



Methodology  
*Rating Canadian Universities*

MARCH 2011



*Insight beyond the rating.*

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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.

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# Rating Canadian Universities

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## Introduction to DBRS Methodologies

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- 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 issuer 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 issuer's general business risk profile, the issuer'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 an issuer 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.

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## Business and Financial Risk Overview

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- 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 issuer-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 issuer 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.

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### Three Stages of DBRS Rating Analysis

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#### Stage 1: Industry Business Risk Rating

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

**Industry Business Risk Rating**

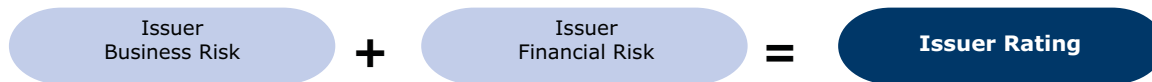


#### Stage 2: Issuer Rating

Consider the strength of the individual issuer:

- (a) First assessing how the issuer’s BRR compares with the industry BRR.
- (b) Then assessing the issuer’s financial risk.

Taken together, these factors will determine the entity’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.



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## Stage 1: Industry Business Risk Rating for Canadian Universities

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For Canadian universities with an established academic track record, DBRS views the BRR as being “A.” Of the five major categories used in assessing industry BRRs, four of them are viewed by DBRS as being above average relative to the other broad sectors rated by DBRS.

### OPERATING PERFORMANCE AND CASH FLOW

- Canadian universities are public not-for-profit institutions and generally budget for balanced results. This translates into relatively tight operating cash flow generation when compared with the typical corporate credits, although this is mitigated by the relative stability of revenues and expenditures, resulting in predictable cash flows.

### COMPETITIVE LANDSCAPE

- The creation of new institutions is controlled by provincial governments. Owing to the significant funding commitment that a new institution represents, governments rarely approve the creation of new universities, and the geographical distribution of existing institutions across provinces is adequate relative to the local catchment areas. As a result, Canadian universities generally benefit from limited local competition and relatively sizable local catchment areas, providing a steady supply of students.
- Furthermore, since the selection of a university is often primarily based on the academic profile and location of the institution and since provincial regulations generally constrain the tuition fees charged to domestic students to artificially low levels, universities are generally set fees at the maximum permitted level as opposed to competing on the basis of price.
- The national and international markets are more competitive, but they remain a meaningful and reliable source of students for most mid- to high-profile institutions given the good reputation of the Canadian education system.

### STABILITY

- Population growth and rising university participation rates, due to increasing educational requirements in the global labour market, provide considerable stability to university enrolments, although local trends may influence specific institutions.
- While they generally grow slowly, operating grants from provincial governments (40% to 60% of total revenue) have historically shown little year-over-year volatility, while expenditures tend to be very predictable, providing significant stability to results and operations.

### REGULATION

- Since Canadian universities are under provincial jurisdiction, significant components of their operating environment are defined through provincial legislation, regulations and/or policies. These generally relate to the governance structure, degree-granting powers, program offerings, borrowing capacity, government funding and, more importantly, fee-setting autonomy.
- Overall, the legislative and/or regulatory framework pertaining to universities in most provinces is fair and provides stability to the sector, although the constraints imposed on fee-setting autonomy are limiting. As such, this factor is generally a neutral consideration in the assessment of Canadian universities.



## OTHER INHERENT CONSIDERATIONS

- In the case of Canadian universities, the monitoring of institutions performed by provincial governments and their funding responsibility toward the system result in close relationships between provincial governments and universities, which generally foster considerable operating stability compared with private university systems or corporate credits.
- Furthermore, while the sector must compete for funding with health care, which is consuming a steadily growing share of provincial budgets, education remains a priority of the public and all provincial governments. This makes governments generally supportive of their institutions and has at times encouraged governments to provide one-time funding or financial help to institutions in difficulty.
- It is worth noting, however, that while university ratings are primarily based on each institution's own merits and benefit from the strong relationship with provincial governments and the considerable funding provided by them, the extent to which university ratings can exceed that of their main funder is limited.
- In general, it will be difficult for a university to exceed the provincial rating unless the institution has a superior academic profile and can demonstrate that it has substantial uncommitted financial resources, which may include cash on hand, internally restricted endowments or operating reserves (preferably exceeding its debt burden).

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## Stage 2: Issuer Rating

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

### 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

- 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 issuer will also be important.

## Issuer-Specific Business Risk Factors

- We now consider if an individual Canadian university 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 issuer 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 issuer within the BBB column.

