



Methodology
*Rating Reverse Mortgage
Transactions in Canada*

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Appendix summarizing methodology added April 2011



Insight beyond the rating.

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Introduction

A reverse mortgage is a non-recourse mortgage loan offered to elderly individuals or couples interested in obtaining cash as a lump sum payment in return for a first-ranking security interest in their residential property. The borrowers can receive the cash flow without the need to sell the properties. A reverse mortgage contains standard contractual mortgage terms and conditions; however, no interest or principal payments are required during the owner's occupancy, although interest does accrue on the mortgage. This means that the loan balance is accreted until the loan matures.

As mentioned above, one of the unique attributes of a reverse mortgage, as compared with a regular mortgage, is that the borrower is not required to pay any of the accrued interest or principal until the loan matures or a termination event occurs. A termination event includes termination of the occupancy of the property, such as the death of the borrower or relocation to a full-time care facility. At that point, the property would be sold and proceeds would be used to repay the advance of funds and accrued interest. Should the total sale proceeds be insufficient to repay the reverse mortgage, there would be no recourse to the borrower or their heirs/estate and the borrower (or their heirs/estate) is not required to make the lender whole on the debt. The reverse mortgage is secured solely by the property.

Alternatively, if the value of the reverse mortgage is less than the proceeds from the sale of the property, any excess funds would remain with the owner or the owner's heirs/estate.

Until loan maturity or the occurrence of a termination event where the property is sold, the borrower continues to occupy and own the property (subject to the security interest held by the reverse mortgage lender), assuming all responsibilities and benefits of ownership of the principal residence. A contractual breach occurs if the borrower fails to fulfill his or her obligation to pay property taxes, maintain home insurance, occupy the property and keep the home in good repair, at which time the lender would be entitled to enforce its security interest over the property.

Characteristics of a Reverse Mortgage

The fundamental aspect of originating a reverse mortgage is to assess whether the value of the related property upon loan maturity will be sufficient to repay the reverse mortgage, which accretes over time. The size of the advance that a reverse mortgage lender makes to a homeowner is based on a number of key factors, such as (a) the current and expected future value of the property, (b) the expected occupancy term (EOT) and (c) the interest rate levels of the loan.

PROPERTY APPRECIATION

Reverse mortgage lenders typically pay little attention to the credit quality of the borrower as they do not depend on a borrower's ability to make an ongoing payment, as is the case in a standard mortgage. Instead, the underwriting process begins with a property appraisal completed by an accredited appraiser. One of the key assumptions made concerns the rate of future price appreciation for the underlying property. To mitigate the risk that the property might not appreciate as much as the forecasts made by the lender, which are generally conservatively set below long-term appreciation rates, the appraised value of every property is usually further adjusted and discounted by various degrees. The province of residence, general location and property type are all factors taken into account when determining the basis for the initial loan amount. Recreational properties, co-operatives and leaseholds are usually not eligible for reverse mortgages.

The advance allowed at origination is usually set at a conservatively low loan-to-value (LTV) limit to ensure that the property value, even with a modest appreciation, will remain above the accreting loan amount for a long period of time.

In addition, as a general policy, an LTV cap should be set for the maximum accrual of a single reverse mortgage. This means that should the value of the reverse mortgage accrete to this maximum LTV limit, the value of the reverse mortgage is no longer permitted to accrete. Furthermore, the property will be appraised more frequently for as long as the property value remains at the LTV limit. This will effectively exclude the interest yield available from the reverse mortgage and increase the likelihood that the property will be able to cover the payment of the reverse mortgage when sold.

