

Methodology

*Rating U.S. Auto Lease Securitizations*

JANUARY 2010



*Insight beyond the rating.*

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Related Research: Legal Criteria for U.S. Structured Finance Transactions dated September 2009

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DBRS is a full-service credit rating agency established in 1976. Privately owned and operated without affiliation to any financial institution, DBRS is respected for its independent, third-party evaluations of corporate and government issues, spanning North America, Europe and Asia. DBRS's extensive coverage of securitizations and structured finance transactions solidifies our standing as a leading provider of comprehensive, in-depth credit analysis.

All DBRS ratings and research are available in hard-copy format and electronically on Bloomberg and at DBRS.com, our lead delivery tool for organized, Web-based, up-to-the-minute information. We remain committed to continuously refining our expertise in the analysis of credit quality and are dedicated to maintaining objective and credible opinions within the global financial marketplace.

This methodology replaces and supersedes all related prior methodologies. This methodology may be replaced or amended from time to time and, therefore, DBRS recommends that readers consult [www.dbrs.com](http://www.dbrs.com) for the latest version of its methodologies.



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# Rating U.S. Auto Lease Securitizations

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## Executive Summary

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This report details the DBRS methodology for rating U.S. auto lease ABS transactions. DBRS analyzes both qualitative and quantitative factors when rating U.S. auto lease ABS transactions which include the following:

- Quality of management and financial condition of the sponsoring entity;
- Originations, underwriting and servicing capabilities;
- Collateral credit quality and performance of issuer's/originator's auto lease portfolio;
- Residual value analysis;
- Transaction capital structure, proposed ratings and credit enhancement;
- Cash flow analysis;
- Legal structure and opinions.

DBRS performs an operational risk assessment of the originator and servicer that serves to provide insight into the manner in which the origination and servicing processes have impacted past pool performance and to assist in establishing expectations for future performance.

For each requested rating, DBRS develops cash flow scenarios to test the financial viability of the transaction. The factors considered in the cash flows include: lease defaults, turn-in rates, residual losses, timing of lease defaults and residual losses, recoveries and other pool related assumptions such as subvention, prepayments and delinquencies. The cash flow scenarios also reflect the priority of payments to investors as set forth in the transaction's governing legal documents.

Based on the analysis of the aforementioned factors, DBRS evaluates the sufficiency of proposed credit enhancement for each requested rating in the capital structure and the ability of the transaction to repay investors according to the terms in which they have invested. These terms typically include timely and full payment of interest on monthly basis and principal by the legal final maturity date.

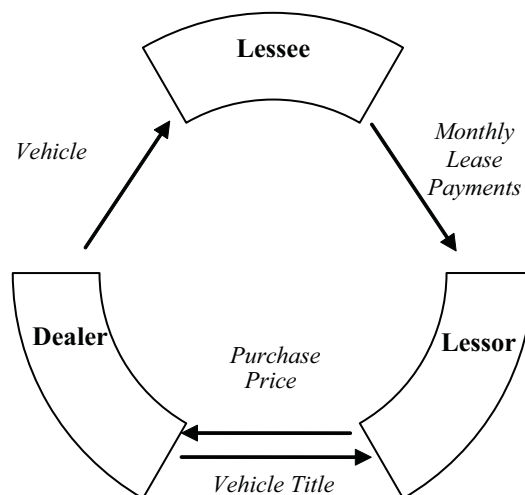
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## Overview of the Leasing Sector

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An auto lease can be either a closed-end or open-end lease. Closed-end lease transactions differ from open-end lease transactions in that the residual value is set at the beginning of the transaction and is stipulated in the contract. In an open-end lease transaction, the market value of the vehicle is determined at the end of the lease contract and then compared to a pre-determined residual value of the vehicle. The lessee is then responsible for the difference. A typical auto lease transaction is collateralized by closed-end leases.

The participants in the closed-end lease market are as diverse as the participants in the retail auto loan market. Participants in leasing include captive finance subsidiaries of vehicle manufacturers, independent finance companies, banks and depository institutions. The major players in the auto lease market are the captive finance subsidiaries. Their dominance results from the competition in the auto industry and the use of subvention mechanisms to drive sales. Auto manufacturers, through their captives, employ various techniques to reduce monthly payments such as lower financing charges or subsidized residual values. Although artificially high residual values may lead to end-of-term residual losses at a captive level, the risk of loss is offset by the increased sales at the manufacturers' level and is mitigated by the exceptional strength of captives when it comes to disposition of off-lease vehicles.



Whereas the captives' participation in the lease space is commonly a function of the manufacturer's desire to increase sales, banks and other financial institutions are attracted to the space due to the more lucrative financing charges that are earned on leases compared to retail loans. However, banks and other financial institutions commonly lack the disposition channels of the captives and often find it hard to compete in the market. In the past, intense competition in the space caused non-captive participants to greatly underestimate residual value risk resulting in substantial losses. As a result, a lot of non-captive players have exited the market in early 1990s and have not yet returned.

### CLOSED END LEASE MECHANICS

A closed-end lease differs from an auto loan in terms of vehicle ownership. The buyer of the vehicle is not the consumer who uses the vehicles. The vehicle is purchased from the manufacturer or dealer by a bank or a finance company, who then enters into a leasing agreement with the consumer to lease the vehicle for a pre-determined period of time. In a closed-end lease, the ownership of the vehicle resides with the bank or finance company throughout the term of the lease. The owner of the vehicle is referred to as a lessor, while the end-user is a lessee.

At the end of the closed-end lease term, the end user has an option to purchase the vehicle for a pre-determined amount from the bank or a finance company. At that time, the end-user is likely to evaluate the value of the vehicle versus the cost of buying that vehicle back from the owner. If the value of the vehicle falls short of the cost of buying it, the end-user is likely to forfeit the option. In that case, a dealer can purchase the vehicle. If neither the end-user nor the dealer chooses to exercise the re-purchase option, the lessor will continue to own the vehicle until the vehicle is sold or leased to a new end-user.

