Methodology

Rating Companies in the Railway Industry

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Introduction to DBRS Methodologies

- DBRS publishes rating methodologies to give issuers and investors insight into the rationale behind DBRS’s rating opinions.
- In general terms, DBRS ratings are opinions that reflect the creditworthiness of an issuer, a security or an obligation. DBRS ratings assess an issuer’s ability to make timely payments on outstanding obligations (whether principal, interest, preferred share dividends or distributions) with respect to the terms of an obligation. In some cases (e.g., non-investment grade corporate issuers), DBRS ratings may also address recovery prospects for a specific instrument given the assumption of an issuer default.
- DBRS rating methodologies include consideration of historical and expected business and financial risk factors as well as industry-specific issues, regional nuances and other subjective factors and intangible considerations. Our approach incorporates a combination of both quantitative and qualitative factors.
- The considerations outlined in DBRS methodologies are not exhaustive and the relative importance of any specific consideration can vary by issuer. In certain cases, a major strength can compensate for a weakness and, conversely, a single weakness can override major strengths of the issuer in other areas. DBRS may use, and appropriately weight, several methodologies when rating issuers that are involved in multiple business lines.
- DBRS operates with a stable rating philosophy; in other words, DBRS strives to factor the impact of a cyclical economic environment into its ratings wherever possible, which minimizes rating changes due to economic cycles. Rating revisions do occur, however, when more structural changes, either positive or negative, have occurred, or appear likely to occur in the near future.
- DBRS also publishes criteria which are an important part of the rating process. Criteria typically cover areas that apply to more than one industry. Both methodologies and criteria are publicly available on the DBRS website and many criteria are listed below under “Rating the Specific Instrument and Other Criteria.”
Overview of the DBRS Rating Process

- There are generally three components to the DBRS corporate rating process: (1) an industry risk rating (IRR); (2) an issuer rating; and (3) considerations for specific securities. The figure below outlines this process.
- An IRR is a relative ranking of most industries that have a DBRS methodology, typically using just three ranges of the DBRS long-term debt rating scale (i.e., “A,” BBB and BB), without making use of the “high” or “low” descriptors. The IRR is a general indication of credit risk in an industry and considers, among other things, an industry’s: (1) profitability and cash flow; (2) competitive landscape; (3) stability; (4) regulation; and (5) other factors. An “industry,” for the purposes of the IRR, is defined as those firms that are generally the larger, more established firms within the countries where the majority of DBRS’s rated issuers are based; this remains true for DBRS methodologies that are more global in nature. The industry risk rating helps DBRS set the BRR grid (see below) in that it positions, in an approximate way, an average firm in the industry onto the BRR grid. For firms in industries with low IRRs, the IRR can, in effect, act as a constraint or “cap” on the issuer’s rating.
- The issuer rating is DBRS’s assessment of the probability of default of a specific issuer. It is a function of: (1) the business risk rating (BRR), determined by assessing each of the primary and (where relevant) additional BRR factors in the BRR grid for a specific issuer; and (2) the financial risk rating (FRR), determined by assessing each of the primary and (where relevant) additional FRR metrics. The two components, BRR and FRR, are combined to determine the issuer rating; in most cases, the BRR will have greater weight than the FRR in determining the issuer rating. Throughout the BRR and FRR determination process, DBRS performs a consistency check of the issuer on these factors against the issuer’s peers in the same industry.
- The issuer rating is then used as a basis for specific instrument ratings. DBRS assigns, for example, a recovery rating and notches up or down from the issuer rating to determine a specific instrument rating for instruments of non-investment grade corporate issuers. (See “Rating the Specific Instrument and Other Criteria” below.)

DBRS Rating Analysis Process

* Depending on the instrument, “other criteria” may include the recovery methodology for non-investment grade issuers or the preferred share and hybrid criteria, for example. Please refer to the section below entitled “Rating the Specific Instrument and Other Criteria” for a list of these criteria, as well as other criteria that may be applicable at any stage of the rating process.
Railway Industry

