Methodology

Rating Canadian Split Share Companies and Trusts

JULY 2014
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Introduction

Dividend-paying common shares offer investors a source of stable income and the potential for capital appreciation in the value of the shares. Split share companies are created for a finite period of time to redistribute the income and capital gains earned from common shares to separate groups of investors based on different levels of desired risk.

A split share company or trust (i.e., the issuer) acquires a portfolio of securities by issuing two classes of shares – preferred shares and capital shares (or preferred securities and capital units in the case of a trust). The most common portfolio holdings are common shares with a history of stable dividend payments. In a split share structure, the preferred shares receive regular cumulative dividends at a fixed rate that is generally established based on the amount of dividend income earned on the portfolio and on the distribution expectations of potential holders of the preferred shares. Preferred shares rank in priority to the capital shares with respect to the payment of dividends and the repayment of capital upon the dissolution, winding up, insolvency, liquidation or termination of the issuer (referred to as the issuer’s termination). This priority gives preferred shares greater protection with respect to the return of initial principal and the payment of fixed dividends in exchange for their ability to benefit from any capital gains earned on the portfolio. The capital shares assume much greater risk and potential reward through capital appreciation by having a leveraged exposure to the portfolio. The distribution policies for capital shares vary by issuer; in many cases, capital shareholders may receive regular distributions if certain portfolio tests are satisfied.

The diagram below illustrates a typical split share structure. A hypothetical company, XYZ Banc Split Corp., has been created to purchase a portfolio of common shares issued by Canadian banks. The company obtains initial funding by issuing an equal number of preferred shares and capital shares. After paying agents’ fees and offering expenses, the net proceeds are invested in a portfolio of Canadian bank common shares.

Typical Split Share Structure
A DBRS rating assigned to the preferred shares issued by a split share company reflects the amount of asset coverage or downside protection available to withstand a decline in the net asset value (NAV) 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 ability of the issuer to meet its fixed cumulative distributions owed to the holders of the preferred shares. The amount of downside protection fluctuates over time as a result of changes in the market value of the portfolio. DBRS does not provide a rating on the capital shares, which have a leveraged equity position, with no subordination to mitigate exposure to potential losses.

DBRS ratings on preferred shares are also dependent on a number of other factors, including the diversification, volatility and credit quality of the portfolio; the active management and dividend payouts on the portfolio; and the inherent structural features that provide increased protection to the preferred shares. DBRS applies a combination of quantitative and qualitative analysis in its preferred share rating process. The quantitative analysis includes a historical value at risk (VaR) framework to assess the likelihood of large portfolio losses based on historical data. DBRS uses VaR results together with qualitative analysis relating to general macroeconomic factors and to certain industries or companies to which the portfolio will be exposed.

Split Share Companies: Initial Considerations

SPONSOR OR PROMOTER
As part of the rating process, DBRS takes into consideration the quality of the sponsor or promoter of the issuer, given that the sponsor may act as the investment manager and/or the administrator of the portfolio. A sponsor should have a significant presence in Canada and should also exhibit the following key characteristics:

(1) A consistent and positive track record in structured products and asset management.

(2) A strong corporate governance culture evidenced by the establishment of an independent board of directors, an auditing and compliance group and a credit-focused risk management team.

(3) A substantial capital commitment to the business.

(4) A management team with broad and deep experience in structured products.

Prior to rating a transaction with a new sponsor, DBRS meets with the sponsor to discuss its investment philosophy along with the points listed above.

INVESTMENT MANAGEMENT STRATEGY
The portfolios in split share structures can be broadly divided into passively managed (static) portfolios and actively managed portfolios. Each sponsor normally has a preference toward one of the two strategies. As expected, passively managed offerings generally have lower management expense ratios than actively managed transactions. Historically, passive portfolios consisting of securities of large-cap companies have provided greater rating stability than actively managed portfolios; however, in times of great stress (e.g., during the fourth quarter of 2008), all split share ratings face downward pressure because their portfolios have direct exposure to equity market valuations.

Passively managed funds hold securities issued by a static list of companies in the portfolio, specifying initial portfolio weightings for each company. The portfolio may be rebalanced on a regular basis to match the initial weightings set out in the issuer’s prospectus. Static portfolios can include the securities of a single company, the securities of a collection of companies from a specific sector or a broad composite of securities.
Actively managed funds invest in a portfolio of securities selected by the investment manager, with the underlying companies chosen from a specific sector, from multiple sectors or from an index of securities. The investment manager may place restrictions on the type of securities available for inclusion in the portfolio. The criteria for selection can include credit ratings, market capitalization and sector weight. Securities included often have a stated range of permitted weight in the portfolio to allow for periodic overweighing or underweighing at the investment manager’s discretion. Active investment managers often use a strategy of writing covered call options to generate income in addition to the dividend yield earned on the underlying portfolio.

In assessing a potential new investment manager, DBRS reviews the risk-adjusted returns and distributions for other funds managed by the investment manager. DBRS may also meet with the investment manager to discuss its investment philosophy and plans for the prospective fund.

PORTFOLIO HOLDINGS
Most split share companies purchase an underlying portfolio of common shares\(^1\) (generally issued by Canadian companies). Portfolio holdings for a split share company may also include income trust units, preferred shares, corporate debt or other income-producing securities. In order to assign a rating to the preferred shares, DBRS expects that at least 80% of the portfolio be invested in common shares or income trust units (or cash and cash equivalents). A minor weighting in preferred shares or corporate debt is acceptable to DBRS. Although other income-producing securities may be included in split share portfolios, the majority of split share companies rated by DBRS include only common shares in their portfolios.

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1. In some cases, the company enters a forward agreement with an appropriately rated counterparty to transfer the economic return of a portfolio to its shareholders (as indicated in the Forward Agreements section below).
Rating Approach: Primary Factors

DOWNSIDE PROTECTION

One of the main factors in the assignment of a DBRS rating on the preferred shares of an issuer is the amount of downside protection available to the preferred shares. Downside protection refers to the percentage that the issuer’s portfolio would have to decline in value before holders of the preferred shares would be in a first-dollar loss position. In a split share structure, the capital shares provide subordination to the preferred shares. Accordingly, downside protection is calculated as the total NAV of outstanding capital shares divided by the total NAV of the portfolio. In the case of a portfolio with additional leverage available through a loan facility, the downside protection is adjusted to account for amounts borrowed under the loan facility, which would typically be expected to be repaid prior to the repayment of any preferred share principal under the terms of the loan facility.