### Issuer-Specific Business Risks – Critical Factors

Rating Business Strength	AA Exceptional	A Superior	BBB Adequate
<b>Academic Profile</b>	<ul style="list-style-type: none"> <li>• The university is viewed as a flagship institution provincially as well as nationally, making it a first-choice institution.</li> <li>• It is also very well known internationally and frequently referred to in international rankings, which translates into very strong student draw, an extremely competitive admission process and pricing power for international students.</li> </ul>	<ul style="list-style-type: none"> <li>• The institution has a long history of excellence.</li> <li>• It is a key component of the provincial university network and has successfully developed over the years well-regarded niche disciplines, which help the institution differentiate itself from its competitors.</li> <li>• The institution is also relatively well known nationally but may have limited clout internationally.</li> </ul>	<ul style="list-style-type: none"> <li>• The institution is fairly new or has failed over the years to establish a reputation beyond its region, making it excessively dependent on its local catchment area to sustain enrolment.</li> </ul>
<b>Provincial Government Rating</b>	<ul style="list-style-type: none"> <li>• The provincial government has a rating at least in the AA range.</li> </ul>	<ul style="list-style-type: none"> <li>• The provincial government has a rating at least in the "A" range.</li> </ul>	<ul style="list-style-type: none"> <li>• The provincial government has a rating at least in the BBB range.</li> </ul>
<b>Adequacy of Government Funding and Tuition Fees</b>	<ul style="list-style-type: none"> <li>• Reasonable flexibility is provided to raise fees at a pace exceeding the consumer price index (CPI).</li> <li>• Government funding is predictable and sufficient to cover system enrolment growth and inflation, with relief provided on an ad hoc basis to address targeted cost pressures (e.g., deferred maintenance and new facilities).</li> </ul>	<ul style="list-style-type: none"> <li>• The provincial tuition-fee policy is stable and permits increases somewhat in line with system cost inflation.</li> <li>• Government funding remains sufficient to fund enrolment growth in the system but adjustments for inflationary pressure may only be partial, forcing institutions to exercise spending restraint.</li> </ul>	<ul style="list-style-type: none"> <li>• The fee policy has been inconsistent over the years and significantly constrains tuition-fee increases to a pace that is inadequate to meet cost inflation, with no adequate compensation provided through government operating grants, resulting in academic revenue growth that is outpaced by expenditures.</li> </ul>

## Issuer-Specific Business Risks – Critical Factors

Rating	AA Exceptional	A Superior	BBB Adequate
<b>Business Strength</b>			
<b>Size</b>	<ul style="list-style-type: none"> <li>The institution is among the largest in the country, with a student population in excess of 30,000 full-time equivalents (FTEs).</li> <li>This translates into a comprehensive program offering, superior visibility among students across the country, considerable synergies in operations and efficient use of the facilities.</li> <li>It also provides considerable flexibility to merge and/or restructure programs, if needed.</li> </ul>	<ul style="list-style-type: none"> <li>The university has a medium size, with FTE enrolment ranging from 10,000 to 30,000.</li> <li>This allows for economies of scale in administrative functions and relatively efficient offerings in selective programs.</li> </ul>	<ul style="list-style-type: none"> <li>The university has fewer than 10,000 FTEs and lacks critical mass in most of its programs, resulting in above-average operating costs and limited flexibility to merge or reorganize classes to generate savings, if needed.</li> </ul>
<b>Location and Catchment Area</b>	<ul style="list-style-type: none"> <li>The university is located in one of Canada's major cities, with a dynamic economy and growing population, which helps drive enrolment and adds to the appeal of the institution among out-of-town students.</li> <li>While there may be other universities serving the region, supply is limited and/or the university is the first-choice institution.</li> </ul>	<ul style="list-style-type: none"> <li>The institution is located in a large and growing city or close to major centres, allowing for daily commute.</li> <li>Competing institutions may be within driving distance but do not focus on the same niches, maintaining a sound equilibrium between program offering and student demand.</li> </ul>	<ul style="list-style-type: none"> <li>The institution is located in a small region, away from any big centre and with a declining population, or in a market saturated with fierce competition.</li> </ul>

- Strong demand fundamentals, a generally balanced supply of institutions relative to the provincial student base, conservative management and considerable monitoring and funding from provincial governments lend support and stability to the Canadian university sector. Nonetheless, limited fee-setting autonomy, slow government-funding growth, an aging infrastructure base and solid cost inflation, due in part to generous employee benefit programs, result in tight operating flexibility.
- DBRS endeavours to rate each issuer through the cycle and does not penalize an issuer at market troughs nor reward it at market peaks unless such changes are structural and are expected to alter future financial metrics and/or qualitative rating considerations materially. Below is a summary of the key considerations and drivers of DBRS ratings that specifically characterize the Canadian university industry.

