M RNINGSTAR DBRS

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Welcome to the DBRS Morningstar Product Guide.

As the next generation in credit ratings, DBRS Morningstar offers independent, transparent, and innovative credit analysis to the market. We are committed to empowering investor success and serving the credit markets with a more innovative tech-forward approach. We focus on clarity of our opinions, diversity of views, and responsiveness to the market participants. To explain our work in a transparent way, we created a variety of communication channels to make our independent credit ratings, other opinions, and research easily accessible to the market.

At DBRS Morningstar, we set ourselves apart with our intuitive dbrsmorningstar.com website including our tailored ESG microsite; DBRS Viewpoint, a first-of-its-kind, data-rich technology platform; our participation in major financial data platforms and feeds; our insightful events and webinars; and our real-time social media updates, targeted email alerts, and topical newsletters.

In keeping with our commitment to transparency, this Product Guide provides an overview of DBRS Morningstar's credit rating products and other types of credit opinions for financial institutions, corporates, and government entities as well as structured finance products and instruments.

Thank you for your interest in DBRS Morningstar and our credit ratings. If you have any questions, please contact us at info-dbrs@morningstar.com.

Detlef Scholz

President DBRS Morningstar Credit Ratings This publication is intended as a reference guide only. For more information on DBRS Morningstar products, please refer to the Methodologies & Criteria, Rating Policies, Rating Studies, and Rating Scales sections at dbrsmorningstar.com under Understanding Ratings.

In this publication, Corporate Finance refers to Corporates, Financial Institutions, and Governments and related entities, collectively, while Structured Finance refers to asset-backed securities (ABS), asset-backed commercial paper (ABCP), residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), covered bonds, structured credit, and split shares, collectively. Where applicable, each relevant sub-business line that offers a product is referenced below.

Note: Morningstar Credit Information & Analytics (MCIA), an affiliate of DBRS Morningstar, offers modular credit information and analytics products, including DealView. MCIA is not a credit rating agency. DBRS Morningstar is separate from MCIA, and the products of MCIA are not described in this Product Guide. For information on MCIA's products and services, please visit https://mcia.morningstar.com.

A. Credit Rating Products

Background Information on DBRS Morningstar Credit Ratings

DBRS Morningstar credit ratings are forward-looking opinions about credit risk that reflect the creditworthiness of an issuer, rated entity, security, and/or obligation based on DBRS Morningstar's quantitative and qualitative analysis in accordance with applicable methodologies and criteria. They are meant to provide opinions on relative measures of risk and are not based on expectations of, or meant to predict, any specific default probability. Credit ratings are not statements of fact.

DBRS Morningstar issues credit ratings using one or more categories, such as public, private, provisional, final(ized), solicited, or unsolicited.¹ From time to time, credit ratings may also be subject to trends, placed under review, or discontinued.

DBRS Morningstar credit ratings are determined by credit rating committees.

DBRS Morningstar differentiates credit ratings of certain Structured Finance products from traditional Corporate Finance ratings with a different rating symbol modifier: (sf).² The (sf) modifier indicates that the credit rating is for the relevant Structured Finance product; it does not change the meaning or definition of the credit rating in any other way and does not change the risk of the particular Structured Finance product.

DBRS Morningstar uses rating symbols as a concise method of expressing its opinion to the market, but there are a limited number of rating categories for the possible slight risk differentials that exist across the credit rating spectrum. DBRS Morningstar does not assert that credit ratings in the same category are of exactly the same quality.

DBRS Morningstar currently uses the following rating scales to assign and monitor credit ratings:³ (1) Long-Term Obligations Scale, (2) Commercial Paper and Short-Term Debt Rating Scale, (3) Financial Strength Rating Scale, (4) Preferred Share Rating Scale (Canadian scale only), (5) National Scale Credit Ratings, (6) Expected Loss Rating Scale, and (7) Credit Fund Rating Scale.

Issuer Ratings

An Issuer Rating reflects DBRS Morningstar's assessment of that issuer's likelihood of default. DBRS Morningstar's rating analysis begins with an evaluation of the issuer's fundamental creditworthiness and also takes the issuer's business and financial risks into account.

Generally speaking, an Issuer Rating is the reference point used in assigning ratings to that issuer's debt securities, such as long-term obligations, including preferred shares and short-term obligations. Nonetheless, depending on the structural and legal details of each rated security,

3 For more information on the rating scales DBRS Morningstar currently uses, please also refer to Appendix II.

¹ For more information on the general categories of DBRS Morningstar Credit Ratings, please also refer to Appendix I.

² DBRS Morningstar marks the credit ratings of the following Structured Finance products (rated with a global or national scale, as applicable) with the (sf) modifier: ABS; ABCP; RMBS; CMBS; single and multitranched collateralized debt obligations and credit default swaps (CDSs), with the exception of single-name CDSs; multitranched insurance securitizations; structured investment vehicles; and repackaged instruments where any of the underlying assets is a Structured Finance instrument.

credit ratings on actual securities (secured or unsecured) may be higher, lower, or equal to the Issuer Rating for a given entity.

For sovereigns and any other rated entities that would likely have the ability to differentiate between foreign and local currency obligations in a debt restructuring, DBRS Morningstar typically assigns a Foreign Currency Issuer Rating and a Local Currency Issuer Rating.⁴

Issuer Ratings are typically assigned by most sub-business lines in Corporate Finance.

Structured Finance assigns Issuer Ratings only in respect of Canadian Pension Funds.

DBRS Morningstar uses the Long-Term Obligations Scale as well as the Commercial Paper and the Short-Term Debt Rating Scale to assign Issuer Ratings.

Financial Strength Ratings

A Financial Strength Rating is DBRS Morningstar's assessment of an insurance company's ability to make timely and full payment of its obligations on policyholder claims and benefits as well as financial contract guarantees and benefit obligations.

The Insurance team assigns these ratings using the Financial Strength Rating Scale.⁵

Long-Term Obligation Ratings

Long-term obligation ratings provide DBRS Morningstar's opinion on the risk that investors may not be repaid in accordance with the terms under which the long-term obligation was issued. The obligations rated in this category typically have a term of one year or longer.

Corporate Finance assigns long-term obligation ratings on different types of securities and instruments across all sub-business lines. Also included are long-term obligation ratings assigned to credit agreements and hybrid securities, including preferred shares.