The following table provides minimum levels of downside protection to achieve certain rating levels for the preferred shares. These minimum levels provide a starting point for the rating analysis. The actual rating assigned at a given level of downside protection may vary from what is listed below, depending on other factors such as the diversification, credit quality and historical volatility and performance of the portfolio. Also, the table applies only to assigning new preferred share ratings. When assigning an initial rating, DBRS typically expects downside protection levels to be greater than its expectations for surveillance, which provides an additional amount of stability in order to mitigate potential rating migration.

<table>
<thead>
<tr>
<th>DBRS Preferred Share Rating</th>
<th>Minimum Downside Protection* (Net of Agents’ Fees and Offering Expenses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pfd-2 (high)</td>
<td>57%</td>
</tr>
<tr>
<td>Pfd-2</td>
<td>50%</td>
</tr>
<tr>
<td>Pfd-2 (low)</td>
<td>44%</td>
</tr>
<tr>
<td>Pfd-3 (high)</td>
<td>38%</td>
</tr>
<tr>
<td>Pfd-3</td>
<td>33%</td>
</tr>
<tr>
<td>Pfd-3 (low)</td>
<td>29%</td>
</tr>
</tbody>
</table>

* Downside protection = percentage reduction in portfolio NAV before preferred shares are in a loss position.

Note that in the table above, ratings in the Pfd-1 range are not shown. Appendix A contains an explanation of each rating category of the DBRS preferred share rating scale. Preferred shares rated Pfd-1 are of superior credit quality and generally correspond with companies whose long-term senior debt is rated in the AAA or AA categories. Due to the unique risk of structured preferred shares (i.e., exposure to equity market fluctuations), DBRS generally does not assign a rating in the Pfd-1 range to preferred shares unless a de-leveraging mechanism is in place to provide greater protection on the repayment of preferred share principal. If a de-leveraging mechanism is in place, a portion of the portfolio equal to the principal amount of preferred shares outstanding will be liquidated and invested in cash or cash equivalents if the portfolio NAV declines by a predetermined percentage. In addition to the de-leveraging mechanism, there are other structural features to mitigate declines in downside protection that are addressed in this methodology, including the suspension of capital share distributions if the NAV drops below a predetermined level.

Note that in the table above, ratings in the Pfd-1 range are not shown. Appendix A contains an explanation of each rating category of the DBRS preferred share rating scale. Preferred shares rated Pfd-1 are of superior credit quality and generally correspond with companies whose long-term senior debt is rated in the AAA or AA categories. Due to the unique risk of structured preferred shares (i.e., exposure to equity market fluctuations), DBRS generally does not assign a rating in the Pfd-1 range to preferred shares unless a de-leveraging mechanism is in place to provide greater protection on the repayment of preferred share principal. If a de-leveraging mechanism is in place, a portion of the portfolio equal to the principal amount of preferred shares outstanding will be liquidated and invested in cash or cash equivalents if the portfolio NAV declines by a predetermined percentage. In addition to the de-leveraging mechanism, there are other structural features to mitigate declines in downside protection that are addressed in this methodology, including the suspension of capital share distributions if the NAV drops below a predetermined level.

2. In addition, minimum downside protection levels for preferred share ratings below Pfd-3 (low) are not shown in the table. These ratings have not been included because in the past experience of DBRS, structured preferred shares have not been assigned initial ratings below the Pfd-3 range. If requested, DBRS may consider minimum protection levels for such rating levels on a case-by-case basis.
A DBRS preferred share rating addresses the probability of first-dollar loss to the preferred shares, and downside protection is the main form of credit enhancement available. Consequently, DBRS does not assign ratings on structured preferred shares if no subordination has been provided through the issuance of capital shares.

DIVIDEND COVERAGE
The dividend coverage available to the preferred shares is calculated by dividing the net dividend income of the portfolio (after deducting issuer expenses and fees) by the fixed preferred share dividend payout. If the dividend coverage ratio is greater than 100%, the issuer can fully fund preferred share distributions with income generated from the portfolio. This allows the issuer to maintain a stable level of downside protection to the preferred shares if the market value of the portfolio stays constant. This includes an assumption that the capital shares receive only excess portfolio income. If the dividend coverage ratio is less than 100%, the issuer will be forced to liquidate a portion of the securities held in the portfolio to meet preferred share distributions or generate income through other sources such as option writing or securities lending. See the “Legal” section of this methodology for further information regarding shortfalls on portfolio income and the payment of preferred share fixed dividends.

When rating split share transactions, DBRS assigns higher ratings to issuers with a preferred share dividend coverage ratio sufficiently greater than 100%. A ratio well above 100% provides a buffer to cover the potential for lower portfolio income resulting from reductions in dividend yield earned on the underlying securities. Since excess income received on the portfolio is generally distributed to the capital shareholders, small differences in coverage are not considered a major rating factor as long as the ratio is adequately greater than 100%. The initial dividend coverage normally meets DBRS standards if capital share distributions are limited to excess issuer income after the payment of preferred share fixed dividends and issuer expenses and fees.

When assigning a rating to the preferred shares of an issuer, DBRS reviews the potential for a significant reduction in dividend income by examining the historical dividend payouts and credit ratings of the portfolio’s underlying companies. More detailed analysis may be performed for less creditworthy companies included in the portfolio. Concerns DBRS has regarding the stability of portfolio dividend income may have a negative impact on the rating assigned to the preferred shares.

PORTFOLIO DIVERSIFICATION
The ability of an issuer to fully repay its obligations to holders of preferred shares is dependent on the change in its portfolio’s market value from the closing date to the final maturity date. By diversifying the portfolio holdings, the volatility of the portfolio and probability of a large decline over time will decrease, subject to systemic risk in equity markets.

Ideally, each issuer’s portfolio would be sufficiently diversified by number of securities, by industry and by geography. However, split share companies are often created to give the capital shareholders leveraged exposure to a particular industry sector or single entity. DBRS accounts for the increased risk from a lack of portfolio diversification by increasing the minimum downside protection expected for each rating level.

3. In many cases, the capital shares receive a regular distribution greater than the excess portfolio income that is available after paying preferred share distributions. This causes a grind on the portfolio, which can have negative rating implications and is addressed in the “Capital Share Distributions” section of this methodology.
Downside Protection Adjustments for Portfolio Diversification

<table>
<thead>
<tr>
<th>Level of Diversification</th>
<th>Adjustment to Minimum Downside Protection Level (Multiple)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong by industry and by number of securities</td>
<td>1.0x (i.e., no change)</td>
</tr>
<tr>
<td>Adequate by industry and by number of securities</td>
<td>1.0x to 1.2x</td>
</tr>
<tr>
<td>Adequate by number of securities, one industry</td>
<td>1.2x to 1.3x</td>
</tr>
<tr>
<td>Single entity</td>
<td>1.3x to 1.5x</td>
</tr>
</tbody>
</table>

Split share companies are normally invested primarily in Canadian securities, but significant geographical diversification is considered a strength in determining the appropriate rating on the preferred shares. The additional downside protection expected in relation to diversification reflects the considerable increase in risk to the preferred shares when a portfolio is concentrated in a single entity or in a single industry.

