise known as notional risk, which arises when a customer prepays or defaults on the contract, also needs to be considered when a hedge is included in a transaction. The prepayments and defaults change the expected maturity of the portfolio as a whole and DBRS ensures that the hedge is structured to mitigate this additional risk. For a more detailed review of DBRS's hedging criteria, please refer to Swap Criteria for Canadian Structured Finance, available at www.dbrs.com.



LEGAL FINAL MATURITY

DBRS ratings are an opinion of the issuer's risk of default in meeting its payment obligations within the terms of the documentation provided. In evaluating the likelihood of the issuer meeting its payment obligations by the legal final maturity date, DBRS considers various cash flow scenarios. This is an important consideration since the servicer may extend or renegotiate contract terms for a lessee as long as such extensions cannot cause the final maturity of the underlying leases to extend beyond the final maturity of the notes issued in the related securitization. The legal final maturity date of the notes issued in the securitization transaction is generally set to correspond with the latest scheduled maturity date of the collateral in the securitized pool plus six to 12 months to allow for extensions and lagged collections on any defaulted or delinquent contracts.

SERVICING

Although it is clear that underwriting and funding of the leases are among the most crucial functions in the overall process, the servicer plays an equally important role. Collection efforts will range from typical collection activities to a host of stepped-up activities that are consistent with the lessor's credit and collection policies as reviewed by DBRS. Servicers must be experienced at each collection stage, especially late-stage collection and remediation. Given the magnitude of the cash flow owing to the structure in a typical lease transaction, the most significant aspect of a servicer's role involves liquidating the returned vehicles.

Since the efficient servicing of a portfolio is necessary, companies invest heavily in sophisticated systems. Servicers must also have the resources to manage a staff of collectors, end-of-lease-term consultants, remarketing teams and document specialists. Limited financial resources can hamper a servicer's ability to maintain a collection staff that can service delinquent obligors. Access to a financially healthy dealer network, online auction channels and use of physical auctions are critical to ensure returned vehicles are liquidated in an efficient manner with respect to maximization of proceeds and timeliness.

Servicers also need to be conscious of various legal limitations involved in servicing accounts. Compliance with all laws requires a significant effort. DBRS expects to see clear guidelines and effective systems to handle legal requirements when reviewing servicing operations, especially in the sub-prime area. DBRS will review the necessity of a backup servicer on a case-by-case basis. The analysis includes consideration of the credit rating of the various entities involved (e.g., servicer and seller), the likelihood of default, the number of years in business and the track record of the servicer.

SERVICING FEE

The servicing fee is the amount paid to a company hired to service the underlying obligations in the event that the originator no longer acts as servicer. In its cash flow model, DBRS assumes a replacement servicer fee is charged to the transaction from the outset, even if the seller is the initial servicer. DBRS believes a transaction should be established and structured such that it can be run by an outside servicer without any impact on the noteholders. The servicing fee is ultimately a function of the size of the portfolio, the underlying assets and the complexity in managing such assets. As the complexity increases, the cost of servicing such assets will also increase. Likewise, a small portfolio will require a larger fee (defined as a percentage of total assets) as the economies of scale of managing a larger portfolio are no longer available. Based on this review, DBRS will assume an appropriate servicer fee, based on observed market rates for comparable portfolios, which has traditionally been estimated at approximately 1% in Canada for prime portfolios. Most Canadian securitizations backed by portfolios of auto lease receivables include the sale of the assets to the structure on a fully serviced basis, resulting in a 1% cushion in the transaction from an enhancement perspective as long as the seller remains in place as the servicer.



Credit Enhancement Analysis

RESIDUAL VALUE LOSSES

Embedded Losses

From an enhancement perspective, DBRS expects that the securitization structure will include enhancement in the form of cash for 100% of the embedded losses in a particular lease pool at the outset of the transaction. Note that embedded losses generally do not exist in transactions structured to issue notes based on the lower of the contract residual value or the third-party residual value estimate. The calculation of the embedded loss is determined on a vehicle-by-vehicle basis and ignores any vehicles that are projected to yield a residual value gain. The third-party estimate is expected to be as reasonably close to the transaction closing date as is possible.