• DBRS defines the railway industry as those companies principally engaged in the transportation of merchandise and bulk commodities by train, including both long-haul and short-line carriers.
• Per the three-tier IRR system described on the previous page, the railway IRR is BBB.
• The railway industry is characterized by: (1) a somewhat less competitive environment in comparison with other industries, as industry participants are more disciplined and compete primarily on service rather than price; (2) profitability that is slightly higher than average; (3) average cyclicality (in line with the general economy); (4) high barriers to entry in the form of a large capital investment and significant regulatory hurdles to build a competing rail network; (5) meaningful direct or indirect ownership of the rail companies by local governments outside of North America; (6) onerous regulations on safety and environmental matters; and (7) in emerging markets, rail infrastructure tends to be less well developed and railway firms therefore have greater difficulty competing with trucking.
• Diversification by customer, geographic region and type of cargo (agriculture, mining products, chemicals, oil and gas, forest products, etc.) reduces cyclicality. Certain small, closed systems — serving a specific mine, for example — can be independent of general economic risk, although other risks related to the viability of the specific project remain.
• The existence of high fixed costs makes profitability vulnerable to volume changes, which tend to line up with general economic conditions. To some degree, export shipments (mostly commodities) help moderate any cyclicality arising from the domestic economy.
• Competition among rail companies is usually limited. For example, there are seven major Class I railways in North America, the most participants in any single region of the world, each with only moderate network overlap. High regulatory and environmental hurdles and costs associated with building a new network have created significant barriers to entry. These Class I railways deem trucking companies to be their main competition; however, competition from trucking is only significant on short-haul routes since trucking is not cost efficient for distances beyond 500 kilometres. Nonetheless, trucking does have a competitive advantage in emerging markets where rail infrastructure is not well developed. For railways, access to ports and metropolitan areas is a significant advantage and while larger networks are generally an advantage, they can pose the risk of differing types of track (e.g., single versus double track).
• Pricing in certain sectors can be controlled to some degree; for example, tariffs for the agricultural sector in Canada can be influenced by social policy goals in support of farmers. There is also reduced bargaining strength among captive customers where dedicated railways exist to serve a specific mine or other project.
• Fuel-cost management is an important aspect of general operating efficiency; railways can enter into contracts that can pass on changes in fuel prices (e.g., diesel) to customers during the term of the contract, or use other hedging mechanisms.
• Regulation in the railway industry is slightly more onerous than in other industries. It is mostly related to safety, environmental concerns and restrictions on consolidation, which makes mergers among major Class I railways rare.
• This is a mature industry, with limited technological risk. Technology advances are focused primarily on equipment productivity and information systems.
### Primary BRR Factors

- The BRR grid below shows the primary factors used by DBRS in determining the BRR. While these primary factors are shown in general order of importance, depending on a specific issuer’s business activities, this ranking can vary by issuer.

<table>
<thead>
<tr>
<th>Railway Network</th>
<th>AA</th>
<th>A</th>
<th>BBB</th>
<th>BB</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

#### Railway Network

- No history of material disruption on any core routes.
- Extensive network with no service gaps across the continent.
- Direct seamless coverage of all major cities and ports (e.g., along all three coasts in North America).
- No major connection delays.
- Network in excellent working condition.
- Minimal material disruption on core routes.
- Large network well spread out across the continent but with minor gaps in coverage.
- Substantial direct coverage of most major cities and ports (e.g., along all three coasts in North America), with strong indirect links to others.
- Infrequent major connection delays.
- Network in good working condition and minimal upgrade investment needed.
- Network congestion issues on key routes leading to delays and low on-time delivery record.
- Adequate regional network.
- Adequate direct coverage of a number of major cities and ports (e.g., limited to certain parts of North America) and limited indirect link to others.
- Network in reasonable working condition, with limited investment needed.
- Consistent network congestion on several routes.
- Small regional network with limited reach.
- Serving a small number of cities and ports within a region and limited indirect link to other cities and ports.
- Significant number of connection delays.
- Network in poor condition; large investment needed to bring network back to proper working condition.
- Network congestion on certain routes during busy periods but disruption to shipments manageable.
- Large network but with gaps in coverage of the continent.
- Strong direct coverage of most major cities and ports (e.g., in a substantial portion of the North American continent) and strong indirect link to all other major cities and ports.
- Some connection delays.
- Network in acceptable condition but some investment needed to restore network to proper working condition.
### Railway — Primary BRR Factors