CREDIT QUALITY

Split share companies normally invest in dividend-yielding stocks, which tend to be issued by larger, creditworthy companies. A common portfolio would comprise shares of the five biggest Canadian banks, with each bank having a senior debt rating of AA by DBRS at the time of publication. In evaluating a portfolio, DBRS considers it a strength if the portfolio includes companies that have investment-grade senior debt ratings by DBRS. However, the inclusion of debt obligations of non-investment-grade issuers may not necessarily result in a lower assigned rating to the preferred shares if the non-investment-grade debt obligations form part of a well-diversified portfolio.

The importance of credit quality in a portfolio increases as the diversification of the portfolio decreases. To be included as a single name in a split share portfolio, a company should be diversified in its business operations by product and by geography. The rating on preferred shares with exposure to single-name portfolios generally does not exceed the rating on the preferred shares of the underlying company since the downside protection is dependent entirely on the value of the common shares of that company.

DBRS views the diversification of a portfolio by industry as more beneficial to the preferred shares than higher credit quality within the investment-grade range. For example, a portfolio of three AA-rated Canadian banks and two “A”-rated utilities would likely result in a higher preferred share rating than a portfolio of five AA-rated Canadian banks, assuming all other aspects of the transactions are identical. Although higher-quality credits are less likely to default, they are not necessarily less likely to suffer a large decline in common equity value at the same time as other securities in the same industry.

CAPITAL SHARE DISTRIBUTIONS

In the “Dividend Coverage” section above, it was assumed that the capital shares receive only excess portfolio income, but this is not the case for all split share companies. It is typical of many issuers to provide capital shareholders with regular monthly cash distributions, yielding a targeted percentage per annum on the initial issue price. In most cases, these capital share distributions will create a grind on the NAV of the portfolio. A grind occurs when, to maintain a stable NAV, a portfolio must earn a certain percentage return from capital appreciation to cover the amount that portfolio expenses and distributions exceed dividend income (the percentage grind). DBRS views grind as a negative rating factor; issuers with a grind on the portfolio NAV are expected to provide a greater amount of downside protection to achieve a given rating. In its rating analysis, DBRS constructs a basic pro forma cash flow statement for the issuer to account for the effect of targeted capital share distributions on the NAV of the portfolio over time.
Option Writing
In order to meet the targeted capital share distributions, many investment managers write covered call options on a portion of their issuer’s underlying shares. Option-writing premiums allow the manager to meet dividend requirements without resorting to the sale of underlying shares in a portfolio. However, when using a strategy of writing covered call options, there is a high reliance on the portfolio manager to effectively manage the premium received versus the potential capital gains that will be lost if the option becomes exercised.

The portfolio manager normally writes covered calls on a percentage of the portfolio’s underlying holdings, depending on how much income needs to be generated to meet distributions to the capital shareholders. This strategy limits the total return achieved through capital appreciation if valuations increase to a point where the written call option is in-the-money. In a steadily declining market, writing a call option provides a small amount of income to protect against losses. In a rising market, a strategy of writing covered call options will underperform a passive portfolio because some of the capital gains will be called away by the option holder. Under challenging market conditions with high volatility, an actively managed portfolio relying too heavily on an option strategy can suffer substantially as large gains are called away by option holders and losses directly affect the NAV.

DBRS views the strategy of writing covered calls as an additional element of risk for preferred shareholders because of the potential to give up unrealized capital gains that would increase the downside protection available to cover future portfolio losses. Furthermore, an option-writing strategy relies on the ability of the investment manager. The investment manager has a large amount of discretion to implement its desired strategy, and the resulting trading activity is not monitored as easily as the performance of a static portfolio. Relying partially on the ability of the investment manager rather than the strength of a split share structure is a negative rating factor.

Asset Coverage Tests
Many issuers have instituted NAV tests in an effort to enhance the level of protection maintained for preferred shareholders throughout the term of the transaction. If a NAV test is put in place, no distributions (regular or excess) may be paid to the holders of the capital shares if the NAV of the portfolio drops below a predetermined level. Existing split share transactions that DBRS has rated have typically used a threshold level for the suspension of capital share distributions of 1.5 times the principal amount of outstanding preferred shares. For some transactions rated by DBRS, the threshold level is higher than 1.5 times to provide greater protection to the preferred shares. Once distributions are suspended, the grind on the portfolio NAV is normally greatly reduced or eliminated.

In addition, a test is often used to protect preferred shareholders from special distributions if the NAV falls below a predetermined level. Special distributions refer to distributions to capital shareholders in excess of the targeted regular monthly payment amount. For existing transactions rated by DBRS, the NAV at the issuer’s inception date (net of operating expenses) has typically been the threshold level for paying out special distributions.

Impact of Capital Distributions
Although asset coverage tests limit the amount of distributions to the capital shareholders, the strongest split share structures from the perspective of preferred shareholders are those that distribute little income or capital gains to the capital shares until the issuer’s termination and after the preferred shares have been repaid. This is mainly because capital appreciation will accumulate if the underlying securities in the portfolio perform well. An increase in the portfolio’s NAV will result in greater downside protection being available to the preferred shares. If the portfolio subsequently experiences a substantial drop in value, the preferred shares will have the benefit of the earlier capital gains covering some of these portfolio losses, which decreases the probability of the preferred shares suffering first-dollar loss of principal or dividends.
The benefit of lower distributions to holders of the capital shares can be demonstrated by a performance attribution exercise for an actively managed split share company. Performance attribution is used to determine why a portfolio’s performance differs from a benchmark return. In this case, the benchmark return reflects the performance of a passively managed split share company that only distributes excess portfolio income to the capital shareholders (after paying preferred share distributions and other issuer expenses). In other words, the benchmark return is the percentage change in market value of the portfolio holdings over time. In analyzing the split share corporations for which DBRS has assigned preferred share ratings, DBRS finds that passively managed companies generally outperform actively managed companies. Nearly all of the difference in performance can be attributed to capital share distributions rather than to option writing or the over/underweighting of certain sectors or securities.

To compensate for the negative impact of capital share distributions on performance and the potential risks of an option-writing strategy, many split share companies may increase the levels of initial downside protection on the preferred shares, which mitigates the negative rating impact of these features on the preferred shares. The chart below gives DBRS general rating guidelines for certain distribution sizes and asset coverage test thresholds.