During the term of the closed-end lease, the end-user will pay the lessor a monthly lease payment for the right to use the vehicle during the term of the lease. The monthly lease payment is determined based on: 1) the term of the lease, 2) the net capitalized cost of the vehicle, 3) the residual value, and 4) the money factor.



<b>Net Capitalization Cost</b>		
MSRP		27,568
Negotiated Purchase Price		26,500
Lesser of MSRP and Negotiate Purchase Price		26,500
-Dealer Participation		
-Manufacturer's Discounts	-1000	
-Down Payment	-2000	
+Add on Fees	350	
+Upfront Taxes	0	
Total		-2650
<b>Net Capitalization Cost</b>		<b>23,850</b>
Residual Value (45% of MSRP)		12,406
Lease Term (Months)		48
Money Factor		0.0025

The term of a lease can vary between 12 months and 60 months, with 48 months leases accounting for the majority of closed end leases outstanding. The net capitalized cost is determined as the price of the vehicle after deducting any dealer participation, manufacturer discounts, down payment from the lesser of the manufacturer's suggested retail price (MSRP) or negotiated sales price. The net capitalization cost also includes any add-on fees and may include taxes that are financed. However, the treatment of taxes is state specific. In some states, sales tax is charged up-front and is added to the net capitalization cost. In other states, sales tax is charged on the monthly payment and is simply paid as part of such. In a closed-end lease, the residual value is set upfront as a percent of the net capitalized cost or as a predetermined amount. The money factor is analogous to an annual percentage rate (APR) on a retail loan in that it represents financing charges on the transaction. It allows one to calculate a monthly payment without the use of complicated annuity formulas. To convert the money factor into an APR equivalent, the money factor should be multiplied by 2,400.

The lease payment is based on the parameters above and is made up of three components: 1) depreciation fee, 2) finance fee, and 3) sales tax. The depreciation fee portion compensates the lessor for the loss in the value of the vehicle, spread over the term of the lease. It is based on the expected miles driven during the term of the lease as well as the actual term of the lease. The monthly finance fee is analogous to the monthly interest paid in auto loan transactions. The sales tax is calculated by multiplying the sum of the monthly depreciation fee and the monthly finance fee with the sales tax rate, if not paid upfront.



<b>Monthly Lease Payment</b>		
Lease Term (Months)		48
Money Factor		0.0025
State Sales Tax		8.60%
<b>Depreciation Fee</b>		
Net Capitalization Cost	23,850	
Residual Value	12,406	
<b>Gross Depreciation Fee</b>	<b>11,444</b>	
Monthly Depreciation Fee	= (11,444/48)	238.43
<b>Finance Fee</b>		
Net Capitalization Cost	23,850	
Residual Value	12,406	
<b>Total</b>	<b>36,256</b>	
Monthly Finance Fee	= (36,256*0.0025)	90.64
<b>Sales Tax</b>		
Monthly Depreciation Fee	238.43	
Monthly Finance Fee	90.64	
<b>Total Payment Net of Taxes</b>	<b>329.06</b>	
Monthly Sales Tax	= (329.06*0.086)	28.30
<b>Total Payment</b>		
Monthly Depreciation Fee		238.43
Monthly Finance Fee		90.64
Monthly Sales Tax		28.30
<b>Monthly Lease Payment</b>		<b>357.36</b>

## ADVANTAGES OF LEASING TO THE CONSUMER

The principal benefit to leasing is that the consumer is able to obtain a new vehicle for a much lower monthly payment than required on a loan to purchase the vehicle. This is due to the fact that scheduled lease payments are based on the portion of the vehicle value to be used only during the term of the lease. Additionally, the lessee is not required to make a down payment on the vehicle. In states where the sales tax on lease payments is levied on a monthly basis, the lessee saves the upfront tax payment which is required with similar auto purchases. Additionally, for retail consumers who enjoy changing their cars frequently, leases offer a convenient way to move from one vehicle to the next every 2-4 years in general depending upon the lease contract. It allows consumers to avoid vehicle maintenance and repair issues associated with an older vehicle as well as the risk of a decline in used car values in the future when they want to sell their vehicle.

Notwithstanding the advantages above, certain consumers still prefer to own their vehicles rather than lease. The vehicle ownership option remains attractive to consumers who intend to use their vehicle for a longer period of time than envisioned by the lease term. Leasing may also be more expensive than purchasing and owning a vehicle due to higher finance charges as rent is based upon the adjusting capitalized cost over the life of the contract versus an auto loan which is based upon the amortizing balance on the loan.