Residual Value Stress

To determine adequate protection for noteholders, DBRS assumes volatility in the underlying market value of the vehicles caused by unanticipated market developments, leading to a systemic overestimation of market values. One example of such an event is automobile manufacturer insolvency, impairing the resale value of the manufacturer's own vehicles while contributing to an oversupply of vehicles in the resale market, thereby reducing the resale value of similar vehicles. Other examples include severe economic conditions, a change in tax regimes, significant changes in fuel prices and the impact on resale values of future new-vehicle pricing decisions.

The DBRS methodology is based on the assumption that the third-party estimates do not reflect all of the potential factors that could result in a systemic devaluation of the vehicles at the end of the lease term. To reserve for these types of possibilities, DBRS applies an additional stress to the third-party values on a lease-by-lease basis. The severity of the stress depends on the rating being assigned to the notes being issued. The following table indicates the stress levels DBRS applies to the third-party estimate for a series of desired rating levels, assuming the portfolio is reasonably diversified.

Summary of Third-Party Stress Severity

Rating Level	Minimum Stress	Maximum Stress
AAA	22.5%	30.0%
AA	20.0%	25.0%
A	15.0%	20.0%
BBB	12.5%	17.5%

The methodology is best explained through the use of an example: A vehicle has a contract residual value of \$12,000 and a third-party expected value of \$11,000, creating an embedded loss of \$1,000. In applying a AAA stress, DBRS reduces the third-party value by 22.5% to 30.0%. For example, a stress factor of 25% would result in a stressed third-party estimate of \$8,250 ($\$11,000 * (1 - 25\%)$).

The stress is realistic for a AAA risk assessment, in this case, creating a gap in value of \$3,750, or 31.25% of the contracted residual value ($\$12,000 - \$8,250$), which DBRS refers to as the stressed residual value loss.



STRESSED CREDIT LOSSES

For each lease portfolio that will be securitized, DBRS applies a multiple to the expected base-case cumulative loss commensurate with the desired rating (see the table below). The cumulative loss base case is determined with reference to the historical performance of the owned and managed pool for the specific originator of leases providing the pool of leases to be securitized. The loss base is then applied to the specific exposures in the actual lease pool to be securitized. DBRS applies stress multiples to the base loss rate to determine the range of enhancement expected to achieve the desired rating.

Summary of Multiple Ranges Applied to Credit Losses for Auto Lease Transactions

Rating Level	Sub-Prime Portfolio	Prime Portfolio	Super-Prime Portfolio
AAA	2.5x to 4.0x	4.0x to 6.0x	5.0x to 10.0x
AA	2.25x to 3.50x	3.0x to 5.0x	4.0x to 8.0x
A	2.0x to 3.0x	2.5x to 3.5x	4.0x to 6.0x
BBB	1.50x to 2.25x	2.25x to 3.00x	3.0x to 4.0x

Since we know that identifiable losses exist on an unstressed basis in the form of embedded residual value losses, DBRS expects to see a minimum level of cash as the first form of enhancement in the structuring of securitized lease portfolios. Accordingly, DBRS would expect that total enhancement to a AAA level will include 100% of any embedded residual value loss in the form of cash.

Multiples can vary in accordance with the credit quality of the pools being analyzed because the volatility of the pools that experience high absolute losses is greater than the volatility of pools that experience very low losses. In addition, enhancement must also protect against event risk (such as the failure of a brand or insolvency of the servicer) that may cause obligor behaviour to change. Because enhancements provided to cover residual value losses can also be used to cover credit losses, typically, multiples for super-prime leased assets tend to be lower than those that would apply for comparable loan portfolios.