### Impact of Capital Share Distributions on Initial Ratings

<table>
<thead>
<tr>
<th>Size of Regular Capital Distributions¹</th>
<th>NAV Test</th>
<th>Likely Impact on Initial Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excess income</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>5% or less per annum</td>
<td>1.75x coverage</td>
<td>0-1 notches lower</td>
</tr>
<tr>
<td>5% or less per annum</td>
<td>1.5x coverage</td>
<td>1 notch lower</td>
</tr>
<tr>
<td>8% per annum</td>
<td>1.75x coverage</td>
<td>1-2 notches lower</td>
</tr>
<tr>
<td>8% per annum</td>
<td>1.5x coverage</td>
<td>2 notches lower</td>
</tr>
</tbody>
</table>

¹. The likely impact on ratings for these distribution sizes assumes a typical split share structure (preferred shares $10 each, capital shares $15 each). If a structure were to differ from this assumption significantly, the likely impact on the preferred share rating will not match what is shown in the table.

The above chart gives general guidelines based on historical transactions and DBRS estimates for future transactions. It is possible that issuers may incorporate a distribution size or coverage test that is not shown in the chart above. DBRS analyzes the risks of such structures on a case-by-case basis.
Rating Approach: Implied Ratings Based on Historical Data

As described above, DBRS evaluates the credit quality of an issuer’s preferred shares through an analysis of the downside protection and dividend coverage available, the diversification and credit quality of the portfolio, the size of capital share distributions and the terms of the NAV test. Through this process, DBRS determines appropriate levels of minimum downside protection expected for different rating levels.

DBRS also calculates two implied ratings for the preferred shares based on an analysis of historical data. The first approach involves calculating a one-year historical VaR for the portfolio and linking the probability of default to a preferred share rating based on historical corporate default data. The second approach combines the weighted-average credit quality of the portfolio with the historical average correlation among the underlying securities to determine a preferred share rating. These two approaches each yield an implied rating on the preferred shares (the volatility rating and the correlation/credit quality rating). The correlation/credit quality rating generally sets a cap for the preferred share rating, regardless of the other aspects of the split share transaction. The volatility rating does not necessarily set a cap for the preferred share rating because DBRS considers the one-year historical VaR together with the credit quality and outlook of the portfolio’s underlying companies (see the “Historical Volatility and Performance Analysis” section below).

Following the determination of a cap for the preferred share rating, the proposed level of downside protection is compared with the expected amount of downside protection. If the proposed level of downside protection is less than the minimum expectation, a rating lower than the cap is assigned. The two implied rating approaches are described in greater detail below.

HISTORICAL VOLATILITY AND PERFORMANCE ANALYSIS

In addition to an evaluation of the credit quality and diversification of the portfolio holdings, DBRS analyzes the historical volatility and performance of the portfolio’s underlying securities to estimate the likelihood of large declines in downside protection. Although past performance is not necessarily an indication of future performance, DBRS views historical returns as an important factor in evaluating the sufficiency of credit enhancement levels. DBRS views its historical performance modelling as a key factor in the rating process, but results are not directly linked to a preferred share rating in isolation. DBRS considers the appropriateness of model predictions in light of economic factors that may affect the outlook of the portfolio and increase the likelihood that future volatility or performance may differ from historical observations. In addition, the historical volatility analysis is considered together with other key aspects of the split share transaction to determine an appropriate preferred share rating.

DBRS uses a variation of the historical VaR method to estimate the likelihood of large declines in downside protection. VaR is the amount of loss that is expected to be exceeded with a given level of probability over a specified time period. For example, if a portfolio has a one-day VaR of $1 million with a probability of 5%, there is a 5% probability that the portfolio will lose at least $1 million in a one-day period. In other words, there is a 95% probability that the portfolio will lose no more than $1 million in a one-day period. Using the historical method, daily returns are calculated for a given portfolio using price data for a historical period of time specified by DBRS. Daily returns are then sorted from lowest to highest. If there are 100 daily returns and a probability of 5% is desired, the 5% VaR would be approximately equal to the fifth-worst return.
Assuming that the capital shareholders receive only excess portfolio income, the essential factor in an assessment of the credit quality of the preferred shares is determining the probability of an X% decline in downside protection over a particular period, where X is the percentage of downside protection available. The VaR method is ideal because a DBRS rating takes into consideration the probability of first-dollar loss to the preferred shares but not the severity of loss upon default. Thus, the magnitude of losses exceeding VaR is not a primary concern in the rating process. The steps in the VaR analysis completed by DBRS are as follows:

1. Gather daily historical performance data for a defined period.
2. Annualize each daily return by multiplying it by the square root of the number of trading days in a year.
3. Sort the annualized returns from lowest to highest.
4. Using the initial amount of downside protection available to the preferred shares, determine the appropriate dollar loss required for the preferred shares to be in a loss position (i.e., asset coverage ratio is less than 1.0).
5. Solve for the probability that yields a one-year VaR at the appropriate dollar-loss amount for the transaction.
6. Determine the implied long-term bond rating by comparing the probability of default with the DBRS idealized default probability table.
7. Link the implied bond rating to the appropriate preferred share rating using an assumption that the preferred shares of a company is rated two notches below the company’s issuer rating.

**Gather Data**

The key consideration in gathering historical data is the time period used. There is a balance between collecting enough returns and avoiding irrelevant data due to a major shift in the portfolio’s environment that may decrease the value of using data observed prior to the shift. In general, DBRS typically uses ten years of historical data to calculate the probability of a large decline in downside protection. Shorter periods may be used if ten years of data is not available for a particular portfolio; however, the comparison of split share portfolios is always completed using identical time periods.

**Annualize Daily Returns**

VaR is generally used to project losses over fairly short periods. It becomes less effective as a tool if the time period increases substantially. DBRS uses a one-year time frame because annualized volatility is commonly used to measure risk. A daily percentage return can be thought of as volatility around a mean of zero. Multiplying daily volatility by the square root of the number of trading days in a year (252) is the standard calculation for annualized volatility. Furthermore, a one-year period is used because it is long enough to match the probability of default to a long-term debt rating using the DBRS idealized default table.

**Sort the Annualized Returns**

For the purpose of determining the probability of a large decline in downside protection, only negative daily returns can cause first-dollar loss to the preferred shares (once annualized). This exercise differs from the calculation of standard deviation, where both large positive and negative volatility around the mean would increase the total magnitude. By using the historical VaR method, large positive daily returns are not considered to increase the risk of default of the preferred shares. At the same time, extreme negative past events (measured by daily loss) are included in the calculation of historical VaR.
**Determine Appropriate Loss Amount Using Downside Protection**
The appropriate loss amount is calculated by multiplying the starting value of the portfolio by the
downside protection initially available to the preferred shares.

