

Methodology

*Rating Companies in the Engineering
and Construction Industry*

MAY 2011



Insight beyond the rating.

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DBRS is a full-service credit rating agency established in 1976. Privately owned and operated without affiliation to any financial institution, DBRS is respected for its independent, third-party evaluations of corporate and government issues, spanning North America, Europe and Asia. DBRS's extensive coverage of securitizations and structured finance transactions solidifies our standing as a leading provider of comprehensive, in-depth credit analysis.

All DBRS ratings and research are available in hard-copy format and electronically on Bloomberg and at DBRS.com, our lead delivery tool for organized, Web-based, up-to-the-minute information. We remain committed to continuously refining our expertise in the analysis of credit quality and are dedicated to maintaining objective and credible opinions within the global financial marketplace.

Rating Companies in the Engineering and Construction Industry

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Introduction to DBRS Methodologies

- In general terms, DBRS ratings are opinions that reflect the creditworthiness of an issuer, a security or an obligation. They are opinions based on an analysis of historic trends and forward-looking measurements that assess an issuer's ability and willingness to make timely payments on outstanding obligations (whether principal, interest, dividend or distributions) with respect to the terms of an obligation.
- DBRS rating methodologies include consideration of general business and financial risk factors applicable to most industries in the corporate sector as well as industry-specific issues and more subjective factors, nuances and intangible considerations. Our approach is not based solely on statistical analysis but includes a combination of both quantitative and qualitative considerations.
- The considerations outlined in DBRS methodologies are not intended to be exhaustive. In certain cases, a major strength can compensate for a weakness and, conversely, there are cases where one weakness is so critical that it overrides the fact that the company may be strong in most other areas.
- DBRS rating methodologies are underpinned by a stable rating philosophy, which means that in order to minimize the rating changes due primarily to economic changes, DBRS strives to factor the impact of a cyclical economic environment into its rating as applicable. Rating revisions do occur, however, when it is clear that a structural change, either positive or negative, has transpired or appears likely to transpire in the near future.
- As a framework, DBRS rating methodologies consist of several components that together form the basis of the ultimate ratings assigned to individual securities. Assessments typically include the industry's business risk profile, the company's general business risk profile, the company's financial risk profile and considerations related to the specific security.
- To some extent, the business risk and financial risk profiles are interrelated. The financial risk for a company must be considered along with the business risks that it faces. In most cases, an entity's business risk will carry more weight in the final issuer rating than will its financial risk.

Business and Financial Risk Overview

- On a high-level macro basis, DBRS has a consistent approach to determining the issuer rating of an entity that is common across many industries. (See the appendix for the definition of "issuer rating.") Our high-level approach can be broken into three stages, as shown on the opposite page.
- Where applicable, DBRS uses the concept of business risk ratings (BRRs) as a tool in assessing the business strength of both industries and individual companies within many methodologies across the corporate finance area. DBRS typically assesses five areas to establish the overall BRR for an industry:
 - Profitability and cash flow.
 - Competitive landscape.
 - Stability.
 - Regulation.
 - Other inherent industry considerations.
- Although there is an overlap in some instances (to some degree, in the long term, all five factors tend to relate to profitability and stability), DBRS has found that considering these five measures in a separate fashion is a useful way of approaching this analysis.
- Using the same factors across different industries provides a common base with which to compare the business risks of various industries, even when they are distinctly different. In all cases, DBRS uses historic performance and our experience to determine an opinion on the future, which is the primary focus. For additional discussion on industry BRRs, please refer to the Industry Business Risk Ratings and Industry Business Risk Rating Definitions sections in the appendix.



- It is important to note that the ratings for company-specific business and financial risks as provided under Stage 2 of this document should not be taken as final issuer ratings. For example, an individual company may fit into the “A” range with respect to the analysis of its business risk, but its financial metrics could be more in the BB category. It would be incorrect to believe that the final issuer rating in this case would be either “A” or BB. In determining the final issuer rating, both of these two major areas must be considered. For additional discussion on this topic, please refer to the Interrelationship between Business and Financial Risk section in the appendix.

Three Stages of DBRS Rating Analysis

Stage 1: Industry Business Risk Rating

Consider the overall business risk rating (BRR) for the industry.

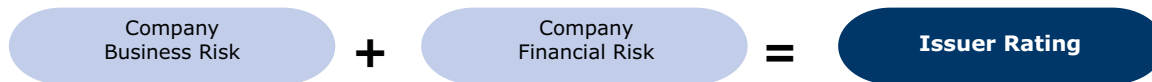


Stage 2: Issuer Rating

Consider the strength of the individual issuer:

- First assessing how the company’s BRR compares with the industry BRR.
- Then assessing the company’s financial risk.

Taken together, these factors will determine the company’s issuer rating.



The **long-term rating** puts more emphasis on business risk than the short-term rating does.



The **short-term rating** stresses financial risk as well as business risk, but places more emphasis on financial risk and liquidity than the long-term rating does.

Stage 3: Rating the Security

Consider covenant and ranking issues that exist for specific securities, using the issuer rating to determine specific security ratings.