EOT ASSUMPTION

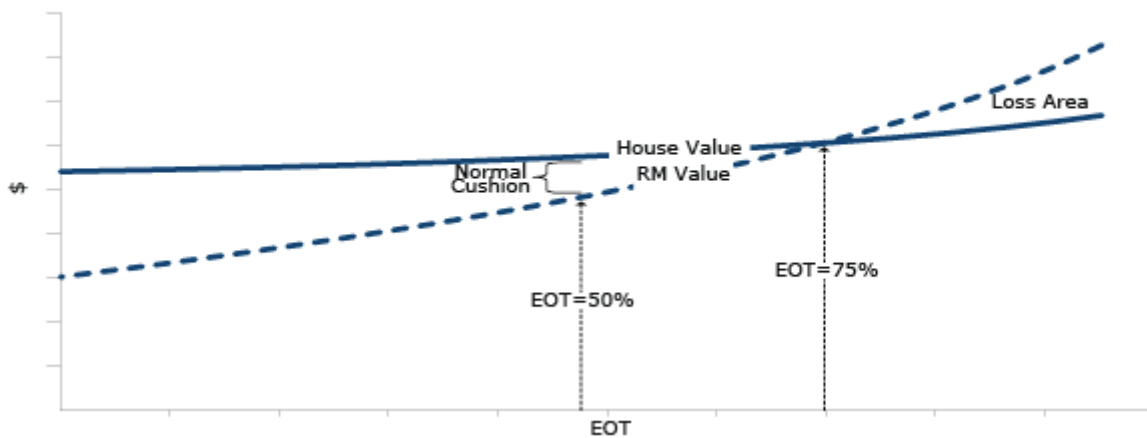
In reverse mortgage underwriting, the EOT, based on the age and gender of the borrower, plays a fundamental role in predicting the date of mortgage repayment. It estimates how long the mortgage balance will be outstanding, which, in turn, helps determine the value that must be recouped on the sale of the home to pay off the reverse mortgage. This information, along with information on property type and location, is used to determine the amount to be underwritten.

The EOT is an estimate derived from a combination of industry standard actuarial tables for life expectancy (mortality) and the underwriter's experience for early move-out prior to the borrower's death (mobility). It is defined as the expected time period between the origination of the reverse mortgage and the date the reverse mortgage comes due (when the borrower either dies or moves out of the property). If borrowers remain in their homes for a longer-than-expected period of time, there is a risk that the amount owing on the reverse mortgage at the time the borrower vacates the property will exceed the value of the property securing the reverse mortgage, thus resulting in a loss. The actuarial mortality tables show the probability of mortality at any particular age, given that the individual has survived to that age. When reviewing a reverse mortgage transaction, DBRS assesses the experience and expertise of the key actuary. Unlike probabilities of mortality (for which external references exist), the mobility probabilities are estimated through the originator's own experience. EOT tables are developed for single males, single females and couples, and DBRS expects the data to be closely monitored and compared with actual historical

experience data, and updated on an ongoing basis. Age is another factor in establishing an appropriate EOT; older homeowners generally receive higher advance rates, as the EOT is shorter and the loan will have less time to accrete at maturity.

Underwriting based on an EOT higher than 50% is considered conservative, as a 50% EOT table represents the actual occupancy term. For example, a 75% EOT table reflects a 75% probability that the actual occupancy term will be less than or equal to the EOT (i.e., there is a 25% chance that it will be longer). If the actual occupancy term is less than the EOT, there is a greater likelihood that when the reverse mortgage comes due, the property value will remain higher than the value of the reverse mortgage. The higher the EOT percentage, the more conservative the underwriting. Only when the accrued reverse mortgage value exceeds the property value does a loss occur on an individual reverse mortgage. This is demonstrated in the diagram below.

Reverse Mortgages and House Value Relationship



INTEREST RATE

Reverse mortgage interest rates, typically variable, are usually higher than equivalent rates for traditional mortgages, probably due to a lack of competition, market acceptance and the advantage of no payment requirement for the borrower. The higher the interest rate on the reverse mortgage, the lower the amount a lender will advance to a borrower at origination, as the loan will accrete faster and is more likely to exceed the property value of the home prior to repayment. In a rising interest rate environment, the likelihood of the reverse mortgage not being fully repaid at maturity is greater, as the loan balance may grow faster than the property value.



ORIGINATOR

As the underwriting quality and subsequent loan administration have the greatest impact on the ultimate performance of the reverse mortgages, DBRS will review all elements of a company's business related to the origination and servicing of reverse mortgages, regardless of whether the originator or servicer has a credit rating. The originator typically relies on an extensive referral network in the broader financial services community, including distribution agreements with the largest Canadian banks. Specifically, maintenance of the referral network, the terms and conditions of distribution agreements and management's experience and knowledge of loan production, appraisal, local real estate markets and property disposition venues, are all factors that are emphasized during DBRS's review.

As a reverse mortgage does not involve the purchase or sale of a property and has no change of occupancy, the potential for fraud is relatively limited compared with traditional mortgages. Nevertheless, misrepresentation by the borrower or coercion from a family member may occur. To mitigate these risks, a prudent lender should require independent legal advice of the borrower's choice and the selected counsel must certify that the borrower is aware of and understands all the terms and conditions. Furthermore, every mortgage should have title insurance.