**Solve for the Probability**
After the daily returns have been sorted and the appropriate loss amount has been determined, solving
for the probability is straightforward. The probability for VaR is the percentage of total annualized daily
return data points that result in a one-year loss exceeding the VaR loss amount (that resulted from the
initial downside protection).

**Determine Implied Rating Level**
Once a one-year VaR probability has been determined, this percentage can be equated to a long-term debt
rating using the corporate default probability table in Appendix B. These corporate default probabilities
are based on historical default statistics and are commonly used in rating structured credit transactions.

**Link Implied Rating to Preferred Share Rating**
Since a rating is being assigned to the preferred shares, a notching assumption is applied to the long-term
debt scale to reflect the subordination of preferred shares to senior debt in the corporate capital structure.
DBRS has assumed that the preferred shares of a company are rated two notches below the rating of
senior debt. By using the notching assumption, the long-term debt rating determined in the previous step
is converted to a preferred share rating.

The purpose of this final step is to assign structured preferred share ratings that are consistent with
ratings on preferred shares issued by Canadian corporations. This consistency is quantified by linking the
probability of a default using historical data (with any appropriate adjustments) to a rating level that is
expected to exhibit similar default behaviour over time.

Using the one-year period is a conservative measure for analyzing the common share returns of higher-
quality companies. The probability of a large decline over five to seven years for a creditworthy company
is likely less than the probability of a one-year decline because there would be plenty of time for a rebound
in prices in the event of a substantial decline. This was best illustrated following the financial crisis of
2008–09, when the major Canadian banks and life insurance companies suffered declines of more than
50% before subsequently regaining all of their lost market value. For this reason, DBRS considers the
one-year historical VaR implied rating in conjunction with the credit quality and outlook for the port-
folio’s underlying companies. Moderately higher volatility may be considered acceptable for companies
with very high credit quality.

**CREDIT QUALITY AND CORRELATION OF THE PORTFOLIO**
A second implied rating is determined based on the correlation among the portfolio’s underlying securi-
ties relative to the weighted-average credit quality of the portfolio. If correlation is very high (i.e., greater
than 75%), the rating on the preferred shares should generally not exceed the weighted-average credit
quality of the portfolio. As the correlation decreases, however, the implied rating of the preferred shares
increases because there is a lower probability of having a large decline in downside protection. Using the
grid below, DBRS determines the implied rating by collecting historical correlation data from the previous
ten-year period (if available).
**Maximum Preferred Share Ratings Based on Portfolio Credit Quality and Correlation**

<table>
<thead>
<tr>
<th>Weighted Portfolio Credit Rating</th>
<th>Portfolio Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below 25%</td>
</tr>
<tr>
<td></td>
<td>25-50%</td>
</tr>
<tr>
<td></td>
<td>50-75%</td>
</tr>
<tr>
<td></td>
<td>Over 75%</td>
</tr>
<tr>
<td>AAA</td>
<td>Pfd-1 (high)</td>
</tr>
<tr>
<td>AAA (high)</td>
<td>Pfd-1 (high)</td>
</tr>
<tr>
<td>AA</td>
<td>Pfd-1 (high)</td>
</tr>
<tr>
<td>AA (low)</td>
<td>Pfd-1 (high)</td>
</tr>
<tr>
<td>A(high)</td>
<td>Pfd-1 (high)</td>
</tr>
<tr>
<td>A (low)</td>
<td>Pfd-1 (low)</td>
</tr>
<tr>
<td>BBB (high)</td>
<td>Pfd-2 (high)</td>
</tr>
<tr>
<td>BBB (low)</td>
<td>Pfd-2 (low)</td>
</tr>
<tr>
<td>BB (high)</td>
<td>Pfd-3 (high)</td>
</tr>
<tr>
<td>BB (low)</td>
<td>Pfd-3 (low)</td>
</tr>
<tr>
<td>B (high)</td>
<td>Pfd-4 (high)</td>
</tr>
<tr>
<td>B (low)</td>
<td>Pfd-4 (low)</td>
</tr>
<tr>
<td>CCC (high)</td>
<td>Pfd-5 (high)</td>
</tr>
<tr>
<td>CCC (low)</td>
<td>Pfd-5 (low)</td>
</tr>
</tbody>
</table>

**Rating Approach: Other Factors**

**CUMULATIVE DIVIDENDS**

For most issuers, holders of the preferred shares receive fixed cumulative dividends on a regular basis (monthly or quarterly). The cumulative nature of the dividends is a factor in the assignment and maintenance of a DBRS rating. Issuers paying cumulative dividends have the option of delaying payment of dividends until the final maturity date. Upon maturity, the preferred shares will rank in priority to the capital shares with respect to the payment of any accrued but unpaid dividends and the repayment of initial principal.

Normally, an issuer would not suspend its distributions to the preferred shareholders unless its financial condition had deteriorated drastically. For example, assume that the market value of a portfolio has dropped 80% from its initial value and the dividend yield earned on the portfolio assets has been cut to close to zero because of changes in dividend policies of the portfolio companies. In such a situation, the preferred shareholders would likely be in a loss position due to the 80% market value decline; however, a certain period of time would remain until the final maturity date. The issuer could suspend its dividend payments to the preferred shareholders to avoid having to sell portfolio shares to meet distributions. By hoarding capital and suspending distributions, the issuer would be aiming to benefit as much as possible from a subsequent rebound in the prices of the portfolio’s underlying securities.
In the example above, it is possible that a rebound in the NAV of the portfolio will occur prior to the final maturity date. If the portfolio appreciates enough in value, the issuer will be able to repay the preferred shareholders all unpaid dividends along with the full return of principal. Since equity prices can be subject to periods of extreme volatility, DBRS will not downgrade a preferred share rating to default if the issuer suspends its distributions, recognizing the potential for subsequent increases in the portfolio’s value (assuming dividends are cumulative). In such cases, DBRS will assign a rating at that time based on an evaluation of the probability of first-dollar loss (either from dividends or principal) on the final maturity date. A rating of Pfd-5 (low) indicates an expectation that the preferred shares will experience first-dollar loss of cumulative dividends or principal on the final maturity date.