Stage 1: Industry Business Risk Rating for the Engineering and Construction Industry

DEFINITION OF THE INDUSTRY

- The industry includes companies involved with the engineering, construction/refurbishment and maintenance of facilities and/or infrastructure to varying degrees across a variety of end markets.
- Companies may be involved with all aspects of a construction project (i.e., engineering, procurement, construction and maintenance) or have a more focused business model (e.g., purely construction or maintenance).

THE BUSINESS RISK RATING

- For the engineering and construction industry, DBRS views the BRR as being BB to BB (high).
- Based on the major categories used by DBRS in assessing industry BRRs, the rationale for this assessment is largely driven by three factors:
 - Profitability is below average based on a competitive-bid business model and related pressure on pricing.
 - The risk of single-project failures, particularly for fixed-price contracts on large complex transactions, is difficult to manage and limits the BRR.
 - The high degree of competition is above average relative to other industries.
- Many companies are able to achieve ratings higher than the industry rating by maintaining balance sheets and credit metrics that are much stronger than most industries.

INDUSTRY PROFITABILITY AND CASH FLOW

- Profitability is generally below other industries, although there are many individual company exceptions.
- The main risk to profitability is performance: single-project delays and cost overruns. These performance risks rise with increased project complexity and problems with supplier/subcontractor execution. Cost overruns on fixed-price contracts reduce profitability.
- The risks of delays and cost overruns are partly mitigated by a greater revenue percentage from cost-plus contracts (which are generally less profitable) and services-based business volume (i.e., longer-term maintenance contracts), which add stability.
- The common use of subcontractors can reduce profitability while typically reducing financial risk (i.e., lower construction risk and fixed costs).
- The tendering process is time-consuming and competitive and input cost volatility can also pressure margins.

INDUSTRY COMPETITIVE LANDSCAPE

- The industry is more competitive than most, particularly during periods of weak demand.
- The industry is characterized by some large global players as well as numerous smaller companies.
- Barriers to entry are generally low, with lower capital requirements relative to other sectors (e.g., manufacturing).
- Price competition is particularly fierce for less technical contracts where price is often the determinant for project award.

INDUSTRY STABILITY

- The industry has an average level of cyclicity.
- Construction revenues are roughly correlated with macroeconomic conditions in the relevant core regions.
- Government-related infrastructure projects (correlated with government fiscal policy) and services/maintenance contracts help reduce earnings cyclicity.

INDUSTRY REGULATION

- Regulation is moderate and relatively stable.
- Workplace safety standards support good industrial practices and are constructive for the industry BRR.
- Environmental compliance requirements at regional and national levels add cost and development time but are generally transparent and manageable.

Stage 2: Issuer Rating

To move from the generic industry BRR toward the issuer rating for a specific company, two tasks must be performed. Specifically, we must determine the business risk and the financial risk for the individual company.

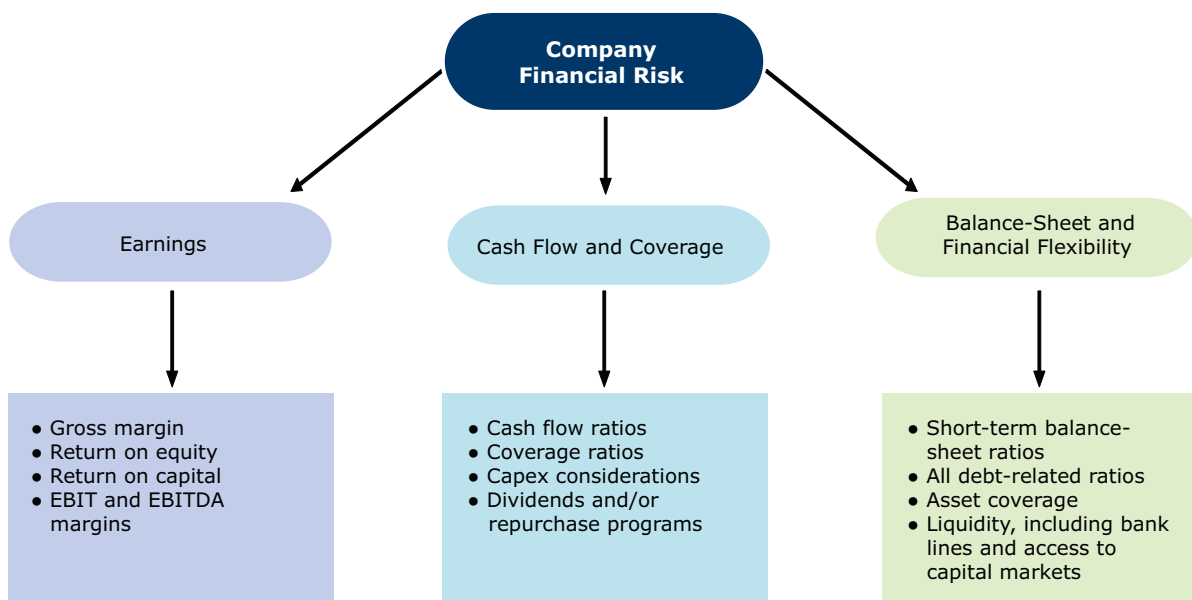
BUSINESS RISK PROFILE

- The business risk profile of the issuer may be better or worse than the industry average due to the presence of unique attributes or challenges that exist at the issuing entity. While not exhaustive, the list of critical factors outlined in the previous section could result in a specific issuer rating being different from the industry BRR.
- This methodology also provides some guidance on which factors are considered the most critical for the industry in question. Issuers may also have meaningful business lines in addition to the base business that extend beyond their most prominent industry, which could add significant attributes or challenges.

