

Morningstar DBRS Product Guide May 2024

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Welcome to the *Morningstar DBRS Product Guide*.

As the next generation in credit ratings, Morningstar DBRS 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 Morningstar DBRS, we set ourselves apart with our intuitive dbrs.morningstar.com website, including our various microsites with curated content on topical credit themes; our participation in major financial data platforms and direct data feeds that make our credit ratings easily accessible; our insightful events and webinars that explain our credit opinions to the market; and our real-time social media updates, targeted email alerts, and topical newsletters that keep our stakeholders up-to-date.

In keeping with our commitment to transparency, this Product Guide provides an overview of Morningstar DBRS 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 Morningstar DBRS and our credit ratings. If you have any questions, please contact us at info-dbrs@morningstar.com.

Detlef Scholz

President
Morningstar DBRS Credit Ratings

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

In this publication, Corporate Finance or Fundamental Credit Ratings 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 Analytics LLC (Morningstar Credit), an affiliate of Morningstar DBRS, offers modular credit information and analytics products. Morningstar Credit is not a credit rating agency. Morningstar DBRS is separate from Morningstar Credit, and the products of Morningstar Credit are not described in this Product Guide. For information on the products and services of Morningstar Credit, please visit credit.morningstar.com.

A. Credit Rating Products

Background Information on Morningstar DBRS Credit Ratings

Morningstar DBRS credit ratings are forward-looking opinions about credit risk that reflect the creditworthiness of an issuer, rated entity, security, and/or obligation based on Morningstar DBRS' 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.

Morningstar DBRS 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.

Morningstar DBRS credit ratings are determined by credit rating committees.

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

Morningstar DBRS currently uses the following rating scales to assign and monitor credit ratings² (1) Long-Term Obligations Rating 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.

Morningstar DBRS differentiates credit ratings of certain Structured Finance products from traditional Corporate Finance ratings with a different rating symbol modifier: (sf).³ 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.

Issuer Ratings

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

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

² For more information on the rating scales Morningstar DBRS currently uses, please also refer to Appendix II.

³ Morningstar DBRS 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 multi-tranched collateralized debt obligations and credit default swaps (CDSs), with the exception of single-name CDSs; multi-tranched insurance securitizations; structured investment vehicles; and repackaged instruments where any of the underlying assets is a Structured Finance instrument.

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, 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, Morningstar DBRS 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.

Morningstar DBRS uses the Long-Term Obligations Rating 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 Morningstar DBRS' 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.

These credit ratings are assigned using the Financial Strength Rating Scale.⁵

Long-Term Obligation Ratings

Morningstar DBRS long-term credit ratings provide opinions on risk of default. Morningstar DBRS considers risk of default to be the risk that an issuer will fail to satisfy the financial obligations⁶ in accordance with the terms under which a long-term obligation has been issued. The long-term 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, Morningstar DBRS 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) issuers, the relevant Recovery Rating.⁷ Morningstar DBRS 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.

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 Rating 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 Rating Scale.

⁶ For more information on financial obligations, please refer to Appendix III herein titled *Financial Obligations and Morningstar DBRS Credit Ratings*.

⁷ For more information, please see the Recovery Ratings section herein Section B.

Morningstar DBRS uses the Long-Term Obligations Rating Scale to assign long-term obligation ratings.⁸

Short-Term Obligation Ratings

Short-term obligation ratings provide Morningstar DBRS' opinion on the risk that an issuer will not meet its short-term financial obligations in a timely manner. The short-term 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,⁹ bankers' acceptances, or T-Bills by Corporate Finance as well as ABCP and money-market instruments by Structured Finance.

Morningstar DBRS uses the Commercial Paper and Short-Term Obligations Rating Scale¹⁰ to assign short-term obligation ratings.

Critical Obligations Ratings

Critical Obligations Ratings¹¹ (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 are assigned to operating banks in jurisdictions where Morningstar DBRS considers that the resolution framework creates this level of differentiation. Morningstar DBRS generally applies these ratings to large, interconnected, and systemically important banks. Obligations that CORs address encompass derivatives, payments and collection services, obligations of a bank as issuer of covered bonds, certain liquidity lines, and contingent liabilities.