SECURITIES LENDING
Issuers usually have the ability under their constitutional documents to enter into securities lending agreements with a custodian in order to generate additional portfolio income. Securities lending involves the issuer lending shares from the portfolio to a borrower for a period of time under the terms of a lending agreement, usually in exchange for collateral that secures the borrower’s obligations. Loaned securities are not bankruptcy remote if the borrower becomes insolvent and are not protected if the borrower does not return them to the issuer. DBRS considers the following criteria to be acceptable mitigation strategies if an issuer engages in securities lending:

1. The custodian is not permitted to lend to non-investment-grade counterparties.
2. Each transaction is conducted on an open-ended basis, which means it can be terminated at any time by the issuer, the custodian or the counterparty.
3. The issuer still receives the underlying dividend payments on the loaned securities on their applicable payment dates.
4. Collateral for the loaned securities must be pledged by the counterparty to the issuer and it must be subject to National Instrument 81-102 Mutual Funds requirements for overcollateralization.
5. The collateral is marked to market each day by the custodian.
6. A custodian (or supporting parent) with a minimum rating of A (high) by DBRS provides an indemnity to the issuer against the risk of loss should a borrower default on its obligations to return the loaned securities and the collateral is insufficient to reconstitute the loaned securities, or such other arrangement that is satisfactory to DBRS is agreed upon to mitigate such potential losses.

FORWARD AGREEMENTS
In order to generate tax-efficient distributions to the preferred share and capital share investors, the issuer may enter into a forward purchase agreement with a counterparty that provides the issuer with synthetic exposure to a basket of securities. Partial settlements under a forward agreement (in order to satisfy distributions and retractions to investors) are considered to be capital gains, which are taxed at a lower rate than the income the issuer would receive if it held the portfolio directly.

When a forward agreement is used, DBRS takes into account the credit quality of the counterparty in the forward agreement, expecting to have a minimum counterparty rating of A (high) or R-1 (middle) to mitigate credit risk. For more information on DBRS criteria for hedge counterparties, see DBRS Derivatives Criteria for Canadian Structured Finance Transactions, which can be found at www.dbrs.com.
LEGAL
DBRS reviews documentation relating to the issuance of the preferred shares, including, without limitation, the prospectus, custodial agreement, investment management agreement and the articles or constitutional documents of the issuer (which should include the terms and conditions of each type of share issued by the issuer). In particular, DBRS reviews the sections of the constitutional documents of the issuer relating to the rights of its shareholders and the priority ranking of its shareholders upon the issuer’s termination to ensure the priority of the preferred shareholders as to payments of dividends and principal.

In reviewing such documentation, DBRS also pays particular attention to the process to be followed in the event there is a shortfall in paying fixed cumulative dividends to the preferred shareholders. More specifically, in most cases the issuer’s articles or organizational documents will stipulate that if fixed dividends are not paid to preferred shareholders on or about the indicated payment date, they will continue to accrue to the next payment date (this is the cumulative nature of the preferred shares). In addition, in many cases the articles or organizational documents of an issuer may state that the board of directors of the issuer has the discretion whether or not to sell shares in the portfolio in the event of a shortfall, depending on whether it is in the best interests of the issuer to do so. However, in some cases, the prospectus will indicate that the issuer will sell shares in the portfolio if there is a shortfall despite any such discretion of the board of directors and despite the cumulative nature of the dividends as may be set out in the articles. These factors are taken into account in determining the appropriate rating level for the preferred shares being issued.

As part of the ongoing monitoring of the preferred shares after a rating is assigned, DBRS expects the issuer to provide DBRS with notice of certain matters that may have a potential impact on the rating of the preferred shares, and DBRS expects this notice to be included in the transaction documentation when a DBRS rating is assigned. The types of matters for which DBRS expects to receive notice include (without limitation) the following: the issuance of (or increasing the number of) any shares of the issuer that have a pari passu or priority ranking to the payment of dividends and principal of the preferred shares (or that have any other rights or privileges that rank pari passu or in priority to the preferred shares); any amendments to the rights of the preferred shareholders; any amendments to the rights of any other class of shares of the issuer that may have an adverse effect on the preferred shares; a proposal to extend the final maturity date of the preferred shares (if applicable); the entering into of any securities lending agreements; and the appointment of any successor or replacement custodian, investment manager or other service provider that is pertinent to the split share structure.

RETRACTIONS
Split share corporations qualify as mutual fund corporations as defined in the Income Tax Act (Canada). As a result, holders of preferred shares can surrender their shares for retraction to the issuer at any time, but the retraction will only take place on the monthly retraction date (as defined in the issuer’s articles and as set out in the prospectus). Preferred shares are normally retracted at a small discount to the NAV, taking into account the cost of purchasing a capital share in the market for the issuer to maintain an equal number of preferred shares and capital shares outstanding.

DBRS does not normally take into account the terms of retraction in assigning an initial rating on the preferred shares. Regardless of retraction activity, DBRS maintains a rating on the preferred shares of an issuer as long as any preferred shares remain outstanding. In certain cases, retraction activity could have an impact on a DBRS rating if a small number of preferred shares and capital shares of an issuer remain outstanding following a large number of retractions at a point in time. In such circumstances, the fixed costs related to the continued operation of the issuer could cause a grind on the NAV since the fixed cost per preferred share would be much higher.
In addition, certain split share companies may not have an obligation to maintain a fixed ratio of capital shares to preferred shares (normally 1:1 or 2:1). If a materially larger percentage of capital shares are redeemed at any given time, this may have a negative effect on the credit quality of the preferred shares because there will be fewer capital shares remaining to provide downside protection to the preferred shares outstanding. As a result, DBRS monitors the retraction activity of such companies and provides updates to affected preferred share ratings as necessary.

CURRENCY HEDGING
If a material percentage of a fund's assets can be invested in securities denominated in foreign currencies, the currency hedging strategy of the fund is considered by DBRS in its rating analysis. If any currency exposure is hedged 100% of the time, no further analysis on the amount of foreign asset exposure of the fund is performed. If the majority of the fund's exposure is hedged (e.g., at least 80% is hedged at all times), the effect on the rating will depend on the potential reduction in the dividend coverage ratio from changes in foreign currency values. If hedging is at the manager's discretion and a minimum hedge percentage is not stated in the fund's prospectus, the preferred share rating will be negatively affected by a substantial amount.

Split Share Surveillance Methodology

The downside protection available to the preferred shares of an issuer is directly dependent on the market value of the issuer's portfolio. In periods of greater volatility, the downside protection can fluctuate significantly in short time periods. Since downside protection is one of the key factors in assigning a DBRS rating, market fluctuations are an important consideration in the maintenance of existing preferred share ratings.

DBRS reviews the downside protection available to all of its rated preferred shares on a monthly basis (at a minimum). DBRS maintains an internal watchlist based on its monthly split share monitoring activity. In the absence of any other material changes, the maintenance of a DBRS rating is based on the downside protection percentage relative to a range of acceptable levels for an assigned preferred share rating. Material changes affecting the transaction must be analyzed as they arise for any impact on the rating assigned to the preferred shares. Certain changes may materially affect the credit quality of the preferred shares, such as a significant change in portfolio dividend income, the merger of two funds or an uneven amount of retractions (for companies that do not require a fixed ratio of preferred shares to capital shares).