SERVICER

Due to the limited numbers of participants in the reverse mortgage business, in Canada the originators of reverse mortgages are usually also the servicers. Nonetheless, the servicer's capabilities are reviewed and considered in assessing the ratings of any notes backed by reverse mortgages. The process is outlined in *Canadian Residential Mortgage Servicer Evaluations: DBRS's Approach* at www.dbrs.com.

As no collection of regular payments is required, the scope of reverse mortgage servicing is less extensive compared with traditional mortgage servicing. It is only at the end of occupancy that the property must be sold, which is the responsibility of the borrower or their heirs/estate. Therefore, the servicing of reverse mortgages is relatively simple, and is done mainly to ensure that property taxes are paid, property insurance is maintained and that periodic property inspections are conducted for collateral quality management. Generally, the servicer can be easily replaced; however, as senior citizens are borrowers of reverse mortgages, additional caution and care and more in-depth communication may be warranted to avoid any negative press or headline risk to the seller/servicer's reputation when dealing with senior citizens. The servicer should be knowledgeable about and compliant with relevant legislations in each jurisdiction.

Unless the servicer has an investment-grade rating, collections must be remitted by the servicer no later than two business days to reduce commingling risk.



LEGAL REQUIREMENTS AND OPINIONS

As in transactions that involve securitization of traditional mortgages, DBRS requires legal assurances (by way of legal opinions) that the sale of the reverse mortgages from the seller to the special purpose vehicle (SPV or the Trust) issuing the notes constitutes a “true sale”, and that the subsequent grant by the Trust of a security interest in the mortgages to the indenture trustee (on behalf of the investors) has been perfected in all applicable jurisdictions. DBRS reviews legal opinions to determine whether the transfer of the mortgages to the Trust (the Transfer) constitutes a true sale such that the assets of the Trust would not be consolidated with those of the seller in the event of the seller’s bankruptcy (bankruptcy remote from the claims of the seller’s creditors). The legal review also ensures that the indenture trustee has a perfected security interest in the purchased assets that secure the Trust’s obligations to the investors.

Notice and Perfection

Except for in the Province of Québec, Personal Property Security Act (PPSA) legislation in Canada does not cover interests in real property. Instead, a mortgage filing in the local land title registry office to evidence the Transfer is required for the Transfer to be considered a legal assignment that is enforceable against third parties. Yet with large or revolving receivable pools, this could be impractical. For this reason, an irrevocable power of attorney should be granted by the originator/seller in favour of the SPV in securitizations that involve real property prior to the insolvency of the originator/seller. The power of attorney will allow the SPV to effect a transfer of the mortgage in the related registry or land titles office without the co-operation of the originator. If an originator has an investment-grade credit rating, DBRS may temporarily waive this requirement. If an originator has insufficient credit strength, is not investment grade or falls below investment grade, DBRS usually requires that mortgages be re-titled into the name of a nominee or third-party custodian in order to protect against the risk of the originator going bankrupt and the mortgages remaining in its name.

In Québec, in the absence of a universality of claims (a legal concept under the Québec Civic Code), perfection of a security interest requires notification to the individual borrowers, in addition to the mortgage re-registration of title. The notification is usually triggered when the originator is downgraded below investment grade. In some securitization structures, it may not be necessary to notify the individual borrowers of the transfer of interests in the reverse mortgage to the SPV, even in the absence of a universality of claims. However, DBRS expects to receive some evidence that the security interest over the reverse mortgages is properly perfected in favour of the investors in Québec, as well as any other relevant jurisdictions.

Please refer to the commentary under the sub-heading “DBRS Québec Guidelines” in *Legal Criteria for Canadian Structured Finance* at www.dbrs.com for more details.