<table>
<thead>
<tr>
<th>Rating</th>
<th>AA</th>
<th>A</th>
<th>BBB</th>
<th>BB</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diversification by Business and Geography</strong></td>
<td>• Stable and well-balanced mix of domestic, transborder and international shipments.</td>
<td>• Well-balanced mix of domestic, transborder and international shipments.</td>
<td>• Reasonable mix of domestic, transborder and international shipments.</td>
<td>• Regionally focused with some exposure to other domestic, transborder and international shipments.</td>
<td>• Limited diversification.</td>
</tr>
<tr>
<td></td>
<td>• Stable and well-balanced mix of a large number of products.</td>
<td>• Leading position or among the leaders in most of its products.</td>
<td>• Reasonable product diversity with no heavy concentration in any one product.</td>
<td>• Regionally product diversity but with heavy exposure to a few products.</td>
<td>• Limited product diversity and/or exclusive dependence on a few product groups and customers.</td>
</tr>
<tr>
<td></td>
<td>• Leading position in all product groups.</td>
<td></td>
<td>• Among the leaders in some products; dedicated carrier for a product(s).</td>
<td>• Solid regional market position in some products; weak market position in some products.</td>
<td>• Weak market position in all products; limited bargaining power in contract negotiations.</td>
</tr>
<tr>
<td><strong>Operating Efficiency</strong></td>
<td>• Among the most efficient and a leader in all operating measures.</td>
<td>• Above average in all operating measures.</td>
<td>• Average in all operating measures.</td>
<td>• Below average in most operating measures.</td>
<td>• Well below average in most operating measures.</td>
</tr>
<tr>
<td></td>
<td>• Operating at full capacity almost all of the time.</td>
<td>• High-capacity utilization.</td>
<td>• Near or above industry average capacity utilization.</td>
<td>• Below industry average capacity utilization.</td>
<td>• Low capacity utilization.</td>
</tr>
<tr>
<td></td>
<td>• All state-of-the-art equipment and infrastructure.</td>
<td>• A large proportion of equipment and infrastructure is state-of-the-art; remainder is modern and efficient.</td>
<td>• Equipment and infrastructure are modern and efficient.</td>
<td>• Equipment and infrastructure is aged but mostly kept in reasonable condition.</td>
<td>• Old and inefficient equipment and infrastructure.</td>
</tr>
<tr>
<td></td>
<td>• All equipment is well maintained and efficient; no breakdowns.</td>
<td>• All equipment is well maintained and efficient; minimal breakdowns.</td>
<td>• All equipment is in good condition with regular maintenance; infrequent breakdowns.</td>
<td>• History of modest labour disruptions (highly unionized workforce).</td>
<td>• Inadequate maintenance; frequent service disruptions due to equipment breakdowns.</td>
</tr>
<tr>
<td></td>
<td>• No history of material work stoppage from labour disputes, non-unionized workforce.</td>
<td>• Infrequent work stoppages from labour disputes (unionized workforce).</td>
<td>• History of modest labour disruptions (highly unionized workforce).</td>
<td>• Sizeable but manageable underfunded position in pension and benefits; reasonable mandated pension contribution schedule.</td>
<td>• Frequent disruptions from labour disputes (highly unionized and militant workforce).</td>
</tr>
<tr>
<td></td>
<td>• Immaterial underfunded position in pension and benefits.</td>
<td>• Manageable underfunded position in pension and benefits.</td>
<td>• History of modest labour disruptions (highly unionized workforce).</td>
<td>• Large underfunded position in pension and benefits; manageable mandated pension contribution schedule.</td>
<td>• Very large underfunded position in pension and benefits; large mandated pension contributions.</td>
</tr>
<tr>
<td><strong>Energy Cost Management</strong></td>
<td>• Effective in controlling fuel costs (modern equipment, efficiency programs), limiting impact on earnings.</td>
<td>• Mostly effective in controlling fuel costs (modern equipment, efficiency programs), limiting impact on earnings.</td>
<td>• Some success in managing fuel costs through efficiency programs, limiting impact on earnings.</td>
<td>• Limited ability in managing volatility of fuel costs.</td>
<td>• Fully exposed to volatility of fuel costs.</td>
</tr>
<tr>
<td></td>
<td>• Fuel surcharge in all contracts to mitigate risk.</td>
<td>• Fuel surcharge in most contracts to mitigate risk.</td>
<td>• Fuel surcharge in some contracts to mitigate risk.</td>
<td>• Limited success in obtaining fuel surcharge in contract negotiation.</td>
<td>• No fuel surcharge protection.</td>
</tr>
</tbody>
</table>
Railway — Primary BRR Factors