The table below shows minimum downside protection ranges generally used for the surveillance of DBRS preferred share ratings. For portfolios with the highest credit quality, some credit may be given in surveillance to the strength of the underlying companies, resulting in lower downside protection expectations to maintain a particular rating.

<table>
<thead>
<tr>
<th>DBRS Preferred Share Rating</th>
<th>Minimum Downside Protection*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pfd-2 (low) or higher</td>
<td>&gt; 40%</td>
</tr>
<tr>
<td>Pfd-3 (low) to Pfd-3 (high)</td>
<td>20% to 40%</td>
</tr>
<tr>
<td>Pfd-4 (high) or lower</td>
<td>&lt; 20%</td>
</tr>
</tbody>
</table>

* Downside protection = percentage reduction in portfolio NAV before preferred shares are in a loss position.
It is important to note that the surveillance ranges for downside protection may be considerably lower than the initial expectations when the split share rating is assigned, depending on the diversification of the issuer’s portfolio and the level of distributions to the capital shares. Initial downside protection levels are expected to be higher to provide a greater level of stability to the initial rating on the preferred shares. Rating actions taken on the preferred shares of an issuer are based on the following guidelines:

• If the downside protection available falls outside the expected range by a significant amount for two consecutive months, the preferred shares may be placed Under Review with Negative Implications to indicate the high likelihood of an impending downgrade.

• After a rating has been placed Under Review with Negative Implications, it maintains its status until one of the following scenarios occurs:
  – If the downside protection falls outside expected levels for two consecutive months subsequent to the rating being placed Under Review with Negative Implications, then the preferred shares will likely be downgraded. The revised rating level depends on the path of downside protection levels during the Under Review period, as well as on other factors such as changes in the dividend coverage available and the credit quality of the portfolio.
  – If the downside protection levels are consistent with the then-current rating for two consecutive months subsequent to being placed Under Review with Negative Implications (likely due to an increase in downside protection), the Under Review status will likely be removed with a confirmation of the rating.

• If the downside protection indicates that an upgrade is warranted for four consecutive months, then the transaction will likely be upgraded. The revised rating level depends on the path of downside protection levels during the previous four months, as well as other factors such as changes in the dividend coverage available and the credit quality of the portfolio.

The above guidelines allow DBRS to make measured rating decisions that benefit from at least four months of NAV data indicating whether a rating change is necessary. DBRS reviews the historical trend in downside protection before making its final rating decision.

The guidelines are not used in the same manner if less than one year remains until the final maturity date of the preferred shares. If multiple years remain until maturity, there is ample time for the portfolio NAV to recover from a precipitous decline. As the maturity date approaches, the amount of time available for a rebound in the NAV decreases, which increases the probability of default if the downside protection has already suffered a large decline. In such situations, DBRS acts promptly in downgrading preferred shares to speculative rating levels.

In addition to the guidelines above, DBRS may adjust its preferred share ratings based on movements in downside protection within each rating range. For example, a drop in downside protection from 60% to 45% may result in a downgrade from Pfd-2 to Pfd-2 (low).

In periods of extreme volatility, the surveillance approach may result in the preferred shares maintaining a rating many notches above what would be implied from the downside protection at a moment in time. This is acceptable because DBRS aims to assign ratings based on longer-term observed values of downside protection. Taking rating actions based on one-month changes in market value could result in constant upgrading and downgrading of preferred shares, depending on the volatility of the equity markets over a given period of time.

It should be noted that, because preferred share ratings of split share companies are related to (potentially volatile) common equity price movements, the preferred share ratings of split share companies may show more ratings volatility than preferred share ratings of single corporate issuers. For example, a large stock market decline, as occurred during 2008-2009, caused more ratings volatility among split share company preferred share ratings containing Canadian bank common equities, than the preferred share ratings of the Canadian banks themselves. A general stock market decline in and of itself may not have an effect on the preferred share ratings of specific regulated banks, but the lower common share price of those banks, when held in a split share company, could potentially have an impact on the rating of the split share company preferred share rating.
Conclusion

Unlike notes issued in other structured finance transactions rated by DBRS, the preferred shares issued by a split share corporation are directly exposed to fluctuations in the equity market value of the issuer’s portfolio. A DBRS rating on preferred shares addresses the probability of the preferred shares being paid in full with respect to cumulative dividends and initial principal. Due to the subordination of the capital shares, a default on the preferred shares will likely not occur unless the portfolio declines in value by a large percentage over time (normally more than 50%).

During the second half of 2008 and early 2009, global equity market valuations declined at an extremely rapid pace. The S&P/TSX Composite Index declined approximately 50% from its peak in June 2008 to its low point in March 2009, a decline eclipsed in severity only during the Great Depression. The valuation declines over that period were not limited to issuers in any particular industry. In such times of historic volatility and stress, downside protection levels available to preferred shares come under severe downward pressure.

DBRS subsequently strengthened its split share rating process, assigning lower initial ratings to preferred shares with a greater risk of default based on the composition of their issuer’s portfolio. Issuers with undiversified portfolios need to provide greater levels of downside protection to their preferred shares in order to achieve a particular rating. The number and size of new preferred share issues has declined substantially since the end of 2007.

This publication has detailed DBRS approach for rating preferred shares issued by split share companies. DBRS continues to evaluate its split share rating methodology on an ongoing basis to ensure that it remains effective. Further updates to the assumptions detailed in this document will be provided as necessary.
Appendix A: DBRS Preferred Share Rating Scale

The DBRS preferred share rating scale is used in the Canadian securities market and is meant to give an indication of the risk that a borrower will not fulfill its full obligations in a timely manner, with respect to both dividend and principal commitments. Every DBRS rating is based on quantitative and qualitative considerations relevant to the borrowing entity. Each 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. This scale may also apply to certain hybrid securities, in which case the references to dividends throughout would reflect interest commitments of the hybrid security.

PFD-1
Preferred shares rated Pfd-1 are of superior credit quality, and are supported by entities with strong earnings and balance sheet characteristics. Pfd-1 securities generally correspond with companies whose senior bonds are rated in the AAA or AA categories. As is the case with all rating categories, the relationship between senior debt ratings and preferred share ratings should be understood as one where the senior debt rating effectively sets a ceiling for the preferred shares issued by the entity. However, there are cases where the preferred share rating could be lower than the normal relationship with the issuer’s senior debt rating.