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

Credit Ratings on Interest-Only (IO) Securities

A Morningstar DBRS 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, Morningstar DBRS considers credit losses that may adversely affect the notional amount of the IO security and the IO excess interest proceeds. Morningstar DBRS may also consider whether the balance of term and refinance risk may be favorable, or not, to the performance of the IO security.¹² Although prepayments, voluntary or involuntary (including recoveries from defaulted loans), may also adversely affect the notional amount of an IO security,

8 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 Rating Scale.

9 They are typically unsecured promissory notes of less than one year in duration.

10 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. Morningstar DBRS believes that these aspects can be more clearly delineated by using a separate Commercial Paper and Short-Term Obligations Rating Scale. For more information, please refer to Morningstar DBRS' Short-Term and Long-Term Rating Relationships at dbrs.morningstar.com under Understanding Ratings.

11 For more information, please refer to the Morningstar DBRS *Global Methodology for Rating Banks and Banking Organisations*.

12 For more information, please refer to the Morningstar DBRS *Rating North American CMBS Interest-Only Certificates Methodology*.

prepayments are not a consideration when Morningstar DBRS determines credit ratings on IO securities.

Morningstar DBRS assigns these 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.

Morningstar DBRS typically uses the Long-Term Obligations Rating Scale to assign credit ratings to IO securities in structured finance transactions.¹³

First Loss Ratings

First loss credit ratings (First Loss Ratings) reflect Morningstar DBRS' opinion on the risk of first loss that a lender or investor may experience arising from a potential default associated with the interest and/or principal financial obligations of the relevant borrower in accordance with the relevant transaction documents. First Loss Ratings are typically requested in respect of commercial mortgage loan transactions associated with single or pool of income-producing commercial real estate.

First Loss Ratings do not consider the timeliness of interest and principal payments. Furthermore, First Loss Ratings do not consider the borrower's other payment obligations, the borrower's risk of insolvency, or any relevant structural features or deficiencies.

First Loss Ratings are typically requested by insurance companies to be used in connection with the satisfaction of the applicable capital adequacy and/or liquidity requirements established by the relevant insurance regulators in Canada, the European Union or the United Kingdom.

Morningstar DBRS uses the Long-Term Obligations Rating Scale to assign First Loss Ratings and applies the suffix "(of)" to distinguish it from the others. First Loss Ratings may be issued as public or private credit ratings.¹⁴

Preferred Share Ratings

Morningstar DBRS assigns credit ratings to preferred shares issued by corporate issuers and financial institutions. Morningstar DBRS uses the Long-Term Obligations Rating Scale to rate preferred shares issued outside Canadian securities markets.¹⁵ Morningstar DBRS uses the Preferred Share Rating Scale, which maps to the Long-Term Obligations Rating Scale, to rate preferred shares issued by Canadian corporate issuers¹⁶ 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.

¹³ For more information, please refer to the Morningstar DBRS *Rating North American CMBS Interest-Only Certificates Methodology*.

¹⁴ For more information, please refer to the Morningstar DBRS *North American Single-Asset/Single-Borrower Ratings Methodology*.

¹⁵ For more information on Morningstar DBRS credit ratings assigned to preferred shares issued by non-Canadian financial institutions, please see the Long-Term Obligation Ratings section and refer to the Morningstar DBRS *Global Methodology for Rating Banks and Banking Organisations*.

¹⁶ For more information on Morningstar DBRS 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 preferred share section of *Morningstar DBRS Global Corporate Criteria*.

Canadian Structured Finance Split Share Ratings

A Canadian Structured Finance Split Share Rating is Morningstar DBRS' 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.¹⁷

Canadian Structured Finance Split Share Ratings are assigned 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.

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

National Scale Credit Ratings

Morningstar DBRS 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. Morningstar DBRS 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

Morningstar DBRS Expected Loss Ratings give an indication of the expected loss of untranching 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, Morningstar DBRS 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, Morningstar DBRS 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.¹⁸

¹⁷ For more information, please refer to the Morningstar DBRS *Rating Canadian Split Share Companies and Trusts Methodology*.

¹⁸ For more information, please refer to the Morningstar DBRS Expected Loss Rating Scale at dbrs.morningstar.com under Understanding Ratings and the Morningstar DBRS commentary, *DBRS Expected Loss Ratings*, at dbrs.morningstar.com.