Registration

Because land has a title registry in all jurisdictions in Canada, all mortgages are registered in the land registry system. The mortgages can either be registered in the name of the originator and continue to be registered in that name even upon sale to an SPV, or the originator or seller can register the mortgages in the name of a third-party custodian, an entity that is remote from the originator or seller, upon the mortgage’s inception. If it is the latter, the mortgages should not be subject to a stay of court proceedings upon any bankruptcy of the seller (in which a court would be asked to officially declare that the mortgage receivables belong to the SPV and to release them from the seller’s estate), as the legal title to the mortgages is already registered in a name other than that of the seller. Provided that a legal opinion is given that indicates that the sale of the interest in the reverse mortgages to the SPV is bankruptcy remote, the creditors of the seller would have no right to claim against the mortgages. In all Canadian provinces – although not a requirement for perfection of the receivable or claim – there is an additional step that may be required to allow the SPV to enforce its right. That step is registration in the land registry office to evidence the transfer of the mortgage to the SPV. This step may be required where the mortgage has defaulted and the Trust intends to enforce the security to be repaid, which may not be practical or even



possible if the mortgage remains in the name of the seller (even if it is servicing on behalf of the Trust). As discussed above, in the absence of a bankruptcy of the seller, the securitization documentation usually provides for a power of attorney so that the particular mortgage can be re-registered and/or enforced by the SPV. In the event of a bankruptcy of the seller, if the registration in the land registry has not been updated to reflect the Transfer, the ability of the SPV to enforce a defaulted mortgage (or any mortgage, for that matter) may be subject to a stay of court proceedings so no steps can be taken until a court allows it. However, assuming the elements of a true sale are present (as evidenced by the legal opinion mentioned above) – and, if in Québec, perfection has been achieved – that stay should eventually be lifted by a court to allow re-registration and enforcement of the mortgaged properties by the SPV. If a registration is made at the land registry reflecting the transfer to the SPV prior to a bankruptcy of the seller, enforcement on that property would not be subject to a stay of proceedings in the event of the seller's bankruptcy.

To address the risk that the legal title remains in the name of the seller and is not re-registered upon the sale of the mortgages to the SPV, DBRS generally requires the completion of re-registration of title within 30 to 60 days once the seller falls below investment grade. If the sellers do not have a rating, there must be other measures taken to mitigate the above risks, such as subjecting the seller to financial strength tests or proving that the seller possesses a sufficient reserve to cover stay risk.

Registration of the transfer of legal title to the mortgages and notice to the borrowers of the sale, assignment and transfer of the mortgages and the related security could also be required (a) by law; (b) by an order of a court of competent jurisdiction; or (c) by a regulatory authority which has jurisdiction over the seller.

Please refer to *Legal Criteria for Canadian Structured Finance* at www.dbrs.com for more details.

Foreclosure and Recourse

As it is the responsibility of the borrower or their estate to sell the property at the end of occupancy, foreclosure is rarely initiated for reverse mortgages. Unlike regular mortgages, reverse mortgages are non-recourse loans. Should the total sale proceeds of the property be insufficient to repay the reverse mortgage, the lender has no recourse to the borrower or their estate. Alternatively, if the reverse mortgage value is less than the sale proceeds, any excess funds would remain with the borrower or their estate. For this reason, the originator (usually the servicer), relies on the borrower to sell the property (unless it is enforcing the security interest over a particular property on behalf of the SPV).

Legislation

DBRS understands that changes in regulatory oversight could have a significant impact on reverse mortgages and related securitization. However, any proposed changes are typically intended to target predatory lending or other unfair practices of the lender and should not affect any prudent lender with good business ethics.



TRANSACTION STRUCTURE AND CREDIT ENHANCEMENT

Credit enhancement and various structuring techniques are used to mitigate the uncertainty associated with reverse mortgage repayments and increase the likelihood of repayment of interest and principal on the notes.

Legal Maturity of the Notes and Refinancing

While the notes could be issued with an expected payment date to be repaid in one bullet payment or issued as pass-through notes until all loans in the pool are fully paid off, the legal final maturity is usually relatively long, potentially 25 or 30 years. The long tenor is meant to increase the likelihood of repayment as the DBRS rating addresses the timely payment of principal and interest on or prior to the legal final maturity date. For the notes issued with expected payment dates, DBRS stress testing assumes that, on the expected payment dates, the notes cannot be refinanced and the bullet payment cannot be made and will turn into a soft bullet structure by paying a monthly banker's acceptance (BA)-based interest plus a conservative spread for the remaining term after the expected payment date. Due to possible timing mismatches between re-pricing the reverse mortgages and the one-month BA rate, the stress testing also assumes a constant and sustained spread compression between the one-year T-bill rate and the one-month BA rate.