FINANCIAL RISK PROFILE

- The graphic below is a visual display of the key financial risk profile considerations that are discussed in the Company-Specific Financial Risk Factors section of this methodology, although even the detail provided there is not meant to be exhaustive.
- The discussion will note that DBRS often makes calculation adjustments in key ratios for risks related to a variety of areas. In some cases, a relationship with a parent or associated company will also be important.

Key Financial Risk Metrics





Company-Specific Business Risk Factors

- We now consider if an individual company in the engineering and construction industry would be better, worse or the same as the industry BRR. Our focus here is on the critical business risk factors that relate to this industry in particular. The five critical factors used to determine the industry BRR are applied by DBRS to compare numerous industries and are thus more general in nature.
- By analyzing these key drivers (which will vary on an industry-by-industry basis), the essential strengths and challenges of each industry are captured in an accurate fashion, and transparency is provided. The analysis below is connected to the industry BRR in that the industry BRR establishes where an average company would be considered to score on the matrix. For example, an industry with a BRR of BBB would mean that the following matrix describes the scoring of an average company within the BBB column.

Company-Specific Business Risks – Critical Factors

Rating Business Strength	A Superior	BBB Adequate	BB Weak	B Poor
Risk Management and Project Control	<ul style="list-style-type: none"> • Highly structured and formalized process. • No history of material project losses. • Centralized across all business units and subsidiaries. • Independent/third-party review of all large projects. 	<ul style="list-style-type: none"> • Formalized process. • No history of significant, recurring project losses. • Level of management bid/project approval correlated with size of project (to board level). • Independent/third-party review for some large-scale/higher-risk projects. 	<ul style="list-style-type: none"> • Formal process for most large projects. • History of project losses but nothing catastrophic. • Risk committee in place to review projects not requiring senior executive approval. 	<ul style="list-style-type: none"> • Mostly informal or no formal process. • History of losses on projects. • Risk management is not standardized or is centralized across business units.
Project Complexity and Contractor Expertise	<ul style="list-style-type: none"> • Focus on low-risk projects (e.g., standard buildings). • Limited or no exposure to high-risk projects. • High degree of internal expertise. 	<ul style="list-style-type: none"> • Greater share of projects deemed to be low versus high risk. • Very few or no bids on projects outside of core areas of expertise. • Internal expertise supplemented with subcontractors. 	<ul style="list-style-type: none"> • Relatively even mix of low- and high-risk projects. • Expertise with certain higher-risk markets and/or projects. • Limited process work. • Projects outside of core areas of expertise are considered. 	<ul style="list-style-type: none"> • Greater share of work with high-risk projects and/or projects that are relatively new to a company. • Expertise in only a few end markets. • Internal expertise limited.
Scale of Operations	<ul style="list-style-type: none"> • Industry-leading scale by a large margin. • Material presence in most major end markets globally. 	<ul style="list-style-type: none"> • Annual sales are significant and close to industry leaders. 	<ul style="list-style-type: none"> • Medium scale of operations but solid reputation. 	<ul style="list-style-type: none"> • Modest-scale, small industry player with limited market influence/reputation.

Company-Specific Business Risks – Critical Factors

Rating	A Superior	BBB Adequate	BB Weak	B Poor
Business Strength				
Nature of Contracts	<ul style="list-style-type: none"> • Almost exclusively cost-plus or contracts with no risk of losses (only risk to margins). 	<ul style="list-style-type: none"> • Larger share of cost-plus contracts versus fixed-price contracts. • Average contracts relatively long (i.e., high maintenance component). 	<ul style="list-style-type: none"> • Generally even mix of fixed-price- and cost-plus-like contracts. • Fixed-price contracts mainly on low-risk projects. 	<ul style="list-style-type: none"> • Mostly fixed-price contracts. • Fixed-price contracts on all types of projects. • Limited or no share of maintenance business (sales are mostly construction-related and shorter-term in nature).
Diversification	<ul style="list-style-type: none"> • Sales evenly dispersed by activity, region, end market and customer, with no material weakness in any segment. 	<ul style="list-style-type: none"> • Material presence in two to three business segments/sectors, on average, with a global presence. 	<ul style="list-style-type: none"> • Sales outside of core domestic market, with a focus on one or two end markets and type of work (e.g., construction and maintenance of commercial buildings). 	<ul style="list-style-type: none"> • Only one market and one core business.