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

Credit Fund Ratings

Morningstar DBRS 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, Morningstar DBRS considers, among other things, the management and legal structure of the relevant credit fund.¹⁹

Morningstar DBRS 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 Credit Rating following its determination are not taken into account. Point-in-Time Credit Ratings are typically private and are not monitored.

Morningstar DBRS uses the Long-Term Obligations Rating Scale as well as the Commercial Paper and Short-Term Debt Rating Scale to assign Point-in-Time Credit 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 denoted with an (icr) modifier.

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 Corporate Finance for project proposals (bids) submitted as part of a competitive selection process. These Indicative Credit Ratings are based on draft documents, information and hypothetical scenarios received by Morningstar DBRS prior to the date of the relevant rating committee as there are no debt securities issued at the time Indicative Credit Ratings are assigned.

Indicative Credit Ratings may also be used in other kinds of hypothetical scenarios in Corporate Finance 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.

Morningstar DBRS typically uses the Long-Term Obligations Rating Scale to assign Indicative Credit Ratings.

¹⁹ For more information, please refer to the Morningstar DBRS *Rating Credit Funds Methodology*.

B. Other Credit Opinions

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

Credit Estimates

A Credit Estimate is a numeric assessment of the credit quality of a corporate debt issuer based on a specific process for this type of credit opinion.²⁰

It is important to note that Credit Estimates are not credit ratings and that Morningstar DBRS does not use its corporate credit rating methodologies to determine Credit Estimates.

Credit Estimates typically serve as inputs in the analysis of structured finance transactions or other debt instruments. Often, the relevant obligors are non-IG issuers that do not have public credit ratings.

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

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 as an input in the analysis of another entity or as a stand-alone credit opinion. For example, (1) an Internal Assessment of a corporate entity may be used as part of an Indicative Credit Rating on a public-private partnership, or (2) an Internal Assessment of a financial institution acting as an account bank or a hedge counterparty may be used as part 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 Morningstar DBRS' 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.

Although Internal Assessments are typically assigned using the Long-Term Obligations Rating Scale, they are generally denoted using the Morningstar DBRS rating scales definitions with the addition of an (iax) modifier.

Internal Assessments are not credit ratings.

²⁰ For more information, please refer to the *DBRS Morningstar Global Criteria: Corporate Credit Estimates*.

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 only as of the date of the related letter issued to the party requesting such Credit Assessment.

Recovery Ratings

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

Morningstar DBRS 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.

Morningstar DBRS assigns Recovery Ratings using the Morningstar DBRS Recovery Rating Scale in accordance with the recovery section of *Morningstar DBRS Global Corporate Criteria*.

Impact Assessments

An Impact Assessment reflects Morningstar DBRS' 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.

Morningstar DBRS typically uses the Long-Term Obligations Rating Scale to assign Impact Assessments.

Operational Risk Assessment Rankings

Morningstar DBRS uses the Operational Risk Assessment Ranking Scale to assign Operational Risk Assessment rankings to certain loan or mortgage originators, servicers, and master servicers.

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 Morningstar DBRS.

U.S. Residential and Reverse Mortgage Originator and Servicer Rankings

U.S. Residential and Reverse Mortgage Originator and Servicer Rankings reflect Morningstar DBRS' 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. The ranking process is voluntary.

North American Commercial Mortgage Servicer Rankings

North American CMBS Commercial Mortgage Servicer Rankings reflect Morningstar DBRS' 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. Depending on the product type, Commercial Mortgage Servicer Rankings may be incorporated into the Morningstar DBRS rating process.

Canadian Residential Mortgage Servicer Rankings

Canadian Residential Mortgage Servicer Rankings reflect Morningstar DBRS' opinion on the quality of the parties that 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. The ranking process is voluntary.

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

Public Credit Ratings & Private Credit Ratings

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

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

Where applicable, Morningstar DBRS disseminates private credit rating letters directly to the party(ies) requesting the relevant private rating and 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. Morningstar DBRS also provides private rating reports to issuers when requested and such private rating reports may be made available to investors via password-protected websites (or similarly effective restrictions) maintained by each relevant issuer or by the party(ies) that requested the private credit rating.

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, Morningstar DBRS may make limited disclosure of that private rating on its website. In such circumstances, Morningstar DBRS' related disclosure is typically limited in accordance with the terms of the arrangement Morningstar DBRS has with the party requesting the relevant credit rating. The 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, Morningstar DBRS 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. Morningstar DBRS assigns a provisional credit rating to a security pending the satisfaction of certain conditions.