FORMS OF ENHANCEMENT

At the outset of the transaction, the lessor is expected to deposit in cash 100% of the calculated embedded loss to be invested by the issuer in permitted investments.¹ Additionally, a second deposit of cash is expected as part of the enhancement proposal to cover a portion of the stressed residual losses beyond the calculated embedded loss to cover a portion of the expected credit losses.

The balance of the enhancement generally comprises a combination of overcollateralization and subordinated notes. Overcollateralization simply refers to the conveyance to the issuing trust of additional lease contracts from which the noteholder has a right to receive collections. Depending on the prevailing market conditions, subordinated notes may be sold to investors and form part of the enhancement by taking on additional risk in exchange for a higher rate of return. However, should losses break through the stressed levels for that subordinated note, the holder of the subordinated note will experience a loss prior to the holder of a senior note. To a lesser degree, excess spread in a transaction provides some level of enhancement to a structure but is not relied on by DBRS to form part of the total of enhancement for a particular rating.

1. Permitted investments are defined in each transaction document and are generally restricted to risk-free investments such as government of Canada bonds. Concentration limits apply when less than 100% of the permitted investments are not government of Canada bonds.

Additional Considerations

Although closed-end leases are among the most prevalent type of lease and the most complex to assess, open-end leases are also used and evaluated by DBRS. The main difference between these two types of leases is that in the case of an open-end lease, the lessee has a contractual obligation to purchase the vehicle at the end of the term at the contracted residual value or pay for any shortfall if the vehicle is re-marketed to a third party. For pools of such leases, the main drivers of enhancement levels include lessee concentrations with respect to individual obligors and historical performance.

In addition, it is sometimes the case that finance companies purchase residual value insurance to cover potential losses with closed-end leases. With this coverage, the finance company can expect to recover any losses suffered on the disposal of vehicles returned by lessees. For this type of pool, the main drivers of enhancements will be the credit quality of the insurance provider, the potential exclusions under the policy and historical performance.

Conclusion

Lease portfolios represent a convergence of several different elements of risk, the assessment of which is critical in determining appropriate levels of enhancement. The dynamic interplay among credit losses, embedded residual value losses, stressed residual value losses, turn-in rates, the subvention of interest rates and residual values adds several layers of complexity to the analysis. The approach used by DBRS to quantify these risks and the protection expected to survive stressed environments has evolved alongside the growing use of this financing method and will continue to do so. Most importantly, DBRS reviews these risks, monitors their development and ensures appropriate levels of conservatism are applied to manage the uncertainties that abound during the life of a securitized lease structure.

Auto Transaction Risk Matrix

	Retail Auto Loan	Retail Auto Lease	Corporate Auto Fleet	Daily Rental Car Fleets	Floorplan
Concentration Risk	Low (more than 10,000 obligors)	Low (more than 10,000 obligors)	Moderate (Less than 5,000 obligors)	Highest (reliance on rental car company as operator)	High (150 to 750 obligors)
Credit Risk	Low to medium (10 to 200 bps)	Low to medium (10 to 200 bps)	Low (0 to 25 bps)	Low (0 to 25 bps)	Low (0 to 25 bps)
Residual Value Risk	n/a	Medium to high (40% to 60% of pool balance)	Nominal	Medium to high (25% to 100% of pool balance)	n/a
Manufacturer Risk	Low (no reliance)	Medium (end-of-term considerations)	Low (no reliance)	Medium (higher on program vehicles)	High (linked closely to the manufacturer)
Asset Features	Amortizing	Amortizing	Revolving	Revolving	Revolving
Enhancement	<ul style="list-style-type: none"> • Cash • Overcollateralization • Subordinated notes • Excess spread 	<ul style="list-style-type: none"> • Cash • Cash (embedded loss) • Overcollateralization • Subordinated notes • Excess spread 	<ul style="list-style-type: none"> • Cash • Overcollateralization • Subordinated notes • Letters of credit • Excess spread 	<ul style="list-style-type: none"> • Cash • Overcollateralization • Subordinated notes • Letters of credit 	<ul style="list-style-type: none"> • Cash • Overcollateralization • Subordinated notes • Excess spread