Subordination

Subordinated notes provide credit support for the senior notes by absorbing losses (up to the subordinated principal amount) and allowing the senior notes to have preferential access to the cash flows. In evaluating the stress test results, the subordinated notes will suffer a loss before the senior notes due to the subordination. As a result, any stress testing that indicates that the subordinated notes will be repaid means that the senior notes will also be repaid. It should be noted that, apart from the cash flows projected by modelling the EOTs for the reverse mortgage portfolio and cash, if applicable, there is no further assurance of payment by way of liquidity or additional credit enhancement to ensure repayment for the subordinated notes. Subordinated notes may have a tenor that is the same as or longer than that of senior notes.

Adjustment to Asset Base

In addition to an LTV cap on the accrual amount, each reverse mortgage can be reviewed frequently for additional value adjustment. For example, for each loan that is determined to have an excess of actual LTV over expected LTV after a certain time period since origination, the asset base against which the debt can be issued may be reduced by the excess LTV multiplied by appraised value at loan origination, until the actual LTV reaches the cap where no more accrual of reverse mortgage is permitted. This can provide additional assurance that sufficient asset value and resultant cash flows at property disposition are available to repay the notes.

Cash Account

As the timing of the repayment of a reverse mortgage and related cash flows is unknown, a cash account can be established to mitigate the uncertainty of cash flows. This cash account can provide for the timely payment of scheduled interest on the notes, thereby avoiding any payment default on the notes.

Accrual of Note Interests

Due to the uncertainty surrounding the exact timing of reverse mortgage repayment, the notes can be structured in such a way that if funds are not sufficient to pay the interest on the notes on the scheduled interest payment dates, no payment default on the notes is triggered. Instead, the interest shortfall will be accrued. Interest accrual on the subordinated notes can be structured as part of subordination support for the senior notes.



Hedging

Interest rate risk can be mitigated by the practice of matching borrowing and lending terms. As discussed above, derivative instruments such as interest rate swaps and forward rate agreements with counterparties that meet DBRS criteria can be utilized to effectively match the term of the debt to the term of the mortgage portfolio, creating relatively stable excess spread and proper staggering of debt maturities. If the notes are denominated or payable in a currency other than Canadian dollars, foreign currency risks could exist. These risks must be mitigated appropriately through currency swaps or other hedging instruments for DBRS analysis.

Prepayment Penalty

As reverse mortgages can be repaid at any time, the terms of the reverse mortgages provide for a prepayment penalty to cover potential reinvestment losses, in addition to the repayment of principal and interest. A reinvestment loss occurs if the existing rate on the reverse mortgage is greater than the current rate offered. In addition, an adjustment payment to compensate for the costs incurred in originating the reverse mortgage may apply if the reverse mortgage is prepaid during the first few years of the loan advance. Usually no prepayment adjustment is made if the repayment results from the death of the borrower, nor if the amount of the penalty could be reduced upon the borrower entering a long-term care facility or retirement residence. A prepayment penalty or adjustment payment is collected when the reverse mortgage is prepaid prior to the maturity date.



PERFORMANCE OF UNDERLYING ASSETS

The historical performance of underlying assets provides insight into the consistency and quality of the originator's underwriting standards. For example, low percentages of losses in both loan counts and dollar values over a long period of time indicate a conservative approach to reverse mortgage underwriting, with respect to EOT assumption, property value appreciation and interest rate levels.

CASH FLOW ANALYSIS

Timely payment of principal and interest on the notes supported by reverse mortgages depends on (1) the accuracy of the lender's EOT for the borrowers who have taken out the reverse mortgages; (2) the property value and the equity in the property; and (3) the spread between the interest rate for reverse mortgage accrual and the interest rate on the notes, to generate the cash flows that will service the notes. In order to ensure that the notes are paid in accordance with their terms, even in an adverse environment, cash flows are stressed to levels commensurate with the ratings.

EOT Assumption

Without a regular payment schedule, the actual cash flow generated by a reverse mortgage typically occurs at loan maturity. However, the date on which a reverse mortgage will be repaid is unknown, with some probability of repayment in each month. Therefore, calculation of the EOT is critical for predicting cash flows from mortgage repayments.

At loan maturity, the reverse mortgage (which has a first-ranking security over the property) will be repaid through the proceeds from the sale of the property. The cash flows generated from the sale of the property to repay the reverse mortgage will flow through to support the interest and principal payments due to the note investors. As a result, at any particular time, there may not be sufficient funds available to pay the interest due on the notes, if an insufficient number of reverse mortgages have matured prior to the note interest payment date.