<table>
<thead>
<tr>
<th>Rating</th>
<th>AA</th>
<th>A</th>
<th>BBB</th>
<th>BB</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barriers to Entry</td>
<td>• Extremely strict, onerous government regulations on approving a new entrant.</td>
<td>• Very strict government regulations on approving a new entrant.</td>
<td>• Onerous government regulations on approving a new entrant.</td>
<td>• Relaxed government regulations on approving a new entrant.</td>
<td>• Limited government regulations on approving a new entrant.</td>
</tr>
<tr>
<td></td>
<td>• Extremely high levels of capital investment to acquire equipment and build infrastructure for a new network.</td>
<td>• Substantial capital investment to acquire equipment and build infrastructure for a new network.</td>
<td>• Meaningful capital investment to acquire equipment and build infrastructure for a new network.</td>
<td>• Large capital investment to acquire equipment and build a new regional network.</td>
<td>• Reasonable amount of capital investment to acquire equipment and build a new regional network.</td>
</tr>
<tr>
<td></td>
<td>• Extremely vigorous environmental review process for new tracks.</td>
<td>• Vigorous environmental review process for new tracks.</td>
<td>• Strict environmental review process for new tracks.</td>
<td>• A non-vigorous environmental review process for new tracks.</td>
<td>• Limited environmental review needed for new tracks.</td>
</tr>
</tbody>
</table>

The following BRR risk factors are relevant to issuers in all industries (although the relevance of sovereign risk can vary considerably):

Sovereign Risk
The issuer rating may, in some cases, be constrained by the credit risk of the sovereign; in other words, the rating of the country in which the issuer operates generally sets a maximum rating for the issuer. If the issuer operates in multiple countries and a material amount of its business is conducted in a lower-rated country, DBRS may reflect this risk by downwardly adjusting its issuer rating.

Corporate Governance
Please refer to DBRS Criteria: Evaluating Corporate Governance for further information on how DBRS evaluates corporate governance and management.

ADDITIONAL BRR FACTORS
• The additional BRR factors discussed below may be very important for certain issuers, depending upon their activities, but they do not necessarily apply to all issuers in the industry.

Competition
• Competition among Class I railways is not fierce and is usually based on service quality (on-time delivery, equipment availability, etc.) rather than on pricing because of limited network overlap.
• Competition with trucking is usually on non-bulk materials and on short-haul routes of up to 500 kilometres, where trucks are most effective. In certain areas, where commodities, such as grain, coal or minerals, are transported, competition with ships (e.g., on the Great Lakes) or barges (e.g., on the Mississippi River) can be high.
• Competition is further lessened by the existence of captive customers, whose production locations are not easily accessible by other means of transportation.

Size
• The high capital intensity of the railway industry favours large companies, which have the resources to support funding needs. It is possible, however, for large firms to have lower credit ratings if they have high volumes on a limited network, or conversely, some small firms may have high credit ratings if they have a monopoly on a network servicing a specific client or purpose (e.g., a specific mine or isolated region).
• Large networks provide better coverage and, therefore, services at a reasonable cost.
• Economies of scale offer better opportunities for efficiency gains and lower costs.

Technology
• The pace of technological change in the railway industry is gradual.
• Technological advancement is mostly focused on reducing emissions and improving the fuel efficiency of the equipment, as well as on information (logistics) software.
Legislation
• The Surface Transportation Board monitors and approves mergers and acquisitions in the United States.
• Regulation on freight rates is not burdensome and is mostly related to social policy goals (e.g., tariffs on grain to protect Canadian farmers) and rates for captive customers.
Railway Financial Risk Rating

PRIMARY FRR METRICS

• The FRR grid below shows the primary FRR metrics used by DBRS to determine the FRR. While these primary FRR metrics are shown in general order of importance, depending upon an issuer’s activities, the ranking can vary by issuer.

• DBRS ratings are primarily based on future performance expectations, so while past metrics are important, any final rating will incorporate DBRS’s opinion on future metrics, a subjective but critical consideration.

• It is not unusual for a company’s metrics to move in and out of the ranges noted in the grid below, particularly for cyclical industries. In the application of this matrix, DBRS looks beyond the point-in-time ratio.

• Financial metrics depend on accounting data whose governing principles vary by jurisdiction and, in some cases, industry. DBRS may adjust financial statements to permit comparisons with issuers using different accounting principles.

• Please refer to DBRS Criteria: Financial Ratios and Accounting Treatments – Non Financial Companies for definitions of, and common adjustments to, these ratios in the FRR grid below.

• Liquidity can be a material risk factor, especially for lower-rated non-investment grade issuers. DBRS will consider available sources of liquidity including cash on hand, cash flow, access to bank lines, etc., as well as uses of liquidity such as operations, capital expenditures, share buybacks and dividends for every issuer.

• DBRS considers an issuer’s financial policy, including factors such as its targeted financial leverage, its dividend policy and the likelihood of share buybacks or other management actions that may favour equity holders over bondholders.