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## Transaction Structures

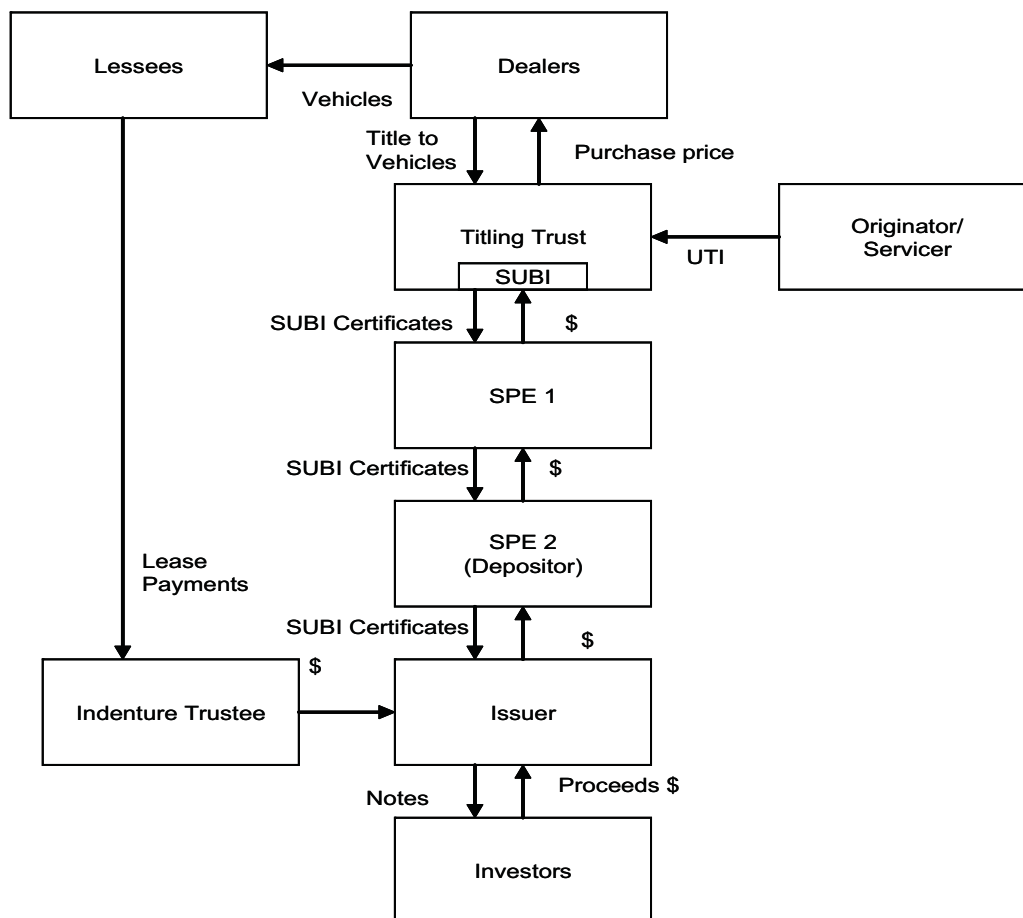
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Similar to other structured finance transactions, auto lease securitizations are rated based on the strength of segregated pools of receivables. For the securitized transaction to command a rating higher than that of a sponsoring entity, it must be isolated from the financial risk of the seller and originator. To accomplish this, the assets must be transferred so that in the event of the bankruptcy of a seller or originator, the assets would not be part of its bankruptcy estate or subject to an automatic stay under the U.S. Bankruptcy Code. The assets in auto lease securitizations are both lease contracts and the underlying vehicles. These assets should be beyond the reach of an originator's or seller's creditors in a bankruptcy.

The process of isolating assets in an auto lease ABS securitization is complicated by the need of transferring both the contracts and the title of the vehicles to a bankruptcy remote entity. Although transferring a contract can be completed similarly to the transfer process undertaken during a retail auto ABS securitization, the transfer of title can only be accomplished following a time-consuming process during which each vehicle's title has to be changed from the lessee to the bankruptcy remote entity. Typically and depending on the state where the vehicle is registered, such process requires the payment of retitling fees or transfer taxes or both on each vehicle, and becomes prohibitively expensive.

The issue posed by the need to retitle vehicles is usually addressed in securitization structures through a titling trust. The titling trust is a special-purpose bankruptcy-remote entity formed by the lease originator or sponsoring entity with the purpose of purchasing newly originated leases directly from the dealers. From the onset, the vehicles are titled in the name of the titling trust and the lessee or originator is removed from the titling process altogether. Although the originator is not part of the titling chain, it still maintains undivided trust interest in all leases and related vehicles in the titling trust. Additionally, the originator is typically contracted by the titling trust to perform all activities required to service the asset of the titling trust.

Once the originator is ready to securitize lease contracts and the vehicles, the titling trust issues special unit beneficial interest (SUBI) certificates. A titling trust may issue one or several SUBI certificates, each of which represents interest in a specific pool of assets to be securitized. Assets that are not represented by a SUBI certificate remain in the titling trust and ABS investors will have no claim against such assets. The SUBI certificate is then transferred through a true sale or a series of true sales to a special purpose entity (SPE) which in turn contributes the SUBI certificates to the securitization trust. The trust issues ABS notes and the proceeds of such are used to purchase the SUBI certificates.



Although the titling trust solves most of the issues associated with the titling of the securitized assets, for the titling trust to represent a workable and cost-effective solution, the lease must be a newly originated lease. However, it should be noted that the structure is effective in most states, but certain states do not recognize titling trusts as legal owners of the vehicles. In such states, the structure must be amended to address this concern.

DBRS's criteria seeks to ensure that proper legal steps have been taken to transfer the titling trust's rights and interest in the leased vehicles and associated contracts to the SPE and that the SPE has been granted a security interest in the associated SUBI certificates. To rate a transaction, DBRS seeks a legal opinion to address that ABS issuer or trustee has a first-priority perfected security in the related SUBI certificates. Additionally, DBRS seeks a legal opinion to provide assurance that the SPEs assets will not be consolidated with the estate of the transferor or the originator in the event of the originator's or transferor's bankruptcy.

### PENSION BENEFIT GUARANTY CORPORATION

The titling trust structure gives rise to some other concerns such as risk of a lien from the Pension Benefit Guaranty Corporation (PBGC), if the originator has unfunded pension liabilities. Under the Employee Retirement Security Act of 1974 (ERISA), if the originator has unfunded pension liabilities, the PBGC has authority to put a lien on the originator's assets, which may extend (at least theoretically) to the securitization trust. The claim would have priority over the interest of the securitized trust.

In order to address this risk, the transaction documents may contain warranties that the originator keep pension liabilities funded during the term of the transaction or maintain an investment grade rating.



They may also contain triggers that cause credit enhancement increases if the pension liability becomes unfunded or if the originator is downgraded below investment grade. DBRS may seek legal opinions that vehicles and leases, and/or proceeds thereof, will not be subject to liens that will have priority to the lien of ABS noteholders.

In the case where the originator does have unfunded pension liabilities, the transaction may be structured to eliminate PBGC risk by establishing the originators as a secured party rather than a holder of the equity interest in the SUBI trust. The leased vehicles are titled at origination in a separate trust and the originator becomes the first lien holder on all of the leased vehicle titles. This structure is intended to reduce PBGC risk for the noteholders.