Generally speaking, DBRS Morningstar assigns Corporate Finance long-term obligation ratings by adjusting the relevant Issuer Rating based on seniority of the relevant instrument and, for bonds issued by non-investment-grade (non-IG) or below-investment-grade (BIG) issuers, the relevant Recovery Rating.⁶ DBRS Morningstar assigns Financial Institutions long-term obligation ratings by adjusting the relevant Issuer Rating based on the seniority of the relevant instrument.

Structured Finance assigns long-term obligation ratings on debt instruments, such as bonds and certificates, credit/warehouse facilities, and liquidity agreements.

DBRS Morningstar uses the Long-Term Obligations Scale to assign long-term obligation ratings.⁷

6 For more information, please see the Recovery Ratings section.

⁴ For more information on Local and Foreign Currency Ratings, please also refer to the Appendix A to the *Global Methodology for Rating Sovereign Governments*.

⁵ The Financial Strength Rating Scale generally uses the same letter ratings as the Long-Term Obligations Scale; however, the Financial Strength Rating Scale uses different terms to describe the credit quality of the relevant rating. In addition, the Financial Strength Rating Scale is unique in that it has an R category that addresses the potential situation of regulatory supervision and control of an insurance company if there is a risk of that company being unable to fulfill its policyholder obligations. This category would not be applicable to the Long-Term Obligations Scale.

⁷ Preferred shares issued in the Canadian securities markets are rated using the preferred share rating scale and preferred shares issued outside of Canadian securities markets are rated using the long-term obligations scale.

Short-Term Obligation Ratings

Short-term obligation ratings provide DBRS Morningstar's opinion on the risk that an issuer will not meet its short-term financial obligations in a timely manner. The obligations rated in this category typically have a term of shorter than one year.

Short-term obligation ratings comprise ratings assigned on commercial paper issuances,⁸ bankers' acceptances, or T-Bills by Corporate Finance as well as ABCP and money-market instruments by the Structured Finance.

DBRS Morningstar uses the Commercial Paper and Short-Term Obligations Scale⁹ to assign short-term obligation ratings.

Critical Obligations Ratings

Critical Obligations Ratings¹⁰ (CORs) address the risk of default for particular obligations/ exposures at certain banks with a higher probability of being excluded from bail-in and remaining in a continuing bank in the event of a troubled bank's resolution than other senior-unsecured obligations.

CORs have been introduced to operating banks in jurisdictions where DBRS Morningstar considers that the resolution framework creates this level of differentiation. DBRS Morningstar generally applies these ratings to large, interconnected, and systemically important banks. CORs encompass derivatives, payments and collection services, obligations of a bank as issuer of covered bonds, certain liquidity lines, and contingent liabilities.

DBRS Morningstar uses the Long-Term Obligations Scale and Commercial Paper and the Short-Term Debt Rating Scale to assign CORs.

Credit Ratings on Interest-Only (IO) Securities

A DBRS Morningstar credit rating on an IO security provides an opinion on the risk that an IO issuer will not make the IO interest payments in accordance with the relevant transaction documents. For this purpose, DBRS Morningstar considers credit losses that may adversely affect the notional amount of the IO and the IO excess interest proceeds. A DBRS Morningstar IO credit rating does not address the likelihood that the IO notional amount is reduced by prepayments, whether voluntary or involuntary.

DBRS Morningstar assigns these are credit ratings to IO securities that entitle the holder of such certificates to receive the residual interest proceeds applicable to a stated tranche or group of tranches (or Reference Obligations) in a structured finance transaction. IO securities typically do not have a stated coupon and do not receive principal payments.

DBRS Morningstar typically uses the Long-Term Obligations Scale to assign credit ratings to IO securities.¹¹

- 8 They are typically unsecured promissory notes of less than one year in duration.
- 9 Rating approach and key considerations used to determine ratings are highly similar for short and long time horizons. Consequently, there is generally a meaningful relationship between short- and long-term ratings; however, there are some unique aspects in assessing short-term credit risk, primarily because of liquidity concerns related to shorter maturities. DBRS Morningstar believes that these aspects can be more clearly delineated by using a separate Commercial Paper and Short-Term Obligations Scale. For more information, please refer to DBRS Morningstar's Short-Term and Long-Term Rating Relationships at dbrsmorningstar.com under Understanding Ratings.
- 10 For more information, please refer to the DBRS Morningstar *Global Methodology for Rating Banks and Banking Organisations*.
- 11 For more information, please refer to the DBRS Morningstar *Rating North American CMBS Interest-Only Certificates* methodology.

First-Dollar Loss Ratings for Large/Single-Borrower Commercial Property Debt Obligations

These credit ratings reflect DBRS Morningstar's opinion on the first dollar of loss that a financial institution may experience with respect to the interest and/or principal payment obligations of the relevant borrower regarding a mortgage loan secured by income-producing commercial real estate.¹² First-dollar loss ratings do not consider the timeliness of interest and principal payments. Furthermore, first-dollar loss ratings do not consider the borrower's other obligations, the borrower's risk of insolvency, or any relevant structural features or deficiencies.

The CMBS team typically assigns these ratings upon request by Canadian-owned and -regulated insurance companies. DBRS Morningstar uses the Long-Term Obligations Scale to assign First-Dollar Loss Ratings.

Preferred Share Ratings

DBRS Morningstar assigns credit ratings to preferred shares issued by corporate issuers and financial institutions. DBRS Morningstar uses the Long-Term Obligations Scale to rate preferred shares issued outside Canadian securities markets. DBRS Morningstar uses the Preferred Share Rating Scale,¹³ which maps to the Long-Term Obligations Scale, to rate preferred shares issued by Canadian corporate issuers¹⁴ and Canadian financial institutions in Canadian securities markets.

The Preferred Share Rating Scale is meant to give an indication of the risk that a borrower will not fulfill its related obligations in a timely manner with respect to both dividend and principal commitments.

Canadian Structured Finance Split Share Ratings

A Split Share Rating is DBRS Morningstar's opinion that reflects the amount of asset coverage or downside protection available to withstand a decline in the net asset value of the issuer's portfolio, which is the source of funds for the repayment of preferred share principal. The rating also takes into account the issuer's ability to meet its fixed cumulative distributions owed to preferred shareholders.¹⁵

The Canadian Structured Finance team assigns these ratings to preferred shares typically issued by split share companies. Split share companies are a type of fund created for a finite period of time. A split share company typically acquires a portfolio of common shares and issues two classes of shares (preferred shares and capital shares) to redistribute the income and capital gains earned from common shares to separate groups of investors based on different levels of desired risk.