Given the importance of the EOT assumption, DBRS has stress tested the variability of EOT assumptions and evaluated the impact on cash flows, by changing the EOT in relation to the 'move-out' probability by two standard deviations (specifically, minus two standard deviations). This scenario increases the EOT and the value of the reverse mortgage in comparison with the value of the property. While, predictably, this does cause some variation in terms of the timing and duration of the cash flows, the probability of ultimate repayment of the notes by the legal maturity date is not affected.

Property Value and Equity in the Property

All properties are appraised by a recognized, certified and independent property appraiser. This appraisal is then adjusted downward by the reverse mortgage originator to conservatively reflect any potential risk associated with the property. The property's geographic location is one element that reduces the appraised value when calculating the maximum advance. Further adjustments by the originator are made to reflect the property type (single-family home, duplex, townhouse or condominium), as well as the quality and location of the property.

On the basis of the adjusted appraisal value, a reverse mortgage subject to a maximum LTV limit can be arranged because, over time, the reverse mortgage may accrue interest at a rate greater than the actual increase in the value of the underlying property. As senior citizens generally tend to make few capital improvements to their properties (rather than frequent upgrades), it may be prudent to assume that properties owned by reverse mortgage borrowers would not appreciate at the same rate as those of the general population. It should be noted, however, that a loss only occurs when the value of the reverse mortgage exceeds the property value.



An additional level of protection is provided voluntarily by many reverse mortgage borrowers. Not all borrowers wish to obtain the maximum allowable amount and instead may elect a lower level of leverage. This increases the level of protection afforded to investors of the notes as the property owners retain a greater equity in the property and have more incentive to make repairs and improvements.

When the notes are issued, DBRS carries out an analysis to assess the magnitude of an initial one-time house price decline at that time (without further changes in house prices) so as to determine whether the notes will suffer any loss. Another scenario tested by DBRS is to assume a one-time 30% decline in house prices when the notes are issued (similar to the decline experienced in the Toronto market in the early 1990s) and to determine the degree of average annual property value decline over the legal tenor of the notes before any losses are suffered on the notes.

Interest Rate and Excess Spread

Excess spread refers to the difference between the reverse mortgage interest rate and the funding costs of the notes. A key to good performance of the reverse mortgage portfolio that backs the notes is maintenance of the spread. The changing spread between these two factors may cause shortfalls in the cash flow required to pay the notes. While reverse mortgages tend to be priced off fixed or floating benchmarks of shorter tenors (such as one-year Government of Canada Treasury bills) and reset annually, the cost of funds on the notes can also be at fixed or floating rates for longer tenors. In order to manage any interest rate mismatch, DBRS expects that a series of interest rate swaps and forward rate agreements will be entered into to match the term of the notes with the interest resets of the reverse mortgages. However, as these hedges are based on anticipated repayments of the reverse mortgages, actual experience may differ and cause some minor mismatches to arise, which DBRS will take into consideration in assessing the ratings.

An environment of rising interest rates could also lead a reverse mortgage to eventually compound to a value greater than the value of the underlying property. For this reason, when an initial loan amount is determined, future interest rates should be conservatively assumed to be higher than the rate at the initial term. If the notes are issued out of a revolving asset pool with continuous originations, future originations need to be consistent with current origination standards to increase the certainty of ultimate repayment of the notes.



Surveillance

After a transaction closes, DBRS monitors the performance of each outstanding transaction to ensure that ratings are as prospective as possible and that they reflect the relevant information received by DBRS relating to that particular transaction. The maintenance of each rating is predicated upon the timely receipt of performance information and data from the seller. The performance information and data for each outstanding transaction is reviewed by DBRS analysts to identify variations between actual and expected performance levels (the latter as assumed by DBRS) for each transaction. DBRS also monitors changes in macroeconomic conditions and the associated effects on the consumer, industry dynamics and other exogenous events that may have an impact on the credit quality of outstanding transactions. DBRS provides monthly surveillance information for all public ratings on its website, www.dbrs.com.