### VICARIOUS TORT LIABILITY

Vicarious liability is a legal doctrine that allows an exception to the rule that those suffering damages due to the negligence of another can look only to the negligent party for compensation. Under the doctrine of vicarious liability, the negligent party is held to be an agent of a principal, and those suffering loss may also look to the principal for damages. Vicarious liability is relevant to claims for damages arising from a motor vehicle accident. Owners of motor vehicles can be held liable for damages caused by the negligent operation of the vehicle if the operator of the vehicle possessed the vehicle with the consent of the owner. Consequently, it is possible that the titling trust may be liable under this doctrine for claims for damages arising from a motor vehicle accident, should such claims occur.

The Highway Bill of the Transportation Equity Act of 2005 has addressed the issue of vicarious tort liability by prohibiting imposition of such liability against vehicle leasing and rental companies. The act extends to cover securitization trusts. The act preempts state laws previously applied to the companies and securitizations trusts and to the large extent addresses the risk associated with vicarious tort liability. However, Supreme Court Justice Thomas V. Polizzi's holding in *Graham v. Dunkley*, reopened the debate in the New York State by ruling that a federal law barring New York from imposing vicarious liability on those who lease or rent motor vehicles intrudes on state powers and cannot be enforced. The case is being appealed and DBRS continues to monitor it. Depending on the resolution of *Graham v. Dunkley*, DBRS criteria may warrant that securitizations which SUBI certificates were issued from the titling trusts with significant exposure the state of New York, include structural provisions that address vicarious tort liability.

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## Credit Enhancement

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Credit enhancement in auto lease transactions generally consists of subordination, overcollateralization, a reserve account and excess spread. DBRS does not determine credit enhancement levels but rather evaluates the level of protection provided by the credit enhancement. The form of credit enhancement is also evaluated to determine whether sufficient liquidity exists in the transaction.

### SUBORDINATION

Subordination is created by tranching the collateral backing the auto lease transaction. The subordinated classes of notes have lower priority of payments in the flow of funds or waterfall providing protection to the senior classes of notes. Most of the auto lease securitizations are structured as a sequential pay. In a sequential structure, subordinated notes will not receive principal distributions until the senior tranches have been paid in full. If a pro-rata structure is utilized, subordinate tranches can receive principal payments while senior notes are still outstanding. However, should transaction performance deteriorate, subordinated tranches are locked out and payments are redirected to senior tranches until the parity between collateral and senior notes is restored. In addition, some structures include the suspension of interest payments on the subordinated classes should the structure become undercollateralized.



## OVERCOLLATERALIZATION

Overcollateralization (OC) is a very common form of credit enhancement in auto lease securitizations. Simply put, it refers to the amount by which collateral exceeds the total amount of securities issued. In auto lease structures OC is very similar to subordination with the exception that it does not receive a specified coupon and is simply available to absorb losses.

## RESERVE ACCOUNT

Reserve funds are funds set aside to supplement collections should the need arise. Such accounts may be funded at issuance or designated to trap excess spread to the pre-specified target amount. In rating a transaction, DBRS focuses on the amount of reserves funded at issuance. The amount of credit DBRS gives to the non-funded portion of the reserve is limited because once leases start to mature and the transaction begins incurring residual losses, excess spread available to fund the reserve account is dramatically reduced. As a rule, DBRS only gives credit to the unfunded portion of the reserve account that is accumulated under a base case scenario during the first six to twelve months. The reserve account in auto lease transactions is typically non-declining and builds credit enhancement as the transaction seasons.

## EXCESS SPREAD

Typically, excess spread in auto lease transactions is equal to the financing charge applied to leasing contracts net of transaction expenses such as servicing, trustee and professional fees. However, many captive financing companies offer leases with rates that are below market rates (“subvented”). Inclusion of subvented leases in a securitization pool may result in insufficient financing charged earned by the assets to cover transaction costs.

In such instances, it is common for the transaction structure to create synthetic excess spread. This is accomplished by discounting pool’s projected cash flow at a predetermined discount rate that ensures an asset yield sufficient to cover all funding costs through the life of the transaction. Synthetic excess spread is created by allocating a portion of cash flows resulting from principal payments to interest payments.

The excess spread, whether synthetic or not, is available on a monthly basis to absorb credit and residual losses. Any changes in cash flows due to credit or residual losses are first covered from excess collections. After all of the obligations prescribed by the transaction structure are satisfied, excess collections can be released. Consequently, monthly excess spread is only available to cover losses incurred during that period.

Availability of monthly excess spread mostly depends on the timing and magnitude credit and residual losses and prepayments. The adverse changes in the excess spread availability over the life of transactions are referred to as excess spread compression and are mostly driven by changes in weighted average money factor. The weighted average money factor can decrease over the life of the pool because leases that have high financing charges default or refinance at a faster rate than other leases. Timing of credit and residual losses, and prepayments creates uncertainty with respect to the availability of excess spread. Once released, excess spread cannot be recaptured and uncertainty associated with its timing reduces its value as a credit enhancement tool. For these reasons, DBRS gives only partial credit to excess spread while modeling the transaction. DBRS also takes into consideration the excess spread used to build the reserve account to the required level so that there is no double counting.

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## Operational Risk Review

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DBRS evaluates the quality of the parties that originate and service the auto leases being securitized through an operational risk review. While DBRS does not assign formal ratings to these processes, it does conduct operational risk reviews and incorporates the results into the rating analysis. In instances



where it is determined that the originator's or servicer's capabilities are deemed below industry standards, certain structural enhancements may be incorporated into a transaction as determined by the issuer.