DBRS Morningstar uses the Preferred Share Rating Scale to assign Canadian Structured Finance Split Share Ratings.

¹² For more information, please refer to the DBRS Morningstar North American Single-Asset/Single-Borrower Ratings Methodology.

¹³ For more information on DBRS Morningstar credit ratings assigned to preferred shares issued by non-Canadian financial institutions, please see the Long-Term Obligation Ratings section and refer to the DBRS Morningstar *Global Methodology for Rating Banks and Banking Organisations*.

¹⁴ For more information on DBRS Morningstar credit ratings assigned to preferred shares of non-Canadian corporate issuers (other than financial institutions), please see the Long-Term Obligation Ratings section and refer to the DBRS Morningstar Criteria: Preferred Share and Hybrid Security Criteria for Corporate Issuers.

¹⁵ For more information, please refer to the DBRS Morningstar *Rating Canadian Split Share Companies and Trusts* methodology.

National Scale Credit Ratings

DBRS Morningstar uses National Scale Credit Ratings in a country to rate domestic issuances against their industry peer group in the same country and to provide a rank ordering of credit risk within the country. National Scale Credit Ratings are not comparable between countries. DBRS Morningstar may assign National Scale Credit Ratings for domestic issuers and issuances or for foreign entities with issuances in the local market.

A national scale would typically contain a long-term scale and a short-term scale for credit ratings.

National Scale Credit Ratings for each country are typically mapped to the global ratings, primarily in reference to the relevant sovereign local currency rating. The mapping table is typically monitored and calibrated to incorporate the range of ratings available on the national scale relative to the relevant sovereign rating.

Expected Loss Ratings

DBRS Morningstar Expected Loss Ratings give an indication of the expected loss of untranched debt or equity securities (pass-through instrument) whose credit performance depends predominantly on the credit performance of a loan portfolio backing such pass-through instruments. Expected loss is the reduction of the pass-through instrument's present value as a result of adverse credit performance in terms of amount due on the loans in the portfolio backing the pass-through instrument not being paid and/or the delayed payments of amounts due on loans.

Expected Loss Ratings are different from Long-Term Obligation Ratings and Short-Term Obligation Ratings whereby the latter product types provide an opinion on the relevant obligation's default risk. For many Structured Finance asset classes, DBRS Morningstar determines the nominal expected loss of a portfolio in the course of the process to assign a Long-Term Obligation Rating to the securitization bonds. To assign Expected Loss Ratings, DBRS Morningstar converts such nominal expected loss into the reduction of the relevant instrument's present value while also considering the average life of the loan portfolio.¹⁶

Structured Finance uses the DBRS Morningstar Expected Loss Ratings Scale to assign these ratings.

Credit Fund Ratings

DBRS Morningstar Credit Fund Ratings address the credit quality of a portfolio of assets held in a credit fund that invests in term instruments; however, these ratings do not address considerations relating to the expected performance of the portfolio of assets due to market volatility, recoveries, yield, liquidity, foreign exchange, leverage, regulatory risks, or other erosion of their value. Credit Fund Ratings do not consider the risks to the fund liabilities or credit fund holder return. Credit Fund Ratings are different from Expected Loss Ratings in that the former gives an indication of the average default probability of a portfolio of assets held in a given credit fund.

The approach with respect to Credit Fund Ratings compares the expected value of a no-loss scenario with the expected portfolio loss scenario. In assigning Credit Fund Ratings, DBRS Morningstar considers, among other things, the management and legal structure of the relevant credit fund.¹⁷

¹⁶ For more information, please refer to the DBRS Morningstar Expected Loss Rating Scale at dbrsmorningstar.com under Understanding Ratings and the DBRS Morningstar commentary, DBRS Expected Loss Ratings, at dbrsmorningstar.com.

¹⁷ For more information, please refer to the DBRS Morningstar *Rating Credit Funds* methodology.

The Structured Credit team uses the Credit Fund Rating Scale to assign credit fund ratings.

Point-in-Time Credit Ratings

Different from the types of credit ratings described so far, Point-in-Time credit ratings are only effective as of the date of the relevant rating committee. Any changes to the facts and circumstances surrounding a Point-in-Time Rating following its determination are not taken into account. Point-in-Time Credit Ratings are typically private and are not monitored.

DBRS Morningstar uses the Long-Term Obligations Scale as well as the Commercial Paper and Short-Term Debt Rating Scale to assign Point-in-Time Ratings.

Indicative Credit Ratings

An Indicative Credit Rating is a type of Point-in-Time Rating and serves as a point-in-time indication of a provisional or finalized (new) credit rating that may be assigned at a future date. Indicative Credit Ratings are different from provisional or final(ized) credit ratings. Typically, private Indicative Credit Ratings are not monitored and, as such, are only effective as of the date of the relevant rating committee.

Indicative Credit Ratings may be used in Infrastructure and Project Finance sub-business lines for project proposals (bids) submitted as part of a competitive selection process. These Indicative Credit Ratings are based on draft documents and hypothetical scenarios as there are no debt securities issued at the time Indicative Credit Ratings are assigned.

Indicative Credit Ratings may also be used in other areas of Corporate Finance in other kinds of hypothetical scenarios or with respect to issuers that request an indication of the likely rating range that may be assigned to an issuer.

Indicative Credit Ratings may be, but are not typically, assigned in Structured Finance. DBRS Morningstar typically uses the Long-Term Obligations Scale to assign Indicative Credit Ratings.

B. Other Credit Opinions

In addition to the credit rating products described thus far, DBRS Morningstar provides other types of credit opinions that are not credit ratings. Unless otherwise stated below, the following types of credit opinions are typically not subject to rating committee review or approval or disclosed publicly by DBRS Morningstar.

Credit Estimates

A Credit Estimate is a numeric assessment of the credit risk of a corporate debt issuer derived primarily from the use of a proprietary statistical model.¹⁸ DBRS Morningstar does not use corporate rating methodologies to determine Credit Estimates.