PFD-2
Preferred shares rated Pfd-2 are of satisfactory 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 companies whose senior bonds are rated in the “A” category.

PFD-3
Preferred shares rated Pfd-3 are 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 companies whose senior bonds are rated in the higher end of the BBB category.

PFD-4
Preferred shares rated Pfd-4 are speculative, where the degree of protection afforded to dividends and principal is uncertain, particularly during periods of economic adversity. Companies with preferred shares rated Pfd-4 generally coincide with entities that have senior bond ratings ranging from the lower end of the BBB category through the BB category.

PFD-5
Preferred shares rated Pfd-5 are 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 have senior bond ratings of B or lower. 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 dividends are only payable when approved, the non-payment of a dividend does not necessarily result in a D rating. In some cases, DBRS may not assign a D rating under a bankruptcy announcement scenario, as allowances for grace periods may exist in the underlying legal documentation. Once assigned, the D rating will continue until such time as the rating is discontinued or reinstated by DBRS.
### Appendix B: DBRS Idealized Default Probability Assumptions

#### Corporate Cumulative Default Probabilities

<table>
<thead>
<tr>
<th>Rating</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>0.01%</td>
<td>0.03%</td>
<td>0.05%</td>
<td>0.07%</td>
<td>0.10%</td>
<td>0.13%</td>
<td>0.17%</td>
<td>0.22%</td>
<td>0.28%</td>
<td>0.34%</td>
</tr>
<tr>
<td>AA (high)</td>
<td>0.02%</td>
<td>0.04%</td>
<td>0.07%</td>
<td>0.11%</td>
<td>0.15%</td>
<td>0.21%</td>
<td>0.28%</td>
<td>0.36%</td>
<td>0.45%</td>
<td>0.56%</td>
</tr>
<tr>
<td>AA</td>
<td>0.02%</td>
<td>0.05%</td>
<td>0.09%</td>
<td>0.14%</td>
<td>0.21%</td>
<td>0.29%</td>
<td>0.38%</td>
<td>0.49%</td>
<td>0.62%</td>
<td>0.77%</td>
</tr>
<tr>
<td>AA (low)</td>
<td>0.03%</td>
<td>0.07%</td>
<td>0.13%</td>
<td>0.21%</td>
<td>0.30%</td>
<td>0.41%</td>
<td>0.54%</td>
<td>0.70%</td>
<td>0.87%</td>
<td>1.06%</td>
</tr>
<tr>
<td>A (high)</td>
<td>0.04%</td>
<td>0.11%</td>
<td>0.20%</td>
<td>0.33%</td>
<td>0.48%</td>
<td>0.66%</td>
<td>0.87%</td>
<td>1.10%</td>
<td>1.35%</td>
<td>1.63%</td>
</tr>
<tr>
<td>A</td>
<td>0.05%</td>
<td>0.13%</td>
<td>0.24%</td>
<td>0.39%</td>
<td>0.57%</td>
<td>0.78%</td>
<td>1.03%</td>
<td>1.30%</td>
<td>1.60%</td>
<td>1.92%</td>
</tr>
<tr>
<td>A (low)</td>
<td>0.09%</td>
<td>0.24%</td>
<td>0.44%</td>
<td>0.68%</td>
<td>0.96%</td>
<td>1.28%</td>
<td>1.63%</td>
<td>2.00%</td>
<td>2.40%</td>
<td>2.81%</td>
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<tr>
<td>BBB (high)</td>
<td>0.19%</td>
<td>0.47%</td>
<td>0.83%</td>
<td>1.27%</td>
<td>1.75%</td>
<td>2.28%</td>
<td>2.84%</td>
<td>3.41%</td>
<td>4.00%</td>
<td>4.60%</td>
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<td>2.21%</td>
<td>2.95%</td>
<td>3.72%</td>
<td>4.51%</td>
<td>5.29%</td>
<td>6.06%</td>
<td>6.83%</td>
</tr>
<tr>
<td>BB (high)</td>
<td>1.08%</td>
<td>2.44%</td>
<td>3.93%</td>
<td>5.47%</td>
<td>6.99%</td>
<td>8.45%</td>
<td>9.84%</td>
<td>11.15%</td>
<td>12.37%</td>
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</tr>
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<td>1.36%</td>
<td>3.06%</td>
<td>4.90%</td>
<td>6.77%</td>
<td>8.60%</td>
<td>10.34%</td>
<td>11.97%</td>
<td>13.49%</td>
<td>14.89%</td>
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</tr>
<tr>
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<td>2.23%</td>
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<td>11.96%</td>
<td>14.05%</td>
<td>15.96%</td>
<td>17.69%</td>
<td>19.26%</td>
<td>20.69%</td>
</tr>
<tr>
<td>B (high)</td>
<td>3.63%</td>
<td>7.41%</td>
<td>11.02%</td>
<td>14.34%</td>
<td>17.33%</td>
<td>20.00%</td>
<td>22.34%</td>
<td>24.42%</td>
<td>26.26%</td>
<td>27.89%</td>
</tr>
<tr>
<td>B</td>
<td>4.85%</td>
<td>9.75%</td>
<td>14.32%</td>
<td>18.42%</td>
<td>22.03%</td>
<td>25.18%</td>
<td>27.92%</td>
<td>30.30%</td>
<td>32.38%</td>
<td>34.20%</td>
</tr>
<tr>
<td>B (low)</td>
<td>10.08%</td>
<td>17.66%</td>
<td>23.51%</td>
<td>28.14%</td>
<td>31.87%</td>
<td>34.93%</td>
<td>37.49%</td>
<td>39.65%</td>
<td>41.50%</td>
<td>43.10%</td>
</tr>
<tr>
<td>CCC (high)</td>
<td>18.79%</td>
<td>30.85%</td>
<td>38.84%</td>
<td>44.34%</td>
<td>48.26%</td>
<td>51.18%</td>
<td>53.44%</td>
<td>55.23%</td>
<td>56.71%</td>
<td>57.95%</td>
</tr>
<tr>
<td>CCC</td>
<td>22.27%</td>
<td>36.13%</td>
<td>44.97%</td>
<td>50.82%</td>
<td>54.82%</td>
<td>57.68%</td>
<td>59.82%</td>
<td>61.47%</td>
<td>62.79%</td>
<td>63.89%</td>
</tr>
<tr>
<td>CCC (low)</td>
<td>61.14%</td>
<td>68.06%</td>
<td>72.49%</td>
<td>75.41%</td>
<td>77.41%</td>
<td>78.84%</td>
<td>79.91%</td>
<td>80.73%</td>
<td>81.40%</td>
<td>81.94%</td>
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