A detailed list of items included in the operational risk review for auto lease ABS is included in Appendix 1 and includes the following areas:

1. **Strategy and Management** - A review of the company's strategy and management is performed including a review of company history, management's experience in operating the company, financial condition of the company and management's strategic initiatives going forward.
2. **Originations** - The originations function is assessed in order to determine the channels and marketing practices used in originating auto lease receivables. DBRS also evaluates the policies and procedures in place for originating leases and the types of products originated.
3. **Underwriting/Risk Management** - The underwriting process is examined to assess whether the auto leases to be securitized have been originated in accordance with the originator's underwriting guidelines and that there were no violations of any consumer protection laws. An originator's risk tolerance and the underlying quality of its underwriting guidelines are assessed. Scoring systems are reviewed including the frequency of system updates based upon the changing economy and consumer behavior. Lending authority of personnel and documentation and verification process for borrower data are reviewed. Residual value determination is discussed including models and third-party information utilized.
4. **Servicing** - A comprehensive review of the servicing platform is performed including customer service, collections, loss mitigation, account administration, investor reporting and technology processes. Similar to an originator's underwriting capabilities, the effectiveness of a servicer's operation has a direct impact on security performance and ultimately the level of losses incurred by ABS investors.
  - a. **Customer service** - A review of customer service should include procedures for responding to customer inquiries and responsiveness to customers as measured by response times, hours of operation and number of representatives based upon call volume.
  - b. **Collections** - The collections function is reviewed in order to understand the collection practices in place for the receivables at various stages in delinquency. The staffing of the collections area as well as management and policies associated with collections is considered. This includes policies for extensions, deferrals, rewrites or due date changes which may have an impact on the timing of collections and delinquency status for the accounts. In addition, the charge-off and repossession policies are examined to determine the timing associated with repossessing vehicles and charge-offs.
  - c. **Loss mitigation** - The loss mitigation function review focuses on the servicer's strategy for handling leases in default as well as the turn-in process and remarketing of vehicles. The review of the turn-in process includes a review of historical disposition expenses, mileage and wear-and-tear charges on the vehicles. It also includes a discussion regarding fraud mitigation efforts in order to mitigate losses on the front end and collections for deficiency balances in order to reduce losses on the remaining deficiency balance due on the leases following the repossession and sale of the vehicles.
  - d. **Investor reporting** - The investor reporting area is reviewed including the procedures for disseminating reports to the investors and trustee and the experience in remitting reporting.
  - e. **Lease administration** - A review of the lease administration area includes cash management pro-



cedures and controls, payment processing, insurance and quality control reviews.

- f. Technology – The technology used in originating and servicing the receivables is reviewed in order to understand the strengths and weaknesses of the systems in place and the capacity available for further growth. The disaster recovery plans are included in this review in order to ensure that appropriate contingency plans are in place.

## Collateral Type

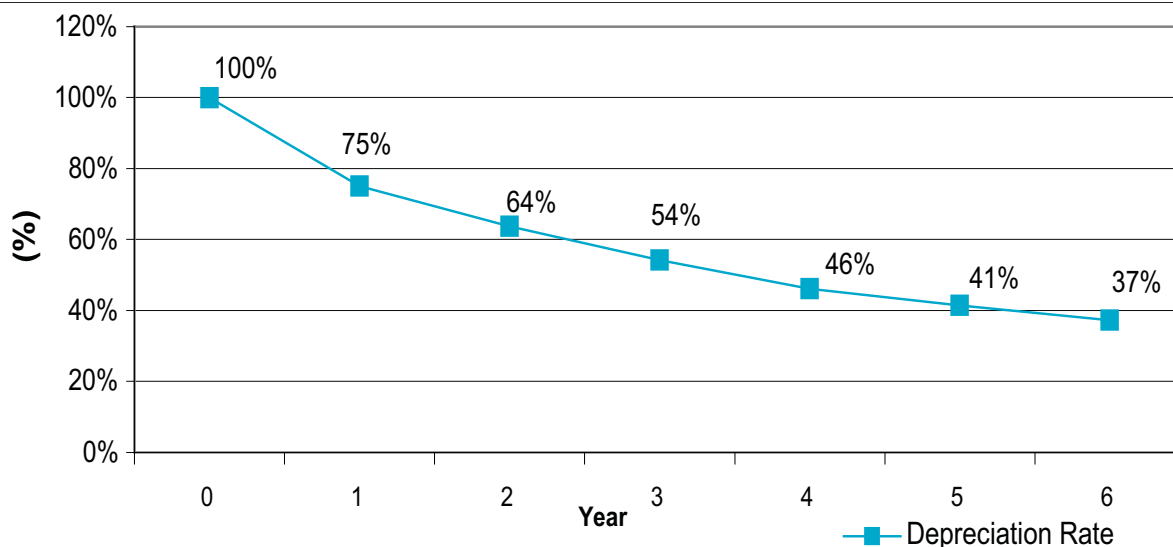
The analysis of the auto leases backing a securitization provides insight into the manner in which the securitized pool of receivables is likely to perform over the life of the transaction. During this analysis, DBRS focuses on the following collateral characteristics:

- Original and remaining term
- Remaining term distribution
- Finance charge
- Vehicle age
- Vehicle make and model
- Geographic distribution
- Obligor credit quality
- Residual value determination

### ORIGINAL TERM

Auto lease products offered to consumers range in term from 12 to 60 months. The 12 and 60 months lease products are only offered by select institutions, while the bulk of the institutions focus on 24, 36 and 48 months leases. As a result, on average, the term of securitized pools of leases is much shorter than the average term of auto loans. In a typical securitized auto lease pool, the term generally ranges from 24 month to 48 months, and has an average term of less than 36 months. Similar to auto loans, there has been a trend towards longer term leases in order to improve the affordability for the consumer.

### Average Vehicle Depreciation



Source: Automotive Lease Guide.



The vehicle depreciation curve is very steep over the first year and most leading experts estimate the average first-year depreciation at 15% to 25% of the purchase price of the car. On average, over the next four years, a vehicle loses 10% to 15% of its value annually. However, there is wide variability among makes and models with the rate of depreciation affected by factors such as vehicle condition and mileage driven. Furthermore, the resale value at the end of the leases' term can be impacted by wholesale market conditions. Consequently, the longer the term of the lease, the higher the uncertainty associated with the depreciation rate and wholesale market conditions and consequently, higher residual value volatility.