A Credit Estimate reflects DBRS Morningstar's assessment of a corporate issuer's credit quality at the initial assessment date and expires within a year of that date. Credit Estimates are not monitored.

Credit Estimates are not credit ratings.

Credit Estimates typically serve as inputs in the analysis of (1) structured finance transactions or (2) other debt instruments, such as bonds. Typically, the relevant obligors are non-IG/BIG small or middle-market issuers that do not have public credit ratings.

Credit Estimates are expressed as a DBRS Morningstar Risk Score that, in turn, may be broadly mapped to DBRS Morningstar's Long-Term Obligations Rating Scale.

For more information, please refer to *A Guide to DBRS Morningstar Corporate Credit Estimates* and *Credit Estimates and Assessing Borrower Default Probabilities in CLOs*.

Internal Assessments

An Internal Assessment is an opinion regarding the creditworthiness of an issuer, security, or transaction, as applicable. Internal Assessments are typically private and may be used in the Governments, Financial Institutions, and Corporate sectors as an input in the analysis of another entity or as a stand-alone credit opinion; for example, an internal assessment of a corporate entity used as part of a public-private partnership, Indicative Rating, or an Internal Assessment of a Structured Finance rating.

Internal Assessments may be determined (1) using public ratings issued and maintained by other credit rating agencies, (2) based on DBRS Morningstar's own analysis, or (3) using a combination of both.

The depth of analysis and the approval process for Internal Assessments differ from that conducted on credit ratings.

¹⁸ For more information, please refer to <u>A Guide to DBRS Morningstar Corporate Credit Estimates</u> and <u>Credit Estimates and Assessing Borrower Default Probabilities in CLOs.</u>

Although Internal Assessments are typically assigned using the Long-Term Obligations Scale, they are generally denoted using the DBRS Morningstar rating scales definitions with the addition of an asterisk. Internal Assessments are not credit ratings.

Credit Assessments

Credit Assessments are point-in-time assessments of a portfolio of assets using the data and information provided by the entity or person requesting such assessment. Credit Assessments are not subject to rating committee approval and are not credit ratings. They do not reflect the same level of analysis conducted for a credit rating and are typically private. Credit Assessments are not monitored and, as such, are effective as of the date of the related letter issued to the party requesting such Credit Assessment.

Recovery Ratings

In assigning a recovery rating, DBRS Morningstar considers the value of assets (or enterprise value) that would be available to the holders of a specific debt instrument in accordance with its ranking and legal rights at the time of an assumed emergence from a reorganization or liquidation process that might occur following a default. As such, a recovery rating necessarily assumes that a default will occur; however, the actual probability of default is addressed solely by the Issuer Rating.

A DBRS Morningstar Recovery Rating is assigned as part of the rating analysis in respect of debt instruments issued by non-IG/BIG corporate issuers. DBRS Morningstar rates an issuer's specific instrument by adjusting the relevant Issuer Rating in reference to the relevant Recovery Rating.

DBRS Morningstar does not assign Recovery Ratings in respect of issuers in the Governments and related entities or Financial Institutions sectors.

Recovery Ratings are not credit ratings, but they are monitored.

DBRS Morningstar assigns Recovery Ratings using the DBRS Morningstar Recovery Rating Scale in accordance with *DBRS Morningstar Criteria: Recovery Ratings for Non-Investment-Grade Corporate Issuers.*

Impact Assessments

An Impact Assessment reflects DBRS Morningstar's opinion on the impact of a potential transaction or event, as presented by an issuer, on the relevant obligation or Issuer Rating. From an analytical perspective, Impact Assessments are reviewed and approved by a rating committee. Nonetheless, Impact Assessments are not credit ratings, primarily because they are contingent on the occurrence of a specific future event and its underlying assumptions. If the event contemplated within the context of the Impact Assessment occurs, a rating committee may subsequently be conducted to update the relevant rating(s). Impact Assessments are intended for a limited audience and are not publicly disseminated. Impact Assessments are not monitored.

Corporates and Financial Institutions teams typically use the Long-Term Obligations Scale to assign Impact Assessments.

Operational Risk Assessment Rankings

The Structured Finance team uses the Operational Risk Assessment Ranking Scale to assign Operational Risk Assessment rankings to U.S. residential mortgage loan originators, servicers, and master servicers; U.S. reverse mortgage originators and servicers, U.S. ABS originators and servicers; or North American commercial mortgage master or special servicers.

The ranking process is voluntary and is not a prerequisite for DBRS Morningstar to rate a U.S. RMBS, U.S. ABS, or North American CMBS transaction. The ranking is typically incorporated into the rating process and may replace the need for an operational risk review when the company is a party in a transaction rated by DBRS Morningstar.

U.S. Residential and Reverse Mortgage Originator and Servicer Rankings U.S. Residential and Reverse Mortgage Originator and Servicer Rankings may be assigned by the U.S. Operational Risk team and reflect DBRS Morningstar's opinion on the quality of the parties that originate, service, or conduct master servicing on residential mortgage loans that may be securitized. Rankings are based on quantitative and qualitative considerations relevant to a company, but are not credit ratings and should not be considered a proxy of a company's creditworthiness.

U.S. ABS Originator and Servicer Rankings

U.S. ABS Originator and Servicer Rankings may be assigned by the U.S. Operational Risk team and reflect DBRS Morningstar's opinion on the quality of the parties that originate or service the loans, leases, or receivables that may be securitized. Rankings are based on quantitative and qualitative considerations relevant to a company, but are not credit ratings and should not be considered a proxy of a company's creditworthiness.

North American Commercial Mortgage Servicer Rankings

North American CMBS Commercial Mortgage Servicer Rankings may be assigned by the CMBS team and reflect DBRS Morningstar's opinion on the quality of the parties that service, master service, or special service commercial mortgage loans in rated North American CMBS transactions. Rankings are based on quantitative and qualitative considerations relevant to a company, but are not credit ratings and should not be considered a proxy of a company's creditworthiness.

Servicer Evaluations

Canadian Residential Mortgage Servicer Evaluations

Canadian Residential Mortgage Servicer Evaluations may be assigned by the Canadian Structured Finance team and reflect the evaluation of the quality of the parties that conduct primary, master, and/or special servicing of residential mortgage loans that are typically expected to be securitized in a Canadian transaction that DBRS Morningstar is rating.¹⁹

Canadian Residential Mortgage Servicer Evaluations are not credit ratings.