PRIMARY FACTORS

Risk Management and Project Control

- A risk management and project control framework is critical to credit ratings. This is especially true for large-scale and complex projects and where bidding competition is high. The ability to effectively identify, weigh, monitor and manage single-project risks, in addition to ordinary operating and financial risks, supports profitability and stability.
- A formal framework for project selection is constructive for credit ratings and includes the following:
 - Project selection and approval committee.
 - Required sign-offs by all relevant internal departments.
 - Prescribed third-party assessments.
 - Approval authority retained by the executive (up to the board of directors) above a defined project-size threshold.
- An effective risk management and project control framework is based on the following:
 - Consistent company strategy.
 - Clear focus on specific target market segments and project types.
 - Project selection matched to company strengths and capability.
- Favourable assessment in this category is based partly on a project control platform and software that does the following:
 - Integrates the bid process with subsequent project management, including critical path analysis.
 - Is the primary tool for subcontractor performance monitoring and oversight.
 - Provides real-time access to measures of percentage completion and percentage of budget, by project element.
 - Supports swift response to scope changes, delays, subcontractor underperformance and critical path adjustment.
 - Generates regular management reports that accurately capture construction progress.
- Management of supplier and subcontractor relationships (including back-to-back contracts, a review of credit profiles and bonding) is reviewed and is considered a critical element in achieving on-time, on-budget performance.
- Managing a project's payment terms to limit contractor exposure (e.g., larger upfront payments and hedging strategies) supports flexibility and is constructive for rating this critical factor.

- Emerging-markets presence requires additional risk assessment and formal risk management and should include an additional framework for markets in less developed countries.

Project Complexity and Contractor Expertise

- DBRS assesses the complexity of a contractor's major projects to determine its business risk profile. Analysis is primarily of larger projects, which can materially affect project profitability. Standard structures and traditional project scope (e.g., commercial buildings and roads) have lower risk profiles and are less exposed to cost overruns or ongoing post-completion performance tests.
- Contractor risk is primarily the risk of project schedule delays and cost overruns. Highly technical or specialized construction projects involving relatively early-stage technologies (e.g., an alternative-energy plant) or unique specifications (e.g., tunnels, nuclear plants and additions to existing buildings) increase risk. This is particularly true for lump-sum contracts, which are fixed-price agreements, rather than for construction management contracts, which are cost-plus, flat-fee agreements. The reliability of key suppliers and subcontractors and the quality, timely delivery and cost of equipment and materials are also assessed.
- Cost estimation is more challenging for complex projects. This is particularly true of process work, when specific performance targets are required but may depend on the performance of others not within the contractor's control.
- When assessing contractor exposure to project delays and cost overruns, DBRS reviews expertise in specific areas as well as its operating track record (e.g., on-time, on-budget completion and project profitability), particularly with respect to more complex projects.
- The industry is highly labour intensive. Attracting top talent is important and labour availability during periods of peak demand is also considered.
- Project location and site conditions can affect complexity. Remote locations increase costs and require more planning and resources. Complexity increases with difficult terrain, substandard soil parameters and pre-existing site conditions requiring remediation.

Scale of Operations

- The scale of a company (its revenue, balance sheet, number of employees and equity base) provides added support for the rating.
- For larger companies, single-project failures represent a smaller percentage of total revenues and are less risky, relatively speaking. If a contractor with annual revenues of \$10 billion incurs a single-project loss of \$100 million, that loss is 1% of revenues and less onerous than for a company with annual revenues of \$1 billion, for which the same loss is 10% of revenues.
- The benefits of scale can be partly offset by larger companies' pursuit of more complex projects.
- A relatively high-volume business (as seen in sales and order book) can indicate the company has a strong market position, which can be an advantage in the project bidding process over smaller, lesser-known companies.
- Larger companies can have increased opportunities for efficiency gains, greater negotiating leverage (e.g., procurement of materials and concessions from subcontractors) and a larger customer base, which promotes repeat business via established relationships.
- Scale usually increases flexibility in terms of financing options (including bonding capacity) and opportunities to partner with other companies on specific projects.

Nature of Contracts

- The ratio of fixed-price contracts to cost-plus contracts is a critical factor. Fixed-price contracts can have higher relative risks, related to cost overruns, but can also have greater margin upside (and built-in contingencies) compared with cost-plus contracts.
- Fixed-price risk can be partly mitigated with recurring services and/or maintenance revenues, which are more stable and longer term in nature (but can also have lower margins).
- DBRS reviews the contracting and subcontracting practices of a company, including risk transfer and allocation. The share of project scope performed by subcontractors can affect general contractor risk. Subcontracting can lower profitability but can also transfer risk and increase operating flexibility (e.g., lower fixed costs in the form of labour and capital equipment).

- Risk of subcontractor bankruptcy or performance failure is assessed. In the case of subcontractor underperformance (including default), companies with “self-perform” capability may respond more effectively. Self-perform capability means the company can perform some of the subcontracted tasks with its own resources (i.e., it has greater in-house expertise). This doesn’t mean that spare in-house resources are always available to replace a failed subcontractor, but in-house expertise does make swift resolution of subcontractor underperformance more likely.

Diversification

- Revenue diversification should provide increased earnings stability, reducing reliance on any one geographic region, end market, business or project. More stable financial performance is constructive for credit in a competitive industry characterized by volatile earnings.

Geographic Diversification

- Reduces exposure to regional macroeconomic change, declines in government spending (e.g., civil infrastructure and public facilities), adverse currency moves, local business conditions and input price shocks.
- Emerging markets have been a source of growth and profitability for many companies, particularly resource-based countries.
- However, while robust market positions and growing presence in highly profitable regions are constructive for credit, diversification into emerging markets can increase business risk.

Customer Diversification

- Companies exposed to a significant number of project types across different customer groups generally reduce risk, subject to consistent, disciplined matching of projects to company expertise.
- Excess exposure to a few customers can concentrate risk and may increase severity of payment defaults.
- Government and utility customers are generally considered more stable and less risky than customers in more volatile sectors (e.g., those more leveraged to prevailing commodity prices).