Appendix: Rating Canadian Auto Lease Transactions Summary

LIMITATIONS

- Future performance may deviate significantly from past performance.
- Recoveries may fall below DBRS-stressed performance assumptions and model results are highly dependent on expected credit losses and future residual values for lease transactions.
- The methodology considers the current legal and regulatory framework (including consumer protection regulations) and its impact on the structure of transactions as at the date of publication of this summary.

APPLICATION OF QUALITATIVE AND QUANTITATIVE METHODOLOGY CONCEPTS

Summary of Risk Analysis Process Applied to Auto Lease Transactions

Input	Detail	Key Variables
Portfolio-Level Analysis – Historical Performance	A minimum of three to five years of static loss data, with tracking of key variables on the securitized pools.	<ul style="list-style-type: none"> • Originator’s historical loss analysis, turn-in rates, residual value losses. • Pools are analyzed based on stratification of static pools, including make, model, model year, weighted-average original term, weighted-average remaining term, monthly portfolio runoff. • Distribution by contract term, province, make, model, new, used, truck, sports-utility vehicle (SUV), passenger car, embedded residual value loss, weighted-average annual percentage rate (APR).
Residual Value Analysis	Third-party estimate of the expected market value of each vehicle at the contract maturity date.	<p>Embedded Losses</p> <ul style="list-style-type: none"> • Contracted residual value (at scheduled lease termination date) is compared with a third-party pricing guide to establish the embedded loss inherent in each lease contract. The third-party estimate should be as close to the transaction closing date as is reasonably possible.
Servicer Analysis	Periodic review of the servicer by DBRS.	<ul style="list-style-type: none"> • Assessment of originator’s servicing capabilities, including credit and collection policy, originations, servicing, collections, asset recovery (e.g., time frame for recovery), static loss performance and management experience.
Economic Analysis	Through an economic or credit cycle.	<ul style="list-style-type: none"> • Review of economic cycles and potential impact on auto lease transaction performance, with an emphasis on the used-vehicle market, including factors such as the relative strength of the Canadian dollar and consumer bankruptcies.



Summary of Risk Analysis Process Applied to Auto Lease Transactions

Input	Detail	Key Variables
Legal Review	DBRS review of transaction structure and underlying legal documents.	<ul style="list-style-type: none"> Review of all legal documents, including true sale opinions, priority of cash distributions and bankruptcy remoteness of structure. In Canada, specific emphasis is placed on the additional risks associated with the potential resiliation of lease contracts. Legal document analysis also includes review, consideration and assessment of early amortization events and events of default, such as residual value loss triggers and manufacturing and seller bankruptcies. Review of transaction representations, warranties and covenants for consistency with <i>Legal Criteria for Canadian Structured Finance</i>.
Lease-Level Analysis – Proposed Pool Composition	Cash flow analysis of the proposed enhancement for the securitized pool.	<ul style="list-style-type: none"> Base-case expected credit loss and residual value loss assumption is determined from a review of the portfolio-level analysis, economic analysis and legal document analysis. Note the lease-level analysis for the proposed pool to be securitized may be analyzed on either a contract-by-contract basis or a stratified pool basis, but it should include a third-party estimate on a vehicle-by-vehicle basis.
Output	Detail	Application
Credit Loss Assumption	Estimate base-case loss assumption.	<ul style="list-style-type: none"> The base-case expected credit loss assumption is estimated based on review of the key variables identified at the lease-level, portfolio-level, economic and legal structure reviews. The base-case expected credit loss assumption is stressed based on a multiple in line with the rating levels detailed in Table 1 below. Enhancement is evaluated based on the expected stressed credit loss.
Residual Value Loss Assumption		<ul style="list-style-type: none"> The residual value loss assumption is determined based on the lease-level and portfolio-level analysis. The residual value loss assumption is stressed based on the rating level ranges detailed in Table 2 and Table 3 below and includes a calculation of a total embedded loss. The embedded loss is calculated on a contract-by-contract basis as the shortfall between the contracted residual value and the estimated third-party residual value. Embedded losses are aggregated without netting of contracts that may have an embedded gain.