While DBRS Morningstar only provides public Canadian Residential Mortgage Servicer Evaluations at that servicer's request, DBRS Morningstar may conduct internal, nonpublic operational reviews and incorporate the results of those reviews into the rating process for each new securitization transaction that DBRS Morningstar rates.

¹⁹ For more information, please refer to the DBRS Morningstar Operational Risk Assessments for Canadian Structured Finance methodology.

Appendix I—Background Information on General Categories of DBRS Morningstar Credit Ratings

Public Credit Ratings & Private Credit Ratings

Credit ratings that are made publicly available on DBRS Morningstar's website are generally considered public ratings and may include credit ratings assigned to securities offered by way of private placement.

Private credit ratings are those credit ratings that are not generally made publicly available on DBRS Morningstar's website and may also include credit ratings assigned to securities offered by way of private placement. DBRS Morningstar private ratings and information regarding any subsequent rating action(s) that DBRS Morningstar may take after the date of issuance of such ratings (including information regarding discontinuation of the private ratings) do not typically appear on DBRS Morningstar's website. DBRS Morningstar notifies the issuer (or the party requesting such rating) in respect of any subsequent rating action.

In private rating letters provided to the party requesting the relevant private rating, DBRS Morningstar customarily includes statements regarding the confidential nature of the relevant private credit rating and limitations regarding the disclosure and dissemination of the rating and the related rating letter. DBRS Morningstar also provides private rating reports to issuers when requested and such private rating reports may be made available to investors via passwordprotected websites maintained by each relevant issuer.

In exceptional circumstances where only a limited number of parties (such as a lender, its professional advisors, and a regulator) may have an interest in having information on a private credit rating, DBRS Morningstar may make limited disclosure of that private rating on its website. In such circumstances, DBRS Morningstar's related disclosure is typically limited in accordance with the terms of the arrangement DBRS Morningstar has with the party requesting the relevant credit rating. Scope and content of such disclosure is driven by the regulatory requirements applicable to the party requesting the credit rating.

Provisional Credit Ratings & Finalized (New) Credit Ratings

When issuers are in the process of issuing new securities, DBRS Morningstar may assign a provisional credit rating for issuers (and their agents) to use in preliminary offering documents and for discussion with investors or other third parties. DBRS Morningstar assigns a provisional credit rating to a security pending the satisfaction of certain conditions.

Generally, the maximum period of time that a provisional rating should remain outstanding is three months from the issuance date, which is the date of the press release or presale report for a public rating or the date of the relevant rating committee or rating letter for a private rating. Provisional ratings are generally either finalized upon satisfaction of the relevant conditions or, in limited circumstances, withdrawn.²⁰

In limited circumstances, DBRS Morningstar may assign provisional ratings that remain outstanding (i.e., those that do not become finalized (new) ratings).

Unsolicited Credit Ratings & Solicited Credit Ratings

The definition for Unsolicited Ratings varies from jurisdiction to jurisdiction based on the applicable regulatory requirements.

In Europe, DBRS Morningstar defines an unsolicited credit rating to be a credit rating that is not initiated at the request of the issuer, rated entity, or related third party. DBRS Morningstar identifies unsolicited ratings (in accordance with the European credit rating agency regulations) that are assigned with or without participation in its public disclosure.

In Canada and the United States, DBRS Morningstar defines an unsolicited credit rating to be a credit rating that is not initiated at the request of the issuer, rated entity, or other third party and is assigned without participation or contact by the issuer or any related third party. DBRS Morningstar identifies the ratings that are initiated at the request of the issuer or rated entity in its public disclosure in Canada and the United States.

The solicitation status of DBRS Morningstar credit ratings is set at the issuer or transaction level, as applicable.

Accordingly, the solicitation status of all DBRS Morningstar credit ratings associated with a particular issuer or a transaction would typically be the same.

DBRS Morningstar can assign Unsolicited Ratings using any scale. DBRS Morningstar typically assigns these in respect of Sovereigns and Banks as well as few such unsolicited ratings in respect of (Canadian) Corporates. There is no restriction regarding issuance of unsolicited Structured Finance ratings; however, they are not typically assigned.

Credit ratings that are not unsolicited ratings are solicited ratings.

²⁰ Provisional credit ratings for securitizations or synthetic structures may be assigned and monitored on unexecuted CDSs or other similar agreements, transaction documents, or other similar agreements, as long as there is one executed contract that is effected under the same reference portfolio and with broadly the same terms. In such cases, the provisional notation is unlikely to be removed. The provisional credit rating may be upgraded, downgraded, confirmed, or placed under review with positive, developing, or negative implications.

Appendix II—DBRS Morningstar Credit Rating and Ranking Scales

This appendix provides an overview of the rating scales DBRS Morningstar uses as at the date of this publication and is intended as a reference guide only. For more information, please refer to the Rating Scales section at dbrsmorningstar.com.

1. Long-Term Obligations Scale

All rating categories other than AAA and D also contain subcategories (high) and (low). The absence of either a (high) or (low) designation indicates that the rating is in the middle of the category.

AAA

Highest credit quality. The capacity for the payment of financial obligations is exceptionally high and unlikely to be adversely affected by future events.

AA

Superior credit quality. The capacity for the payment of financial obligations is considered high. Credit quality differs from AAA only to a small degree. Unlikely to be significantly vulnerable to future events.

А

Good credit quality. The capacity for the payment of financial obligations is substantial, but of lesser credit quality than AA. May be vulnerable to future events, but qualifying negative factors are considered manageable.

BBB

Adequate credit quality. The capacity for the payment of financial obligations is considered acceptable. May be vulnerable to future events.

BB

Speculative, non-investment-grade credit quality. The capacity for the payment of financial obligations is uncertain. Vulnerable to future events.

В

Highly speculative credit quality. There is a high level of uncertainty as to the capacity to meet financial obligations.

CCC/CC/C

Very highly speculative credit quality. In danger of defaulting on financial obligations. There is little difference between these three categories, although CC and C ratings are normally applied to obligations that are seen as highly likely to default or subordinated to obligations rated in the CCC to B range. Obligations in respect of which default has not technically taken place, but is considered inevitable, may be rated in the C category.