## REMAINING TERM DISTRIBUTION

The term maturity schedule of a securitized pool is another important attribute that is examined by DBRS. A maturity of a large portion of the lease contracts within a short timeframe may place the transaction under potentially higher residual loss risk because large off lease vehicle volume may impact the auction proceeds negatively by increasing supply at a possibly inopportune time of weaker wholesale used car market conditions. Therefore, DBRS examines the lease term maturity distribution within trust. An even distribution lease maturity diminishes the risk of vehicles being subject to depressed market conditions at any given point in time.

## FINANCE CHARGE

The monthly finance fee as measured by the money factor charged on the lease is a function of the market environment and prevailing interest rates. However, all else equal, leases that are characterized by the underwriter as a higher risk tend to have higher finance charges when compared to less risky lessees. Further, finance charges can be influenced by available incentive programs. In an effort to increase sales, car manufacturers commonly offer interest rate incentives through their captives to the lessees. Such subsidies can result in a dramatic reduction of interest rates on the leases relative to market conditions. It is not uncommon to see subvented leases carry interest rates as low as 0%.

The majority of lessees have high credit profiles and, as such, lease contracts are frequently sub-vented and carry low lease rates. As a result, auto lease securitization trusts rarely rely on the lease rates to provide excess spread for a transaction as the majority of the contracts are discounted during securitization. An examination of the lease rate distribution may be a testament of consistency of the lending institution's originations. As higher lease rates are assessed to lessees with a higher risk profile, examining the weighted average FICO scores within lease term distribution may indicate changes in a lending institution's origination platform and also serves as a signal to DBRS of possible adjustments to the expected pool's base case loss expectation.

## VEHICLE AGE

The majority of leased automobiles are new with few high-end vehicle manufacturers leasing certified pre-owned vehicles.

Certified vehicles are off-lease vehicles that are less than 3 years old and that have been through inspection and are still covered by a manufacturer's warranty. Although used vehicles have flatter depreciation curves when compared to new vehicles, they tend to have higher frequency and severity of losses. The higher severity on pre-owned and used vehicles is a result of the difficulty in estimating vehicle value.

## VEHICLE MAKE AND MODEL

The distribution of the pool in terms of vehicle make and model is important in order to diversify the risk associated with any particular make or model. Residual values vary by manufacturer, vehicle make and model. They can also be influenced by prevailing market conditions and prices. High gas consumption vehicles can experience rapid price depreciation associated with the price of gasoline, exposing those vehicles to additional residual value risks in a high gas price environment. Additionally, the residual value can change if a certain make or model becomes discontinued or the manufacturer's ability to maintain warranty coverage becomes impaired or is perceived to be impaired. It is important to ensure that vehicles collateralizing securitized pool are diversified across make, model, and manufacturer. DBRS reviews the



concentration of vehicles by make and model particularly in light of the financial condition of the vehicle manufacturer in order to determine the risk of a brand being discontinued or of the manufacturer's future ability to maintain its warranty coverage.

## GEOGRAPHIC DISTRIBUTION

The geographic distribution of a pool of lease contracts is important in auto lease securitizations in order to limit the effect of any downturn in economic conditions of any particular region or state. It also minimizes the risk of downturn in the used car market in any particular region.

## OBLIGOR CREDIT QUALITY

An auto lease can be broadly classified as prime or subprime based on the overall credit quality of the borrower. Although in other asset classes, this classification is made by comparison of objective metrics such as average credit score measured by one or more of the recognized credit scoring models, in the auto sector, the segmentation process is not as clear cut. Even though credit scores are widely used by auto lending institutions, many auto lending institutions substitute them by internal credit score grade such as A, B, C, and D to describe credit quality of the auto contract.

Typically, an obligor with FICO score above 680 or a tier "A" credit would be considered a prime obligor, while borrowers that do not meet these requirements or do not qualify for prime leases are considered sub-prime. The reasons for a lessee not qualifying for a prime lease or falling into B, C, or D credit tiers are diverse and can include lack of credit history, prior bankruptcy, high debt to income ratios, high auto lease payment versus income ratio, lack of stability with regard to employment, and poor installment credit history.

In contrast to auto loan securitizations, auto lease are mostly backed by prime collateral, with extremely small concentrations in non-prime borrowers. DBRS examines the static pool data of a proposed transaction segmented by FICO and/or internal credit score grades to measure borrower credit quality. The distribution of the FICO scores is also examined to avoid pitfalls of a barbell distribution within a pool.

## RESIDUAL VALUE DETERMINATION

The residual value or amount that the vehicle is expected to be sold for at the end of the lease is determined at the inception of a lease by the finance company. Contractual residual value has an impact not only on monthly lease payments but also on consumer behavior at the end of the lease term. By assuming rational behavior, 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, in effect transferring that loss to the lessor.

If the contractual residual value is set conservatively, the actual market value of the leased vehicle at the end of the term may be above the contractual value. It is reasonable to assume that the lessee is likely to exercise the purchase option as the required payment would be lower than the actual value of the vehicle. Therefore, a conservative residual value setting policy lowers residual value risk for a securitization. Conversely, by 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 payment from the lessee. Over the term of the lease, however, the lessor will receive lower cumulative payments and, at the end of the term, the lessee would be less likely to exercise the purchase option as the required payment is greater than the expected market value. Such a residual value setting policy is expected to result in higher residual risk exposure for a securitization as a higher volume of the off-lease vehicles will be returned to the lessor.

To set the residual values, lessors either utilize proprietary models to approximate the future fair market value of each vehicle secured under a lease or employ residual values determined by third-party information providers. Lessors may set the residual value at a higher level in order to make the vehicle more



affordable to the consumer and help to drive sales. Currently, the most recognized provider of vehicle residual values is Automotive Lease Guide (ALG).

In addition to less conservative residual value policies, some lessors increase the estimated actual value of the off-lease vehicles by subventing residual values and making the contracts more desirable for lessees as the monthly payments are lowered. DBRS examines the residual value policy to gauge the expected residual value exposure for each securitization.