Summary of Process to Evaluate Amount of Enhancement Proposed in Auto Lease Transactions

Input	Process
Evaluating Amount of Enhancement	<p>(1) Apply assumptions on base-case expected credit loss, prepayments, recoveries and cost of funds to the cash flow model. Apply the residual value stress range in Table 2 and Table 3 to the third-party pricing guide to the proposed pool of lease contracts to be securitized. Add the total embedded loss (calculated as described) above for a stressed expected residual value loss. Replacement servicer fees are included in estimated cost contingencies.</p> <p>(2) A cash flow model is used to determine whether the proposed level of enhancement is sufficient to warrant the requested rating.</p>
Output	Appropriate rating level based on the proposed enhancement and the stress ranges outlined in Table 1.

Summary of Process to Evaluate Form of Enhancement in Auto Lease Transactions

Input	Assessment
Proposed Form of Enhancement	<p>(1) A minimum level of cash is expected to cover 100% of embedded losses and to provide short-term liquidity to the transaction, if needed, to address spikes in credit losses or excess spread declines.</p> <p>(2) The remainder of the total enhancement may be provided through a combination of subordination, overcollateralization and excess interest rate spread or acceptably rated third-party forms of enhancement. Floor levels may be included to ensure that a minimum level of enhancement is available throughout the life of the transaction and to protect against losses that can occur in the later stages of the transaction (i.e., tail risk). Subordination considerations include an analysis of the priority of payments and the rate of interest to be paid on the subordinated notes.</p> <p>(3) Excess interest rate spread is evaluated based on the structure of the transaction as the excess spread may be created by way of an interest rate hedge or other structural mechanism or the excess interest rate spread may be exposed to volatility on a monthly basis as a result of pool delinquencies, defaults or losses. Unless there is a structural feature included to guarantee the monthly excess spread, a maximum of one year's credit is applied to DBRS's analysis.</p>
Output	<p>A proposed level of enhancement that includes a cash reserve account¹ that is funded up front to cover 100% of embedded losses (on a contract-by-contract basis) and additional enhancement to cover remaining stressed residual value losses and stressed credit losses, including the following:</p> <ul style="list-style-type: none"> • Subordination. • Overcollateralization. • Excess spread.

1. Excess cash is subject to deposit and investment restrictions as outlined in DBRS's *Legal Criteria for Canadian Structured Finance*.



Summary of Additional Transaction Risks Addressed through Related DBRS Methodologies