D

When the issuer has filed under any applicable bankruptcy, insolvency, or winding-up statute or there is a failure to satisfy an obligation after the exhaustion of grace periods, a downgrade to D may occur. DBRS Morningstar may also use SD (Selective Default) in cases where only some

securities are impacted, such as the case of a distressed exchange. See the Default Definition document on dbrsmorningstar.com under Understanding Ratings for more information.

2. Commercial Paper and Short-Term Debt Rating Scale

The R-1 and R-2 rating categories are further denoted by the subcategories (high), (middle), and (low).

R-1 (high)

Highest credit quality. The capacity for the payment of short-term financial obligations as they fall due is exceptionally high. Unlikely to be adversely affected by future events.

R-1 (middle)

Superior credit quality. The capacity for the payment of short-term financial obligations as they fall due is very high. Differs from R-1 (high) by a relatively modest degree. Unlikely to be significantly vulnerable to future events.

R-1 (low)

Good credit quality. The capacity for the payment of short-term financial obligations as they fall due is substantial. Overall strength is not as favourable as higher rating categories. May be vulnerable to future events, but qualifying negative factors are considered manageable.

R-2 (high)

Upper end of adequate credit quality. The capacity for the payment of short-term financial obligations as they fall due is acceptable. May be vulnerable to future events.

R-2 (middle)

Adequate credit quality. The capacity for the payment of short-term financial obligations as they fall due is acceptable. May be vulnerable to future events or may be exposed to other factors that could reduce credit quality.

R-2 (low)

Lower end of adequate credit quality. The capacity for the payment of short-term financial obligations as they fall due is acceptable. May be vulnerable to future events. A number of challenges are present that could affect the issuer's ability to meet such obligations.

R-3

Lowest end of adequate credit quality. There is capacity for the payment of short-term financial obligations as they fall due. May be vulnerable to future events and the certainty of meeting such obligations could be impacted by a variety of developments.

R-4

Speculative credit quality. The capacity for the payment of short-term financial obligations as they fall due is uncertain.

R-5

Highly speculative credit quality. There is a high level of uncertainty as to the capacity to meet short-term financial obligations as they fall due.

D

When the issuer has filed under any applicable bankruptcy, insolvency, or winding-up statute or there is a failure to satisfy an obligation after the exhaustion of grace periods, a downgrade to D may occur. DBRS Morningstar may also use SD (Selective Default) in cases where only some

securities are impacted, such as the case of a distressed exchange. See the Default Definition document on dbrsmorningstar.com under Understanding Ratings for more information.

3. Financial Strength Rating Scale

All rating categories from AA to CCC contain the subcategories (high) and (low). The absence of either a (high) or (low) designation indicates the rating is in the middle of the category. Securities issued by an insurer will be rated using the relevant DBRS Morningstar rating scale for that security.

AAA

Exceptional financial strength. The insurer's capacity for the payment of policyholder and contract obligations is considered exceptionally strong and unlikely to be undermined by adverse business and economic conditions.

AA

Excellent financial strength. The insurer's capacity for the payment of policyholder and contract obligations is considered excellent. Financial strength differs from AAA only to a small degree. Unlikely to be significantly vulnerable to adverse business and economic conditions.

А

Good financial strength. The insurer's capacity for the payment of policyholder and contract obligations is substantial, but of lesser financial strength than AA. May be vulnerable to adverse business and economic conditions, but qualifying negative factors are considered manageable.

BBB

Adequate financial strength. The insurer's capacity for the payment of policyholder and contract obligations is considered acceptable. May be vulnerable to adverse business or economic conditions.

BB

Weak financial strength. The insurer's capacity for the payment of policyholder and contract obligations is uncertain over the long term. Vulnerable to adverse business or economic conditions.

В

Very weak financial strength. There is a high level of uncertainty as to the capacity of the insurer to meet policyholder and contract obligations.

CCC/CC/C

Exceptionally weak financial strength. There is a very high level of uncertainty in the insurer's capacity to meet policyholder and contract obligations. The risk of the insurer failing to pay policyholder and contract obligations is significantly elevated. There is little difference between these three categories. The CC and C ratings carry greater degrees of risk than CCC ratings and insurers with such ratings are seen as highly likely to be unable to meet their policy obligations. Insurers that face inevitable default or risk being put under regulatory control may be rated in the C category.

R

Regulatory supervision. The insurer is under the supervision of a regulator and a resolution to determine its future is pending. In these situations, the company may be rescued through a sale to another insurer; it may become bankrupt, insolvent, or subject to a winding-up statute; or it may be liquidated or put into run-off.

NR

Not rated. An insurer with a designation of NR is not rated and DBRS Morningstar offers no opinion on the insurer's financial strength.

4. Preferred Share Rating Scale (Canadian scale only)

Each rating category may be denoted by the subcategories (high) and (low). The absence of either a (high) or (low) designation indicates the rating is in the middle of the category.

Pfd-1

Preferred shares rated Pfd-1 are generally of superior credit quality and are supported by entities with strong earnings and balance sheet characteristics. Pfd-1 ratings generally correspond with issuers with a AAA or AA category reference point. The reference point is a credit rating or intrinsic assessment on the relevant issuer expressed using the long-term obligations scale. For instance, it could be the issuer rating (for a corporate issuer), the intrinsic assessment (for a bank or a nonbank finance company), or the financial strength rating (for an insurance company).

Pfd-2

Preferred shares rated Pfd-2 are generally of good credit quality. Protection of dividends and principal is still substantial, but earnings, the balance sheet, and coverage ratios are not as strong as Pfd-1 rated companies. Generally, Pfd-2 ratings correspond with issuers with an A category or higher reference point.

Pfd-3

Preferred shares rated Pfd-3 are generally of adequate credit quality. While protection of dividends and principal is still considered acceptable, the issuing entity is more susceptible to adverse changes in financial and economic conditions, and there may be other adverse conditions present which detract from debt protection. Pfd-3 ratings generally correspond with issuers with a BBB category or higher reference point.

Pfd-4

Preferred shares rated Pfd-4 are generally speculative, where the degree of protection afforded to dividends and principal is uncertain, particularly during periods of economic adversity. Issuers with preferred shares rated Pfd-4 generally correspond with issuers with a BB category or higher reference point.

Pfd-5

Preferred shares rated Pfd-5 are generally highly speculative and the ability of the entity to maintain timely dividend and principal payments in the future is highly uncertain. Entities with a Pfd-5 rating generally correspond with issuers with a B category or higher reference point. Preferred shares rated Pfd5 often have characteristics that, if not remedied, may lead to default.