• While market pricing information (such as market capitalization or credit spreads) may on occasion be of interest to DBRS, particularly where it suggests that an issuer may have difficulty in raising capital, this information does not usually play a material role in DBRS’s more fundamental approach to assessing credit risk.

Railway — Primary FRR Metrics

<table>
<thead>
<tr>
<th>Primary Metric</th>
<th>AA</th>
<th>A</th>
<th>BBB</th>
<th>BB</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Flow-to-Debt</td>
<td>&gt; 60%</td>
<td>30% to 60%</td>
<td>20% to 30%</td>
<td>10% to 20%</td>
<td>&lt; 10%</td>
</tr>
<tr>
<td>Debt-to-EBITDA</td>
<td>&lt; 1.0x</td>
<td>1.0x to 2.0x</td>
<td>2.0x to 3.5x</td>
<td>3.5x to 5.0x</td>
<td>&gt; 5.0x</td>
</tr>
<tr>
<td>EBITDA-to-Interest</td>
<td>&gt; 10.0x</td>
<td>7.0x to 10.0x</td>
<td>4.0x to 7.0x</td>
<td>2.0x to 4.0x</td>
<td>&lt; 2.0x</td>
</tr>
<tr>
<td>Debt-to-Capital</td>
<td>&lt; 20%</td>
<td>20% to 30%</td>
<td>30% to 45%</td>
<td>45% to 60%</td>
<td>&gt; 60%</td>
</tr>
<tr>
<td>Operating Ratio*</td>
<td>&lt; 55%</td>
<td>55% to 70%</td>
<td>70% to 80%</td>
<td>80% to 90%</td>
<td>&gt; 90%</td>
</tr>
</tbody>
</table>

*Operating Ratio is defined here as operating expenses as a percentage of revenues.

ADDITIONAL FRR METRICS

• While the primary FRR metrics above will be the most important metrics that DBRS will use in determining the FRR of an issuer, other metrics may be used, depending upon an issuer’s activities, capital structure, pension liabilities and off-balance sheet obligations.

• Profitability, particularly in the medium term, can be an important differentiator of credit risk. DBRS may assess profitability through a variety of metrics, including return on capital.

• While free cash flow (i.e., net of changes in working capital, dividends and capital expenditures, etc.) can be volatile and, on occasion, negative, DBRS may use this and/or other cash flow metrics to assess a company’s ability to generate cash to repay debt.
Blending the BRR and FRR into an Issuer Rating

- The final issuer rating is a blend of the BRR and FRR. In most cases, the BRR will have greater weight than the FRR in determining the issuer rating.
- At the low end of the rating scale, however, particularly in the B range and below, the FRR and liquidity factors play a much larger role and the BRR would, therefore, typically receive a lower weighting than it would at higher rating levels.

Rating the Specific Instrument and Other Criteria

- For non-investment grade corporate issuers, DBRS assigns a recovery rating and reflects the seniority and the expected recovery of a specific instrument, under an assumed event of default scenario, by notching up or down from the issuer rating in accordance with the principles outlined in the criteria DBRS Recovery Ratings for Non-Investment Grade Corporate Issuers.
- Preferred share and hybrid considerations are discussed under Preferred Share and Hybrid Criteria for Corporate Issuers.
- The issuer rating (which is an indicator of the probability of default of an issuer’s debt) is the basis for rating specific instruments of an issuer, where applicable. DBRS uses a hierarchy in rating long-term debt that affects issuers that have classes of debt that do not rank equally. In most cases, lower-ranking classes would receive a lower DBRS rating. For more detail on this subject, please refer to the general rating information contained in the DBRS rating policy Underlying Principles.
- For a discussion on the relationship between short- and long-term ratings and more detail on liquidity factors, please refer to the DBRS policy Short-Term and Long-Term Rating Relationships and the criteria Commercial Paper Liquidity Support Criteria for Corporate Non-Bank Issuers.
- The existence of holding companies can have a meaningful impact on individual security ratings. For more detail on this subject, please refer to the criteria Rating Holding Companies and Their Subsidiaries.
- Guarantees and other types of support are discussed in Guarantees and Other Forms of Explicit Support.
- For further information on how DBRS evaluates corporate governance, please refer to DBRS Criteria: Evaluating Corporate Governance.
- Please refer to DBRS Criteria: Financial Ratios and Accounting Treatments – Non Financial Companies for definitions of, and common adjustments to, these ratios.