Sector or Business Diversification

- DBRS assesses the extent to which a company is diversified by business segment (e.g., civil construction, oil and gas, power or mining projects).
- Exposure to more volatile sectors can increase project losses, but consideration is given to the contractor’s sector- or segment-specific strengths; record of on-time, on-budget completion; specialized capabilities; and market position.
- Revenue mix by business line is assessed (e.g., construction, engineering, project management and maintenance and investment in concession projects). Each type of business generally provides different profitability and risk characteristics.
- Pure construction is a competitive-bid and generally low-margin business (particularly for less technical projects). Companies in more than one type of business beyond pure construction are generally viewed more favourably, particularly if they include the recurring nature of earnings from construction management agreements and concessions.

ADDITIONAL FACTORS

Project Ownership

- Project equity investment can offer greater reward but potentially increase risk.
- Concession projects (e.g., toll roads) can have more modest risk profiles. Contractor equity investments expose them to post-completion operating risk, which is incremental to their normal-course completion risk and is moderate relative to pure construction risk.
- Single-project equity investments also expose contractors to the potential for greater severity of loss in the case of project delays and cost overruns during construction. However, a contractor is better positioned than other equity investors to assess and manage these core risks.
- The size of a project equity investment relative to a contractor’s balance-sheet equity, the market value of its ownership position in other concessions or assets (which can be highly saleable) and the credit quality of the project investment itself are evaluated when assessing project equity investment risk.



- Project debt is typically non-recourse to project equity. Project equity investors can have the option, but not the obligation, to cure project debt defaults – a flexibility offered by this class of equity.

Market Position

- Companies with a long-established market presence and reputation are in a stronger position to bid on projects.
- Larger companies are often better positioned to invest in projects, which can benefit them in the bidding process.
- Successful bids are typically determined by price, but the reputation that comes with a strong market position in a particular region or end market can sometimes be more important than pricing.

Barriers to Entry

- Barriers to entry are generally low for the engineering and construction industry and lowest for companies focused purely on construction, with its competitive-bid process and narrow margins.
- Companies with engineering capabilities to complement their construction management and maintenance businesses enjoy higher barriers to entry as a broader, more vertically integrated menu of services is expensive and time-consuming to build and fewer contractors have these capabilities.
- A broader menu of offerings, including the ability to engineer, build, complete and operate projects, can be a source of competitive advantage.

COMMON BUSINESS CONSIDERATIONS

- There are two major considerations that were not included with the prior analysis but can have a meaningful impact on an individual company in any industry: country risk and corporate governance (which includes management). These areas tend to be regarded more as potential negative issues that could result in a lower rating than otherwise would be the case, although DBRS would certainly consider exceptional strength in corporate governance as a rating attribute.
- In most cases, our focus on the two areas is to ensure that the company in question does not have any meaningful challenges that are not readily identifiable when reviewing the other business risk considerations and financial metrics outlined in this methodology.

Country Risk

- Governments often intervene in their economies and occasionally make substantial changes that can significantly affect a company's ability to meet its financial obligations; therefore, considerations include the company's main location or country of operation, the extent of government intervention and support and the degree of economic and political stability.
- As such, the sovereign rating itself may in some cases become a limiting factor in an entity's rating, particularly when the sovereign has a lower rating and the entity does not have meaningful diversification outside its domestic economy.

Corporate Governance

- Effective corporate governance requires a healthy tension between management, the board of directors and the public. There is no single approach that will be optimal for all companies.
- A good board will have a profound impact on a company, particularly when there are significant changes, challenges or major decisions facing the company. DBRS will typically assess factors such as the appropriateness of board composition and structure, opportunities for management self-interest, the extent of financial and non-financial disclosure and the strength or weakness of control functions. For more detail on this subject, please refer to the DBRS criteria *Evaluating Corporate Governance*.
- With respect to the pivotal area of management, an objective profile can be obtained by assessing the following: the appropriateness of core strategies; the rigour of key policies, processes and practices; management's reaction to problem situations; the integrity of company business and regulatory dealings; the entity's appetite for growth, either organically by adding new segments or through acquisition; its ability to smoothly integrate acquisitions without business disruption; and its track record in achieving financial results. Retention strategies and succession planning for senior roles can also be considerations.

Company-Specific Financial Risk Factors

KEY METRICS

- Recognizing that any analysis of financial metrics may be prone to misplaced precision, we have limited our key metrics to a small universe of critical ratios. For each of these ratios, DBRS provides a range within which the issuer's financial strength would be considered as supportive for the same level of business risk as the engineering and construction industry. For example, a company where the outlook for both business risk and financial risk metrics falls within the BBB category would, all else being equal, be expected to have an issuer rating in the BBB range.
- To be clear, the ratings in the matrix below should not be understood as the final rating for an entity with matching metrics. This would only be the case to the extent that the business risk of the company and a wide range of other financial metrics were also supportive. The final rating is a blend of both the business risk and financial risk considerations in their entirety.