Generally, the maximum period of time that a provisional credit 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 credit rating or the date of the relevant rating committee or rating letter for a private credit rating.

Provisional credit ratings are generally either finalized upon satisfaction of the relevant conditions or, in limited circumstances, withdrawn.

In limited circumstances, Morningstar DBRS may assign provisional credit ratings that remain outstanding (i.e., those that do not become finalized (new) ratings).²¹

Unsolicited Credit Ratings & Solicited Credit Ratings

The definition for unsolicited credit ratings varies from jurisdiction to jurisdiction based on the applicable regulatory requirements.

In Europe, Morningstar DBRS 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. Morningstar DBRS 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, Morningstar DBRS 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. Morningstar DBRS 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 Morningstar DBRS credit ratings is set at the issuer or transaction level, as applicable.

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

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

Credit ratings that are not unsolicited credit ratings are solicited credit ratings.

²¹ 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—Morningstar DBRS Credit Rating and Ranking Scales

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

1. Long-Term Obligations 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 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.

A

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.

B

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. Morningstar DBRS 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 dbrs.morningstar.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. Morningstar DBRS 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 dbrs.morningstar.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 Morningstar DBRS 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.

A

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.

B

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 Morningstar DBRS 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 an 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 Pfd-5 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 payable only when approved, the nonpayment of a preferred share dividend does not necessarily result in a D. Morningstar DBRS 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 [dbrs.morningstar.com](https://www.dbrs.morningstar.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 credit 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 its domestic 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.

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. Morningstar DBRS 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 dbrs.morningstar.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 short-term 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. Morningstar DBRS 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 [dbrs.morningstar.com](https://www.dbrs.morningstar.com) under Understanding Ratings for more information.

6. Expected Loss Rating Scale

All rating categories from AA (el) to CCC (el) 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.

AAA (el)

The pass-through instrument is considered to be of the 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

All rating categories from AA-cf to CCC-cf 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.

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 Morningstar DBRS 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 RVO1

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

MOR R02/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 RVO3

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

MOR R04/MOR RVO4

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 Morningstar DBRS 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. North American Commercial Mortgage Servicer Ranking Scale

The Morningstar DBRS 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 loan 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.

D. Canadian Residential Mortgage Servicer Ranking Scale

The Morningstar DBRS residential mortgage 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 RMS1

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

MOR RS2/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 RMS3

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

MOR RS4/MOR RMS4

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

Appendix III—Financial Obligations and Morningstar DBRS Credit Ratings

What is a financial obligation?

Morningstar DBRS assigns credit ratings to short-term or long-term obligations (such as securities, loans, or other products, each an Instrument), which are opinions on the risk of default (also referred to as creditworthiness). For more information on Morningstar DBRS long-term obligation ratings, please refer to Appendix II.

Morningstar DBRS considers risk of default to be the risk that an issuer will fail to satisfy its financial obligations in accordance with the terms under which an Instrument has been issued. Those terms are the contractual terms set forth in the documents under which the Instrument was issued.

An Instrument that Morningstar DBRS is analyzing will typically contemplate both financial obligations and other contractual payment obligations. The term “contractual payment obligation” refers to payment obligations set forth in a transaction’s legal documents. However, Morningstar DBRS credit ratings do not address risk of default associated with all contractual payment obligations but only those that are financial obligations.

As a threshold matter, for a contractual payment obligation to be a financial obligation considered by Morningstar DBRS in assigning a credit rating, such contractual payment obligation should be credit-related, such that Morningstar DBRS should be able to analyze the credit risk associated with the contractual payment obligation by applying the relevant Morningstar DBRS Methodology using the data and information provided by the issuer and/or its agents.

In addition, contractual payment obligations that are considered financial obligations for purposes of Morningstar DBRS’ applicable policies, procedures and rating scales, generally carry certain characteristics. Financial obligations, as such term is contemplated in the Morningstar DBRS policy documents, are contractual payment obligations that are typically expected to have the following three characteristics, which can overlap: (a) they pay specified or specifiable amounts; (b) they pay on specified or specifiable dates; and (c) the payment is not contingent, subject to limited exceptions.

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