Risk	Description	Methodology¹
Interest Rate Mismatch	Arises when the interest on the securitized contract is calculated on a different term basis than the notes issued. For example, floating-rate asset-backed commercial paper (ABCP) notes are issued by a conduit secured by a portfolio of fixed-rate auto lease contracts.	<i>Swap Criteria for Canadian Structured Finance Transactions</i>
Basis Rate Mismatch	Arises when the basis for calculating interest charged on the securitized contract is different from the basis for paying interest on the notes issued. For example, an interest rate hedge indexed to banker's acceptance (BA) rates not fully offset by ABCP notes indexed to commercial paper (CP) rates (referred to as BA/CP risk).	<i>Swap Criteria for Canadian Structured Finance Transactions</i>
Foreign Currency Mismatch	Arises when the proceeds received on the securitized contracts is in a different currency than the principal and interest payments due under the note issuance.	<i>Swap Criteria for Canadian Structured Finance Transactions</i>
Cash Commingling	Cash commingling risk refers to the risk inherent in transactions where the seller of the assets collects funds owed from the securitized contracts and manages the funds within its daily operations between monthly remittance dates.	<i>Legal Criteria for Canadian Structured Finance</i>
Bankruptcy Risk: Originator, Financial Servicer or Seller	In order to obtain ratings that are above that of the seller, transactions should be structured to ensure that the assets of the transaction are separate and remote from any claim that secured creditors may have if the originator or seller of the securitized assets files for bankruptcy. Among others, true-sale and substantive non-consolidation opinions are expected and reviewed on a transaction-by-transaction basis.	<i>Legal Criteria for Canadian Structured Finance</i>
Conduit Liquidity Risk	The funding of long-term assets by ABCP has inherent asset-liability duration mismatch and risk for ABCP investors. To address the risk that market demand for ABCP may not be sufficient or the ABCP fails to roll over due to unforeseen events, all conduit sponsors should comply with DBRS conduit liquidity criteria, including Global Liquidity Standard (GLS) liquidity backup lines, in support of outstanding conduit notes.	<i>Rating Canadian ABCP and Legal Criteria for Canadian Structured Finance</i>

1. Available at www.dbrs.com.



SUMMARY OF TRANSACTION MONITORING

Summary of Surveillance Procedures for Auto Lease Transactions

Offering	Information Reported	Frequency	Source ¹
Asset-Backed Commercial Paper (ABCP)	Asset class, seller industry, seller/servicer rating, funded amount, initial credit enhancement, current credit enhancement, loss coverage, delinquency rate, performance ratios, deal rating.	Monthly	<i>Monthly Canadian ABCP Report</i>
Asset-Backed Securities (ABS)	Originator, collateral description, types of credit enhancement available, program size, lead underwriter, original balance, current balance, coupon, expected maturity, legal maturity, current rating, reporting month, pool balance, collections, loss rate, delinquency rate, reserve ratio, overcollateralization (O/C) ratio, debt class name.	Monthly	<i>Monthly Canadian ABS Report</i>
Private Term Transaction	Originator, collateral description, types of credit enhancement available, program size, lead underwriter, original balance, current balance, coupon, expected maturity, legal maturity, current rating, reporting month, pool balance, collections, loss rate, delinquency rate, reserve ratio, O/C ratio, debt class name.	Monthly	Not public

1. Available at www.dbrs.com.

SUMMARY OF APPLIED RATINGS THRESHOLDS FOR AUTO LEASE TRANSACTIONS

Table 1: Summary of Multiple Ranges Applied to Credit Losses for Auto Lease Transactions

Rating Level	Sub-Prime Portfolio	Prime Portfolio	Super-Prime Portfolio
AAA	2.5x to 4.0x	4.0x to 6.0x	5.0x to 10.0x
AA	2.25x to 3.50x	3.0x to 5.0x	4.0x to 8.0x
A	2.0x to 3.0x	2.5x to 3.5x	4.0x to 6.0x
BBB	1.50x to 2.25x	2.25x to 3.00x	3.0x to 4.0x

Table 2: Summary of Turn-In Rate Assumptions Applied to Lease Transactions

Rating Level	Reach End of Term	Turn-In Rate	Aggregate Turn-In Rate	Applied Turn-In Rate
AAA	90.0%	100.0%	90.0%	85.0% to 95.0%
AA	90.0%	95.0%	85.5%	80.0% to 90.0%
A	90.0%	90.0%	81.0%	75.0% to 85.0%
BBB	90.0%	85.0%	76.5%	70.0% to 85.0%

Table 3: Third-Party Stress Severity

Rating Level	Minimum Stress	Maximum Stress
AAA	22.5%	30.0%
AA	20.0%	25.0%
A	15.0%	20.0%
BBB	12.5%	17.5%



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Corporate Headquarters

DBRS Tower
181 University Avenue
Suite 700
Toronto, ON M5H 3M7
TEL +1 416 593 5577