Engineering and Construction Industry Financial Metrics

Key Ratio	A	BBB	BB	B
Cash flow-to-debt	> 0.8x	0.35x to 0.8x	0.15x to 0.35x	< 0.15x
Debt-to-capital	< 15%	15% to 30%	30% to 50%	> 50%
EBITDA coverage	> 8.0x	5.0x to 8.0x	3.0x to 5.0x	< 3.0x
Debt-to-EBITDA	< 1.0x	1.0x to 2.5x	2.5x to 4.0x	> 4.0x
EBIT margin	> 7%	4% to 7%	2% to 4%	< 2%

- While the data in the above table are recognized as key factors, they should not be expected to be fully adequate to provide a final financial risk rating for any company. The nature of credit analysis is such that it must incorporate a broad range of financial considerations, and this cannot be limited to a finite number of metrics, regardless of how critical these may be.
- DBRS ratings are based heavily 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 also not uncommon for a company's key ratios to move in and out of the ranges noted in the ratio matrix above, particularly for cyclical industries. In the application of this matrix, however, DBRS is typically focusing on multi-year ratio averages.
- Notwithstanding these potential limitations, the key ratios are very useful in providing a good starting point in assessing a company's financial risk.
- It is important to note that actual financial ratios for an entity can and will be influenced by both accounting and accounting choices. In Canada, this will include the shift to International Financial Reporting Standards (IFRS). DBRS acknowledges that IFRS and other accounting choices will have an impact on the financial metrics of the companies that it covers. The financial risk factors include ratios based on data from company financial statements that are based on Canadian Generally Accepted Accounting Principles (GAAP) and U.S. GAAP, for the most part. When company financial statements are based on GAAP in other countries, including IFRS, the ratios and ranges may need to be redefined.
- Recognizing that the metrics in the table above do not represent the entire universe of considerations that DBRS examines when evaluating the financial risk profile of a company, the following provides a general overview that encompasses a broader range of metrics and considerations that could be meaningful in some cases.

Overall Considerations in Evaluating a Company's Financial Risk Profile

In addition to the information already provided with respect to key financial metrics, the following financial considerations and ratios are typically part of the analysis for the engineering and construction industry. As it is not possible to completely separate business and financial risks, note that many of the following ratios will relate to both areas.

EARNINGS

- DBRS earnings analysis focuses on core earnings or earnings before non-recurring items and in doing so considers issues such as the sources, mix and quality of revenue; the volatility or stability of revenue; the underlying cost base (e.g., the company is a low-cost producer); optimal product pricing; and potential growth opportunities. Accordingly, earnings as presented in the financial statements are often adjusted for non-recurring items or items not considered part of ongoing operations.
- DBRS generally reviews company budgets and forecasts for future periods. Segmented breakdowns by division are also typically part of DBRS analysis. Notwithstanding the focus on core earnings, note that actual net earnings is also a consideration in our analysis given the direct impact that this has on the capital structure.

Typical Earnings Ratios

- EBITDA interest coverage.
- EBIT interest coverage.
- EBITDA margin.
- EBIT margin.
- Net margin.
- Return on equity.
- Return on capital.

CASH FLOW AND COVERAGE

- DBRS cash flow analysis focuses on the core ability of the company to generate cash flow to service current debt obligations and other cash requirements as well as on the future direction of cash flow. From a credit analysis perspective, insufficient cash sources can create financial flexibility problems, even though net income metrics may be favourable.
- DBRS evaluates the sustainability and quality of a company's core cash flow by focusing on cash flow from operations and free cash flow before and after working capital changes. Using core or normalized earnings as a base, DBRS adjusts cash flow from operations for as many non-recurring items as relevant. As with earnings, the impact that non-core factors have on cash flow may also be an important reality.
- In terms of outlook, DBRS focuses on the projected direction of free cash flow, the liquidity and coverage ratios and the company's ability to internally versus externally fund debt reduction, future capital expenditures and dividend and/or stock repurchase programs, as applicable.

Typical Cash Flow Ratios

- Cash flow-to-debt.
- Adjusted cash flow-to-adjusted debt (ratios exclude non-recourse debt and cash (where applicable) and EBITDA related to investments funded with non-recourse debt).
- Cash flow-to-net debt.
- Adjusted cash flow-to-adjusted net debt (ratios exclude non-recourse debt and cash (where applicable) and EBITDA related to investments funded with non-recourse debt).



BALANCE-SHEET AND FINANCIAL FLEXIBILITY CONSIDERATIONS

- As part of determining the overall financial risk profile, DBRS evaluates various other factors to measure the strength and quality of the company's assets and its financial flexibility. From a balance-sheet perspective, DBRS focuses on the quality and composition of assets, including goodwill and other intangibles; off-balance-sheet risk; and capital considerations such as the quality of capital, appropriateness of leverage to asset quality and the ability to raise new capital.
- DBRS also reviews the company's strategies for growth, including capital expenditures and plans for maintenance or expansion, and the expected source of funding for these requirements, including bank lines and related covenants. Where the numbers are considered significant and the adjustments would meaningfully affect the credit analysis, DBRS adjusts certain ratios for items such as operating leases, derivatives, securitizations, hybrid issues, off-balance-sheet liabilities and various other accounting issues.

Typical Balance-Sheet Ratios

- Current ratio.
- Debt-to-EBITDA.
- Net debt-to-EBITDA.
- Adjusted debt-to-EBITDA.
- Debt-to-capital.
- Net debt-to-capital.
- Adjusted debt-to-capital.