Conclusion

A reverse mortgage appeals to elderly borrowers as it allows them to draw upon the equity embedded in their property without regular interest or principal repayment. While the reverse mortgage market in Canada is relatively small, DBRS strives to provide investors with more transparency and insight by developing an approach to rating reverse mortgage transactions. The methodology considers the key characteristics of reverse mortgages and their corresponding risk metrics, together with the various structural features used in securitizations. As structural innovations continue to evolve, along with origination and servicing practices, DBRS will continue to refine and adjust its criteria to better serve the needs of market participants.



Appendix: Canadian Reverse Mortgage Methodology Summary

LIMITATIONS

- Future asset performance may deviate significantly from past performance.
- Actual occupancy terms, interest rates and property value declines may exceed DBRS's stressed assumptions and expected portfolio performance is highly dependent on assumed levels of these variables.
- The methodology considers the current legal and regulatory framework (including consumer protection regulations) and its impact on the structure of transactions as of the date of publication of this summary.

APPLICATION OF RATING RATIONALE

Summary of Risk Analysis Process for Canadian Reverse Mortgage Transactions

Input	Details	Key Variables
Portfolio-Level Characteristics	A minimum of three to five years of historical performance data, tracking key variables of pool performance.	<ul style="list-style-type: none"> • Size and seasoning of portfolio, geographic distribution, reverse mortgage advance rate and amount, property value, mortgage rate, property type, expected occupancy term (EOT; based on borrower's mortality and mobility assumptions) and the number and magnitude of reverse mortgages whose value at maturity exceeds the sale proceeds of the property (i.e., a loss).
Originator Analysis	All elements of a company's business related to reverse mortgage origination will be reviewed for new issuers.	<ul style="list-style-type: none"> • Credit rating of the Originator (if applicable), business and securitization program history, competition and challenges, growth potential, senior staff experience and turnover, market share, target market and product positioning, material litigation/legal compliance issues, product offerings, marketing, pricing, risk management, liquidity and other funding sources, auditing, fraud experience and management, loan origination and credit adjudication process, delivery channels, information systems, disaster recovery and business continuity. • DBRS will review the assumptions used to determine advance rate, interest rate, EOT and property appraised value and future house price appreciation at origination. • The size and seasoning of the portfolio are examined to assess if the originator has the critical mass required to develop underwriting assumptions and to address liquidity within the portfolio to meet obligations as they come due.
Servicer Analysis	Servicer capacity will be reviewed according to criteria outlined in the Canadian Residential Mortgage Servicer Evaluations methodology for new programs.	<ul style="list-style-type: none"> • Credit rating of the servicer (if applicable), company structure, management experience and outlook, asset administration, reporting and customer service, loss management, technology and systems, financial condition, staff and training, procedures and controls, outsourcing and sub-servicing arrangements.
Economic Analysis	DBRS expectation of macroeconomic factors throughout an economic or credit cycle.	<ul style="list-style-type: none"> • Macroeconomic factors and potential impact on Canadian reverse mortgage transaction performance from the review of the resale housing market, monetary policy, mortality tables, unemployment rate and consumer bankruptcies.



Summary of Risk Analysis Process for Canadian Reverse Mortgage Transactions

Input	Details	Key Variables
Legal Document Analysis	Review of transaction structure and underlying legal documents.	<ul style="list-style-type: none"> Review of all legal documents as to their form and content, including true-sale opinions, perfection of security interest in the purchased assets, powers of attorney granted to the trust or registrable mortgage transfers, priority of cash distributions, legal maturity date and bankruptcy remoteness of the structure. Document analysis also includes assessment of regulatory environment, early amortization events, loan-to-value (LTV) caps, asset-base adjustments, servicer termination events, re-titling of mortgages trigger events and events of default.
Output		Application
Assumptions of Base Case		<ul style="list-style-type: none"> The base-case EOT, property value decline and interest rates are estimated based on the key variables identified after portfolio, seller, servicer, economics and legal structure review.

Summary of Process to Evaluate Proposed Enhancement in Canadian Reverse Mortgage Transactions

Input	Process
Proposed Amount of Enhancement	<ul style="list-style-type: none"> Several scenarios are considered in the cash flow model using simultaneous stresses on the EOT, property value decline and interest rates. The stress variables are provided in Table 1. Cost of funds and replacement servicer fees are included in the analysis. The estimated credit losses after cash flow modeling are compared with the proposed amount of credit enhancement to determine whether the proposed enhancement is sufficient or any loss on the notes may occur at the requested rating.
Proposed Form of Enhancement	<ul style="list-style-type: none"> DBRS evaluates the appropriateness and mechanism related to each form of enhancement, including hedging arrangements, triggers, availability, scalability, priority of payments, negative carry and eligibility of related parties and investments. Floor levels may be required to protect against tail-end risk of default and loss. Common forms of enhancement are the following: <ul style="list-style-type: none"> Excess spread (generally limited to a credit of one year). Cash collateral account. Subordination. Overcollateralization. Letter of credit.
Output	Appropriate rating level based on the proposed enhancement.