D

When the issuer has filed under any applicable bankruptcy, insolvency or winding up or the issuer is in default per the legal documents, a downgrade to D may occur. Because preferred share dividends are only payable when approved, the nonpayment of a preferred share dividend does not necessarily result in a D. DBRS Morningstar may also use SD (Selective Default) in cases where only some securities are impacted, such as the case of a distressed exchange. See the Default Definition document on dbrsmorningstar.com under Understanding Ratings for more information.

5. National Scale Credit Ratings

All rating categories other than AAA and D also contain subcategories (high) and (low). The absence of either a (high) or (low) designation indicates that the rating is in the middle of the category. Structured Finance ratings will be denoted by the addition of (sf) with the relevant rating. In each country, the suffix of the rating denotes the country in which the issuer is located.

A. Long-Term Debt National Scale

AAA.N

Highest credit quality in the country. Obligations or issuers rated AAA.N are considered to be of the highest credit quality, relative to its peers in the country to which the national rating is assigned.

AA.N

Superior credit quality in the country. The capacity for the payment of financial obligations is considered high relative to domestic its peers. Credit quality differs from AAA.N only to a small degree.

A.N

Good credit quality in the country. The capacity for the payment of financial obligations relative to its domestic peers is strong, but of lesser credit quality than AA.N. May be vulnerable to future events, but qualifying negative factors in the country are considered manageable.

BBB.N

Adequate credit quality in the country. The capacity for the payment of financial obligations relative to its domestic peers is considered acceptable; however, the rating may be vulnerable to future adverse economic events.

BB.N

Speculative in the country, non-investment-grade credit quality. The capacity for the payment of financial obligations relative to its domestic peers is uncertain. The rating is vulnerable to future adverse events.

B.N

Highly speculative credit quality in the country relative to its domestic peers. There is a high level of uncertainty as to the capacity to meet financial obligations.

CCC.N/CC.N/C.N

Very highly speculative credit quality in the country. In danger of defaulting on financial obligations. There is little difference between these three categories, although CC.N and C.N ratings are normally applied to obligations that are seen as highly likely to default or subordinated to obligations rated in the CCC.N to B.N range. Obligations in the country in respect of which default has not technically taken place, but is considered inevitable, may be rated in the C.N category.

$\mathsf{D}.\mathsf{N}$

When the issuer has filed under any applicable bankruptcy, insolvency, or winding-up statute or there is a failure to satisfy an obligation after the exhaustion of grace periods, a downgrade to D may occur. DBRS Morningstar may also use SD.N (Selective Default.N) in cases where only some securities are impacted, such as the case of a distressed exchange. See the Default Definition document on dbrsmorningstar.com under Understanding Ratings for more information.

B. Short-Term Debt National Scale

The R-1.N and R-2.N rating categories are further denoted by the subcategories (high), (middle), and (low).

R-1 (high).N

Highest credit quality in the country. The capacity for the payment of short-term financial obligations as they fall due is exceptionally high relative to its domestic peers.

R-1 (middle).N

Superior credit quality in the country. The capacity for the payment of short-term financial obligations as they fall due is very high relative to its domestic peers. Differs from R-1 (high) by a relatively modest degree.

R-1 (low).N

Good credit quality in the country. The capacity for the payment of short-term financial obligations as they fall due is strong. Overall strength is not as favourable as higher rating categories, but qualifying negative factors in the country are considered manageable.

R-1 (high).N

Upper end of adequate credit quality in the country. The capacity for the payment of short-term financial obligations, relative to its domestic peers, as they fall due is acceptable.

R-2 (middle).N

Adequate credit quality in the country. The capacity for the payment of short-term financial obligations, relative to its domestic peers, as they fall due is acceptable.

R-2 (low).N

Lower end of adequate credit quality in the country. The capacity for the payment of shortterm financial obligations, relative to its domestic peers, as they fall due is acceptable. May be vulnerable to future events. A number of challenges are present that could affect the issuer's ability to meet such obligations.

R-3.N

Lowest end of adequate credit quality in the country. There is a capacity for the payment of short-term financial obligations as they fall due. The certainty of meeting such obligations could be impacted by a variety of developments.

R-4.N

Speculative credit quality in the country. The capacity for the payment of short-term financial obligations as they fall due is uncertain.

R-5.N

Highly speculative credit quality in the country. There is a high level of uncertainty as to the capacity to meet short-term financial obligations as they fall due.

D.N

When the issuer has filed under any applicable bankruptcy, insolvency, or winding-up statute or there is a failure to satisfy an obligation after the exhaustion of grace periods, a downgrade to D may occur. DBRS Morningstar may also use SD (Selective Default) in cases where only some securities are impacted, such as the case of a distressed exchange. See the Default Definition document on dbrsmorningstar.com under Understanding Ratings for more information.

6. Expected Loss Rating Scale

Apart from the AAA (el) rating category, each other rating category is denoted by the subcategories (high) and (low). The absence of either a (high) or (low) designation indicates the rating is in the middle of the category.

AAA (el)

The pass-through instrument is considered to be of highest credit quality.

AA (el)

The pass-through instrument is considered to be of a superior credit quality.

A (el)

The pass-through instrument is considered to be of a good credit quality.

BBB (el)

The pass-through instrument is considered to be of an adequate credit quality.

BB (el)

The pass-through instrument is considered to be of a speculative, non-investment-grade credit quality.

B (el)

The pass-through instrument is considered to be of a highly speculative credit quality.

CCC (el)

The pass-through instrument is considered to be of a very highly speculative credit quality.

CC (el)

The pass-through instrument is considered to be of a very highly speculative credit quality with low recovery prospects.

C (el)

The pass-through instrument is considered to be of a very highly speculative credit quality with very low recovery prospects.

7. Credit Fund Rating Scale

Apart from the AAA-cf rating category, each other rating category is denoted by the subcategories (high) and (low). The absence of either a (high) or (low) designation indicates the rating is in the middle of the category.

AAA-cf

The fund portfolio is considered to be of the highest credit quality.

AA-cf

The fund portfolio is considered to be of a superior credit quality.

A-cf

The fund portfolio is considered to be of a good credit quality.

BBB-cf

The fund portfolio is considered to be of an adequate credit quality.