Stage 3: Rating the Security

With respect to Stage 3, the following comments describe how the issuer rating is used to determine ratings on individual securities:

- 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 DBRS rating policy entitled "[Underlying Principles](#)."
- In some cases, issued debt is secured by collateral. This is more typical in the non-investment-grade spectrum. For more detail on this subject, please refer to [DBRS Rating Methodology for Leveraged Finance](#).
- 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 Parent/Holding Companies and Their Subsidiaries](#).

Appendix

INDUSTRY BUSINESS RISK RATINGS

- DBRS uses the concept of business risk ratings (BRRs) as a tool in assessing the business strength of both industries and individual companies within many methodologies across the corporate finance area. (DBRS does not typically use this approach for most financial, government and public finance sectors, where the industry is more challenging to define and this approach is not as useful.)
- The BRR is assessed independently of financial risk, although in some cases there are subtle but important links. As an example, the very low business risk profile of many regulated utilities has historically allowed this sector to operate with debt levels that would not be acceptable for most other industry sectors. Given this reality, it is difficult to consider the utility industry's BRR without acknowledging to some degree that the industry operates with sizable debt levels. This type of relationship exists with many industries, although typically to a much lesser degree.
- When a BRR is applied to an industry, there is an acknowledgment that this is a general assessment and there may in fact be a wide disbursement in the business strength of individual entities within the industry. Nonetheless, this assessment is beneficial to enabling DBRS to clearly delineate our industry opinion and is a useful tool when comparing different industries. An industry BRR is defined as being representative of those entities that the market would consider as "established," meaning that the group of companies being considered would have at least reasonable critical mass and track records. As such, the BRR for an industry does not consider very small players, start-up operations or entities that have unusual strengths or weaknesses relative to the base industry.
- DBRS methodologies note whether they apply to global industries or more specific countries or regions. When analyzing individual credits, DBRS considers the degree to which regional considerations may differ from the geographic area applicable within the industry methodology. Many entities have business units that transcend industries and in these cases, more than one BRR would be considered, including the possible benefits or challenges that may exist when all businesses are analyzed as part of a combined group.
- The BRR is a tool that provides additional clarity regarding the business risk of the industry overall, but it should be viewed as just one aspect in the complex analysis of setting ratings and should by no means be seen as either a floor or ceiling for issuers within a given industry. Although DBRS does not anticipate volatility in an industry's BRR, changes are possible over time if there are meaningful structural developments in the industry. When such a change does occur, DBRS will make this clear and note any impact on related individual ratings within the industry as applicable.
- DBRS assesses five areas to establish the overall BRR for an industry. Although there is an overlap in some instances (to some degree, in the long term, all five factors tend to relate to profitability and stability), DBRS has found that considering these five measures in a separate fashion is a useful way of approaching its analysis. In all cases, DBRS uses historic performance and our experience to determine an opinion on the future, which is the primary focus.

Industry Profitability and Cash Flow

- When ratios such as return on equity, return on capital and a variety of cash flow metrics are considered, some industries are simply more profitable than others. While standard economics would suggest a reversion to the mean through new competitors, this often occurs at a very slow pace over a long time horizon and in some cases may not occur at all because of barriers to entry.
- The benefits from above-average profits and/or cash flow are substantial and include internal capital growth, easier access to external capital and an additional buffer to unexpected adversity from both liquidity and capital perspectives.
- Some industries and their participants have challenges or strengths in areas such as research and development (R&D), brand recognition, marketing, distribution, cost levels and a potentially wide variety of other tangibles and intangibles that affect their ability in the area of profitability.

Industry Competitive Landscape

- The competitive landscape provides information regarding future profitability for the industry and thus somewhat crosses over into the profitability and cash flow assessment, but competition is deemed worthy of separate consideration because of its critical nature.
- Participants in industries that lack discipline, produce commodity-like products or services, have low barriers to entry and exhibit ongoing pricing war strategies generally have difficulty attaining high profitability levels in the longer term. Certain industries benefit from a monopoly or oligopoly situation, which may relate to regulation.

Industry Stability

- This factor relates primarily to the degree of stability in cash flow and earnings, measuring the degree to which the industry and its participants are affected by economic or industry cycles. Stability is considered critical as industries with high peaks and troughs have to deal with higher risk at the bottom of a cycle. As such, to some degree, industries with lower but stable profitability are considered more highly than industries with higher average profitability that is more cyclical.
- Some of the key factors in considering stability include the nature of the cost structure (fixed or variable), diversification that provides counter-cyclical and the degree to which the industry interrelates with the overall economy. Depending on the industry, economic factors could include inflation or deflation, supply and demand, interest rates, currency swings and future demographics.

Industry Regulation

- Where applicable, regulation can provide support through stability and a barrier to entry, but it can also cause challenges and change the risk profile of an industry and its participants in a negative way, including the reality of additional costs and complications in enacting new strategies or other changes.
- As part of its analysis of regulation, DBRS also considers the likelihood of deregulation for a regulated industry, noting the many examples where this transition has proven to be a major challenge in the past.