Summary of Additional Risks to be Considered in Canadian Reverse Mortgage Transactions

Risk	Description	Methodology ¹
Interest Rate Mismatch	Arises when the interest rates on the securitized assets are based on a different interest rate term than the notes issued. For example, fixed-rate notes are secured by a portfolio of floating-rate mortgages.	<i>Swap Criteria for Canadian Structured Finance Transactions</i> or conservative stress scenario in cash flow model.
Basis Rate Mismatch	Arises when the basis for calculating interest charged on the securitized assets or swap contract is different from the basis for paying interest on the notes issued. For example, prime-based interest on the mortgages does not perfectly offset banker's acceptance (BA) based cost of funds on the notes (referred to as prime/BA risk).	<i>Swap Criteria for Canadian Structured Finance Transactions</i> or conservative stress scenario in cash flow model.
Currency Mismatch	Arises when the proceeds received from the mortgages are in a different currency than the principal and interest payments required 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 servicer of the assets collects funds owed from the securitized contracts and manages the funds within its daily operations between monthly remittance dates. If the servicer were to declare bankruptcy, it may be onerous and time consuming to obtain rightful access to the commingled funds. Unless the servicer has an investment-grade rating, collections must be remitted to the trust within two business days.	<i>Legal Criteria for Canadian Structured Finance</i>
Bankruptcy Remoteness from Originator or Seller	Transactions should be structured to ensure that the securitized assets are separate and remote from any claim that secured creditors may have if the seller or servicer of the assets files for bankruptcy. True sale opinions are expected and are reviewed as to their form and content on a transaction by transaction basis.	<i>Legal Criteria for Canadian Structured Finance</i>
Transaction Parties	Appropriate remedies should be clearly documented in case the financial strength of key transaction parties is weakened below levels considered acceptable by DBRS.	<i>Swap Criteria for Canadian Structured Finance Transactions</i> and <i>Legal Criteria for Canadian Structured Finance</i>
Conduit Liquidity Risk	The funding of mortgages by asset-backed commercial paper (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</i> and <i>Legal Criteria for Canadian Structured Finance</i>

1. Methodologies are available at www.dbrs.com.



SUMMARY OF TRANSACTION MONITORING

Summary of Surveillance Reporting for Canadian Reverse Mortgage Transactions

Debt Type	Information Reported	Frequency	Source ¹
ABCP	Asset class, seller industry, seller rating, funded amount, initial credit enhancement, current credit enhancement, portfolio LTV, deal rating.	Monthly	<i>Monthly Canadian ABCP Report</i>
ABS	Originator, collateral description, types of credit enhancement available, program size, lead underwriter, debt class name, original debt balance, current debt balance, coupon, expected repayment date, legal maturity, current rating, reporting month, total debt balance, portfolio LTV.	Monthly	<i>Monthly Canadian ABS Report</i>
Private Term Transaction	Originator, collateral description, types of credit enhancement available, program size, lead underwriter, debt class name, original debt balance, current debt balance, coupon, expected repayment date, legal maturity, current rating, reporting month, total debt balance, portfolio LTV.	Monthly	Not public.

1. DBRS monthly surveillance reports are available at www.dbrs.com.

SUPPLEMENTARY TABLE

Table 1: Summary of Cash Flow Stress Scenarios for AAA (sf) Transactions

Characteristic	Stress Scenario
EOT	The originator's EOT assumption used in underwriting is stressed by two standard deviations.
Property value	The magnitude of an initial one-time house price decline is assessed to determine the break-even loss level for the notes. Another scenario of an initial 30% decline in house prices is assumed to obtain the degree of average annual property value appreciation or decline over the legal tenor of the notes before any losses on the notes.
Interest Rates	The interest rate assumptions used by the originator in underwriting are reviewed and may be further stressed depending on the degree of underwriting conservatism and shape of the forward curve.

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