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## Establishing Loss Projections / Cash Flow Analysis

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In lease transactions, potential losses include both credit losses and residual value losses. The risk of residual value losses comes from vehicles turned in by lessees to a finance company. Credit losses generally represent a smaller portion of the risk imbedded in auto lease transactions as the obligors are typically high quality. Similar to auto loans, lease contract credit losses are relatively stable and sponsoring entities capture lease credit losses in the static pools providing DBRS predictable data. In contrast, residual value losses represent a larger portion of losses and tend to be volatile and therefore present greater challenges in deriving a base case loss assumption.

DBRS employs a cash flow model which incorporates transaction specific terms and conditions such as triggers and credit enhancement characteristics. DBRS does not determine credit enhancement levels for each transaction. It simply determines ratings using proposed credit enhancement levels. DBRS applies a number of stresses to assess the robustness of the transaction structure and ability of securities to withstand a strained environment. The ratings are determined under a confluence of these stressful scenarios.

### CREDIT LOSSES

DBRS analyzes historical default and recovery data provided by a sponsoring entity. DBRS relies on static pool data analysis to establish a base case cumulative net loss (CNL) amount for the securitized assets. In instances when comprehensive static pool data is not available, DBRS may establish a base case CNL using the issuer's managed portfolio loss data.

For detailed static pool analysis, constructing of the loss curves and DBRS's credit loss methodology, please refer to "Rating U.S. Retail Auto Loan Securitizations", November 2009. Static pool analysis relies on historical loss credit data from discrete groups of financing originated over a relatively short period of time such as a month, a quarter or a year, (i.e., static pool data). In this analysis, a ratio of cumulative losses to original lease balance is tracked on a monthly basis for a static pool of assets as they amortize.

If the originator's underwriting policies are consistently applied and there have been no changes to the credit and collection policies, static pool analysis is a good proxy for establishing losses. Similar to the auto loan methodology, DBRS may adjust expected base case credit losses for the seasoning of the pool. However, given the short term nature of the assets, securitized pools rarely exceed 12 months of seasoning, rendering the possible seasoning credit insignificant.

Depending on rating category, each rated security is expected to withstand multiples of the expected base case credit losses. For example, in a prime transaction, for a security to qualify for a "AAA" rating, it must withstand losses that are 4 to 6 times higher than the base case credit loss estimate.

	<b>AAA</b>	<b>AA</b>	<b>A</b>	<b>BBB</b>
Credit Loss Multiples	4.0 - 6.0x	3.0 - 4.0x	2.0 - 3.0x	1.5 - 2.0x



## TURN-IN RATES AND RESIDUAL VALUES

Residual value risk represents a larger component of overall risk and is more volatile when compared to the credit losses. Therefore, DBRS focuses on quantifying the residual value risk component in order to evaluate risk associated with a pool of lease vehicles. The residual value risk in the transaction depends upon two factors: 1) the turn-in rate or percentage of vehicles returned to the lessor at the end of the lease term; and 2) the market value of the vehicles in the pool compared to the contractual residual value at the end of the lease term.

### *Turn-in Rates*

The turn-in rate depends in part on the lessees' choice regarding the exercise of the vehicle purchase option at the lease maturity. The higher the percentage of lessees that choose to repurchase the vehicles at lease maturity, the lower the turn-in rate and the lower the residual value risk. Turn-in rates are also influenced by customer defaults and insurance proceeds collected in connection with accidents or other related issues. Historically, turn-in rates ranged between 50% to 80% percent and tend to rise during periods of adverse wholesale market conditions.

The turn-in rate of a lease pool depends on the residual value of the vehicles relative to the contractual residual value as many lessees prefer to keep the vehicle with higher value (actual or perceived). The historical turn-in rate of an originated portfolio tends to be dynamic and correlated with conditions of the wholesale vehicle market based on the vehicles' make, model and manufacturer.

In establishing a base case turn-in rate, DBRS focuses on turn-in rates of non-defaulted obligors. When a lessee purchases the leased vehicle instead of turning it in, the lessee does so at a contractual residual value which is either higher or equal to the securitized residual value. Correspondingly, a lessee purchase results in either a gain or full lease residual value payments for a securitized pool. As a result, lower turn-in rates provides a benefit to a lease securitization.

DBRS establishes base case turn-in rate assumption by examining a sponsoring entity's historical data, where past turn-in rate per make and model are used as a proxy to estimate future turn-in rates for similar makes and models.

The turn-in rate first depends upon the survival rate which is 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 their purchase option. Even in an unstressed environment, there will always be some early terminations (arising from default-triggered repossessions, for example), while other vehicles will inevitably be stolen, written off due to accident, or see their lessees move abroad or otherwise experience lifestyle changes 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-ins or survivorship, particularly in a stress scenario where that rate is assumed to be several multiples of the historical level.

DBRS also considers the total number of vehicles in the pool that can be considered "scheduled turn-ins" (due to the expected negative equity position of lessee at the end of the term) during the term of the transaction. This is determined by comparing the contracted residual values and the relevant Automotive Leasing Guide (ALG) values (stressed or otherwise, depending on the scenario).

The following table illustrates the turn-in rate applied to survivors and what that rate implies on an aggregate basis. Under stressed scenarios, DBRS normally assumes a maximum of 90% of leases that actually survive their full term and then turn-in rates on survivors as depicted below. DBRS reviews the issuers historical data and may use a number higher if historical data warrants a higher amount.



Turn-In Rates	Survival Rate	Turn-in rate on survivors	Aggregate Turn-In Rate	Turn-In Rate Used
AAA	90.0%	100.0%	90.0%	85.0% - 90.0%
AA	90.0%	95.0%	85.5%	85.0% - 90.0%
A	90.0%	90.0%	81.0%	80.0% - 85.0%
BBB	90.0%	85.0%	76.5%	70.0% - 85.0%

### *Residual Values*

As discussed above, the majority of originators employ ALG values as a foundation to set their base residual value, which may be subsidized by a manufacturer to achieve desired monthly payment and market penetration rates. Consequently, a sponsoring company may choose to securitize a contractual residual value of a lease contract (which includes all incentives) or ALG residual value established at the inception of the lease. In many cases, the originator will use the lower of the ALG residual value and contractual value at the time of the origination of the lease. Additionally, some sponsoring entities may choose to securitize the residual value of a vehicle adjusted to ALG's expectations at the time of securitization (ALG mark-to-market value).