Other Inherent Industry Considerations

- Each industry has its own set of unique potential risks that, even if managed well, cannot be totally eliminated. Specific risks, the ability to manage them and the range of potential outcomes vary industry by industry. Two of the most common risks are changing technology and operational risks.
- Some of the other more common risks are in the areas of legal, product tampering, weather, natural disasters, labour relations, currency, energy prices, emerging markets and pensions.



INDUSTRY BUSINESS RISK RATING DEFINITIONS

DBRS specifies the BRR for an industry in terms of our **Long-Term Obligations** rating scale. When discussing industry BRRs for an industry, DBRS typically provides either one specific rating or a limited range (such as BBB (high)/BBB). Using a range recognizes the fact that, by their nature, industry BRRs are less precise than a specific corporate or security rating as they represent an overall industry. In addition to relating to the industry level, these definitions also apply to the business risk of individual companies, which will fall more often in the very high and low categories (AA/AAA and B) than would be the case for an entire industry.

Industry Business Risk Ratings (BRRs)

Rating	Business Strength	Comment
AA/AAA	Exceptional	An industry BRR of AA/AAA is considered unusually strong, with no meaningful weakness in any individual area. It may include pure monopolies that are deemed essential (the primary case being regulated utilities, where the risk of deregulation is believed to be very low). Common attributes include product differentiation, high barriers to entry and meaningful cost advantages over other industries or entities. These and other strengths provide exceptional stability and high profitability. It would be quite rare for an industry to have a BRR in this category.
A	Superior	Industry BRRs at the "A" level are considered well above average in terms of stability and profitability and typically have some barriers to entry related to capital, technology or scale. Industries that have, by their nature, inherent challenges in terms of cyclicity, a high degree of competition and technology risks would be unlikely to attain this rating category.
BBB	Adequate	Industry BRRs at the BBB level include many cyclical industries where other positive considerations are somewhat offset by challenges related to areas such as commodity products, labour issues, low barriers to entry, high fixed costs and exposure to energy costs. This rating category is considered average and many industries fall within it, with key considerations such as overall profitability and stability typically considered as neither above or below average.
BB	Weak	An industry at the BB level has some meaningful challenges. In addition to high cyclicity, challenges could include the existence of high technology or other risks. Long-standing industries that may have lost their key strengths through factors such as new competition, obsolescence or the inability to meet changing purchaser demands may fit here. The culmination of such factors results in an industry that does not generally score well in terms of stability and profitability. For an entire industry, this is typically the lowest BRR level.
B	Poor	While not common, there are cases where an industry can have a BRR of B. Such industries would typically be characterized by below-average strength in all or virtually all major areas.



INTERRELATIONSHIP BETWEEN FINANCIAL AND BUSINESS RISK

Having in mind the prior discussion on the typical importance that DBRS places on certain financial metrics and business strengths for the engineering and construction industry, we provide some guiding principles pertaining to the application of DBRS methodologies, the first one being that, in most cases, an entity's business risk will carry more weight in the final rating than its financial risk.

Based on this underlying concept, we provide the additional guidance for individual companies with varying business risks:

- **For an Entity with a Business Risk of AA (Exceptional):** A company with a business risk of AA will almost always be able to obtain an investment-grade issuer rating. When financial metrics are in the BBB range, an entity with a business risk of AA would typically be able to attain an "A"-range issuer rating.
- **For an Entity with a Business Risk of "A" (Superior):** Unless financial strength fails to exceed the B range, superior business strength will typically allow the final issuer rating to be investment grade. Very conservative financial risk may in some cases allow the final issuer rating to be within the AA range, but this should not be considered the norm.
- **For an Entity with a Business Risk of BBB (Adequate):** At this average level of business risk, the level of financial risk typically has the ability to result in a final issuer rating from as high as "A" to as low as B.
- **For an Entity with a Business Risk of BB (Weak):** At this weak level of business risk, conservative financial risk can, in some cases, take the final issuer rating into the BBB investment-grade range.
- **For an Entity with a Business Risk of B (Poor):** It is not typically possible for a company with a business risk of B to achieve a final investment-grade issuer rating.

DEFINITION OF ISSUER RATING

- DBRS Corporate rating analysis begins with an evaluation of the fundamental creditworthiness of the issuer, which is reflected in an "issuer rating". Issuer ratings address the overall credit strength of the issuer. Unlike ratings on individual securities or classes of securities, issuer ratings are based on the entity itself and do not include consideration for security or ranking. Ratings that apply to actual securities (secured or unsecured) may be higher, lower or equal to the issuer rating for a given entity.
- Given the lack of impact from security or ranking considerations, issuer ratings generally provide an opinion of default risk for all industry sectors. As such, issuer ratings in the banking sector relate to the final credit opinion on a bank that incorporates both the intrinsic rating and support considerations, if any.
- DBRS typically assigns issuer ratings on a long-term basis using its **Long Term Obligations** Rating Scale; however, on occasion, DBRS may assign a "short-term issuer rating" using its **Commercial Paper and Short Term Debt** Rating Scale to reflect the issuer's overall creditworthiness over a short-term time horizon.

SHORT-TERM AND LONG-TERM RATINGS

- For a discussion on the relationship between short- and long-term ratings and more detail on liquidity factors, please refer to the DBRS policy entitled "**Short-Term and Long-Term Rating Relationships**" and the criteria *DBRS Commercial Paper Liquidity Support Criteria for Corporate Non-Bank Issuers*.

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