BB-cf

The fund portfolio is considered to be of a speculative, non-investment-grade credit quality.

B-cf

The fund portfolio is considered to be of a highly speculative credit quality.

CCC-cf

The fund portfolio is considered to be of a very highly speculative credit quality.

CC-cf

The fund portfolio is considered to be of a very highly speculative credit quality and generally holds assets that are likely to default with some prospect of recovery.

C-cf

The fund portfolio is considered to be of a very highly speculative credit quality and generally holds assets that are likely to default with little prospect of recovery.

8. Operational Risk Assessment Ranking Scale

A. U.S. Residential Mortgage Originator Ranking Scale

The DBRS Morningstar residential originator ranking scale provides an opinion on the quality of the parties that originate residential mortgage loans. Rankings are based on quantitative and qualitative considerations relevant to the company. All ranking categories are as noted and do not contain subcategories such as (high) and (low).

MOR R01/MOR RV01

Superior Origination Quality – Exceeds prudent loan origination standards. Unlikely to be significantly vulnerable to future operational risk challenges.

MOR RO2/MOR RVO2

Good Origination Quality – Demonstrates proficiency in loan origination standards. May be vulnerable to future operational risk challenges, but qualifying negative factors are considered manageable.

MOR R03/MOR RV03

Adequate Origination Quality – Demonstrates satisfactory loan origination standards. May be vulnerable to future operational risk challenges.

MOR R04/MOR RV04

Weak Origination Quality – Demonstrates lack of compliance with one or more key areas of risk. Vulnerable to future operational risk challenges.

B. U.S. Residential Mortgage Servicer Ranking Scale

The DBRS Morningstar residential servicer ranking scale provides an opinion on the quality of the parties that service (S) or conduct master servicing (MS) on residential mortgage loans. Rankings are based on quantitative and qualitative considerations relevant to the company. All ranking categories are as noted and do not contain subcategories such as (high) and (low).

MOR RS1/MOR RVS1/MOR RMS1

Superior Servicing Quality – Exceeds prudent loan servicing standards. Unlikely to be significantly vulnerable to future operational risk challenges.

MOR RS2/MOR RVS2/MOR RMS2

Good Servicing Quality – Demonstrates proficiency in loan servicing standards. May be vulnerable to future operational risk challenges, but qualifying negative factors are considered manageable.

MOR RS3/MOR RVS3/MOR RMS3

Adequate Servicing Quality – Demonstrates satisfactory loan servicing standards. May be vulnerable to future operational risk challenges.

MOR RS4/MOR RVS4/MOR RMS4

Weak Servicing Quality – Demonstrates lack of compliance with one or more key areas of risk. Vulnerable to future operational risk challenges.

C. U.S. ABS Originator Ranking Scale

The DBRS Morningstar ABS originator ranking scale provides an opinion on the quality of the parties that originate loans, leases, or receivables. Rankings are based on quantitative and qualitative considerations relevant to the company. All ranking categories are as noted and do not contain subcategories such as (high) and (low).

MOR ABSO1

Superior Origination Quality – Exceeds prudent loan/lease/receivable origination standards. Unlikely to be significantly vulnerable to future operational risk challenges.

MOR ABSO2

Good Origination Quality – Demonstrates proficiency in loan/lease/receivable origination standards. May be vulnerable to future operational risk challenges, but qualifying negative factors are considered manageable.

MOR ABS03

Adequate Origination Quality – Demonstrates satisfactory loan/lease/receivable origination standards. May be vulnerable to future operational risk challenges.

MOR ABS04

Weak Origination Quality – Demonstrates lack of compliance with one or more key areas of risk. Vulnerable to future operational risk challenges.

D. U.S. ABS Servicer Ranking Scale

The DBRS Morningstar ABS servicer ranking scale provides an opinion on the quality of the parties that service loans, leases, or receivables. Rankings are based on quantitative and qualitative considerations relevant to the company. All ranking categories are as noted and do not contain subcategories such as (high) and (low).

MOR ABSS1

Superior Servicing Quality – Exceeds prudent loan/lease/receivable servicing standards. Unlikely to be significantly vulnerable to future operational risk challenges.

MOR ABSS2

Good Servicing Quality – Demonstrates proficiency in loan/lease/receivable servicing standards. May be vulnerable to future operational risk challenges, but qualifying negative factors are considered manageable.

MOR ABSS3

Adequate Servicing Quality – Demonstrates satisfactory loan/lease/receivable servicing standards. May be vulnerable to future operational risk challenges.

MOR ABSS4

Weak Servicing Quality – Demonstrates lack of compliance with one or more key areas of risk. Vulnerable to future operational risk challenges.

E. North American Commercial Mortgage Servicer Ranking Scale

The DBRS Morningstar commercial servicer ranking scale provides an opinion on the quality of the parties that service or conduct master or special servicing on commercial mortgage loans. Rankings are based on quantitative and qualitative considerations relevant to the company. All ranking categories are as noted and do not contain subcategories such as (high) and (low).

MOR CS1

Superior Servicing Quality – Exceeds prudent loan servicing standards. Unlikely to be significantly vulnerable to future operational risk challenges.

MOR CS2

Good Servicing Quality – Demonstrates proficiency in Ioan servicing standards. May be vulnerable to future operational risk challenges, but qualifying negative factors are considered manageable.

MOR CS3

Adequate Servicing Quality – Demonstrates satisfactory loan servicing standards. May be vulnerable to future operational risk challenges.

MOR CS4

Weak Servicing Quality – Demonstrates lack of compliance with one or more key areas of risk. Vulnerable to future operational risk challenges.

F. Canadian Residential Mortgage Servicer Evaluations

Superior

Servicer exhibits a thorough understanding of the implementation and execution of all of the facets of servicing.

Good

Servicer exhibits a comprehensive understanding of the servicing areas reviewed by DBRS Morningstar and has received a positive assessment in most of the aspects of servicing, but could benefit from improvement in some less critical areas or could gain from additional experience.

Adequate

Servicer exhibits a full understanding of the areas reviewed by DBRS Morningstar, but lacks a certain level of experience and consistency in implementation.

Weak

Servicer has fallen short in one or more of the areas reviewed by DBRS Morningstar, either through not exhibiting any of the benchmarked traits or through a lack of understanding of how to implement them correctly.

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