To derive a base case residual value loss, DBRS takes the lower of: 1) the initial ALG residual value, 2) the current ALG residual value and 3) the contractual residual value by model and term. To the extent that the securitized value of the leases is above the base case residual value (measured on a lease-by-lease basis), then the difference between the securitized value and the base case residual value would be considered an embedded loss. In this case, DBRS would expect the transaction to incorporate sufficient liquid enhancement sized to mitigate this amount.

DBRS then compares this value to the historical value realized by that originator. The historical value realized for each model is derived by examining auction proceeds of the off-lease vehicles by model and term. DBRS requests the auction level data for each model broken out by term for the 2-5 year timeframe compared against initial ALG residual value.

DBRS calculates the historical average loss relative to the initial ALG residual value for each model for 24, 36 and 48 months lease terms to the extent it is available. The historical average loss for each model relative to ALG is used to adjust ALG residual value for 24, 36, and 48 month terms. This calculation is performed for each model and is used as a proxy for expected losses for this model for their respective lease terms. DBRS also examines the data to assess the variability of residual losses.

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 systematic overestimation of contract values. The DBRS methodology is based on the assumption that the neither ALG nor proprietary models based estimates reflect all of the potential factors that could result in a systemic devaluation of the vehicles at the end of the lease term. It is clearly evidenced by the inherent volatility in the historical data fluctuation of the used vehicle market.

DBRS applies a stress factor to the base case residual values to reserve for these types of possibilities. The severity of the stress factor depends on the desired rating of the notes – the following table indicates the stress levels DBRS applies to the base case residual values for a series of desired rating levels, assuming the portfolio is reasonably diversified. DBRS also reviews the lessor's historical realized proceeds compared to ALG residual values and may apply an additional haircut if realized values have historically deviated materially given the proposed rating category.



<b>Residual Value Stress</b>	<b>AAA</b>	<b>AA</b>	<b>A</b>	<b>BBB</b>
Maximum	30.0%	25.0%	20.0%	17.5%
Minimum	22.5%	20.0%	15.0%	12.5%

The methodology is best explained through the use of an example: assuming a vehicle with a contracted residual value of \$12,000 and an ALG expected value of \$11,000, creating an embedded loss of \$1,000. In applying a AAA stress, DBRS reduces the ALG value by 22.5% - 30.0%. For example, a stress factor of 25% would result in a stressed ALG estimate of \$8,250 [ $\$11,000 \times (1 - 25\%)$ ].

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.



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## Appendix 1: DBRS Outline of Operational Risk Review Items

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The operational risk review includes an assessment of the items noted below as well as any other relevant factors related to the issuer.

### *Strategy and Management*

- Company history, ownership and operating experience.
- Financial condition and ability to provide and honor representations and warranties.
- Management experience.
- Staffing, training and retention rates.
- Portfolio size and composition.
- Strategic initiatives.
- Litigation (past, present and expected).
- Recent or planned mergers or acquisitions.
- Internal and external audit results.
- Securitization history and future plans.

### *Originations*

- Overview of operations/department organization.
- Origination channels.
- Sales and marketing practices.
- Program summary/ background of products originated.
- Dealer approval and ongoing review process.
- Contract origination procedures – (initial inquiry, credit review, approvals, documentation, verifications, funding).
- Description of technology in place for originations.
- Alliances with third parties.
- Other programs/future plans.
- Any program parameter shifts over time and past and future volume projections by product.

### *Underwriting/Risk Management*

- Department organization.
- Description of scoring model and ongoing validation procedures and updates.
- Underwriting policies and procedures.
- Underwriting guidelines, lending authority and exceptions approval (past changes/future plans).
- Residual value forecasting and ALG values.
- Use of credit scoring and proprietary technology.
- Income and employment verification processes.
- Exception/override process.
- Fraud prevention techniques.
- Closing and funding process.
- Dealer oversight and management.
- Quality control and audit processes.
- Documentation (storage, titling process).
- Compliance with state and federal laws.
- Discussion of vintage loss performance and trends to date.
- Residual value performance, turn-in rates and trends, ALG mark-to-market comparison.



### *Servicing*

- Department organization.
- Centralized vs. decentralized servicing.

#### *a) Customer Service*

- Procedures for responding to customer inquiries.
- Strategy and technology.
- Call volume and average time to answer.
- Number of representatives and ratio to call volume.
- Response times for inquiries.

#### *b) Collections*

- Collection strategies for early-, middle- and late-stage collections.
- Explanation of call and notice cycles by product type.
- Account-to-collector ratio.
- Right-party contact rate.
- Hold time and abandonment rates.
- Use of credit and behavioral scoring and other technology.
- Policies regarding rewrites, extensions, deferrals or payment holidays.
- Repossession timelines.
- Charge-off process.
- Use of technology.

#### *c) Remarketing / Loss Mitigation*

- Vehicle remarketing and disposition process.
- Use of auctions or dealer lots to sell vehicles.
- Vehicle maintenance, mileage and excess wear/tear recoveries.
- Recovery rates.
- Approach to fraud detection.

#### *d) Investor Reporting*

- Procedures for dissemination of reports to investors and trustees.
- Average number of investors remitted to on a monthly basis (last 12 months).
- Average dollar of monthly remittances (last 12 months).
- Number of late remittances in the last 12 months.

#### *e) Lease Administration*

- Cash management procedures and controls.
- Payment processing and controls.
- Insurance tracking.
- Exception and suspense management.
- Account reconciliation and timing.
- Post-closing quality reviews.

#### *f) Technology*

- Core servicing system strengths and weaknesses.
- Capacity remaining in the servicing system.
- Web site availability and usage.
- Procedures for vendor selection and oversight.
- Disaster recovery plans and success of last test.
- Frequency of full-system backup.
- Future initiatives.

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