## PRIMARY INDUSTRY-SPECIFIC FACTORS

### *Academic Profile*

- The academic profile of an institution is ultimately its trademark. A strong reputation generally translates into stronger and less volatile student demand as it extends the boundaries of the university's draw beyond its regional catchment area and more successful faculty recruitment and fundraising activities.
- Despite the sharp gain in popularity of academic research in recent years, teaching remains the core mission of universities and the primary driver of university revenue, directly through tuition and grant revenue and indirectly through ancillary operations (e.g., food services and residences).
- In assessing the academic profile of a university, DBRS reviews its history, mission, program offering and academic resources and endeavours to establish the role and relative importance of the institution regionally, nationally and internationally. Understanding the relative academic strengths and challenges of the institution and the primary factors likely to influence enrolment going forward is paramount in analyzing its financial prospects.

- The trend in student application and enrolment is a particularly insightful indicator of the quality of an institution's academic profile and is reviewed in relation to the provincial average and the institution's enrolment strategy.

### *Provincial Rating and Relationship with Provincial Governments*

- While DBRS rates Canadian universities on the basis of their own merits, the significance of provincial funding in the revenue base of a university (generally 40% to 60%) makes it hard for these institutions to exceed the credit rating of their main funder. As a result, the provincial rating becomes a material factor in the determination of the rating of a Canadian university.
- On the other hand, the close relationship between universities and provincial governments provides material stability to the operating framework and support to ratings in the sector. Since Canadian universities are under provincial jurisdiction, significant components of their operating environment are defined by provincial legislation, regulations and/or policies.
- Beyond the operating funding and tuition-fee frameworks, which are part of DBRS's primary rating factors, key considerations such as the governance structure, degree-granting powers, program offerings and borrowing power may also be influenced or determined by governments. DBRS is attentive to the operating framework that universities are subject to, with particular emphasis put on the complexity and consistency of the framework as well as the reasonableness of the powers granted to the system.
- The relationship maintained by a government with its universities is also monitored by DBRS. The extent of government oversight warrants special attention in the analysis and is generally viewed as positive by DBRS as it fosters discipline in the system.

### *Adequacy of Government Funding and Tuition Fees*

- University funding policies and tuition-fee policies often go hand in hand as governments generally understand that weakness on one side needs to be offset by increased flexibility on the other since operating grants and tuition combined generally account for more than 70% of total university revenues. Unfortunately, political considerations and/or fiscal challenges may at times distort this relationship and temporarily give rise to inadequate funding. For this reason, DBRS also reviews these policies together, with considerable emphasis put on consistency, stability and sustainability.
- An adequate university funding framework would be expected to provide funding for system enrolment growth and basic inflationary pressures, at the same time instilling spending prudence in the system. DBRS also looks for predictability and responsiveness to unexpected system challenges when analyzing a government's funding regime.
- Given the public nature of the Canadian university system, tuition-fee regimes are expected to limit fee-setting autonomy. Nonetheless, the regime should allow for adequate annual adjustments, especially if annual increases in operating grants are consistently inadequate to cover prudently budgeted cost increases.

### *Size*

- Larger universities are generally believed to have more flexibility to absorb declining enrolment than smaller institutions as they can more easily consolidate classes. This also translates into a comprehensive program offering, superior visibility among students across the country, considerable synergies in operations and efficient use of the facilities. In some cases, however, the benefits provided by size may be accompanied by inefficiencies resulting from cumbersome management and policies.

### *Location, Catchment Area and Competition*

- Although students generally tend to be fairly mobile, the location of an institution may often significantly influence its ability to attract students and high-quality faculty members.
- Larger cities with a growing population and dynamic economy offer larger and growing local student catchment areas while facilitating interaction with the private sector through, for example, student internship, fundraising or research activities. However, some of these benefits may be offset by more intense competition to attract better students as larger cities often have a greater number of post-secondary institutions.

- The relative proximity of a university to other institutions with similar program offerings may hinder student recruitment and introduce volatility in enrolment. For this reason, DBRS also seeks to understand the factors that differentiate the institution from its closest competitors and the factors likely to continue to stimulate student demand and ensure the institution's existence going forward.
- The issue of competition is usually analyzed in conjunction with other considerations, such as location, the program mix and any specialization that may exist at the institution.

## ADDITIONAL FACTORS

### *Expendable Financial Resources and History of Fundraising*

- Uncommitted financial resources can provide considerable flexibility to a university and help reduce borrowing needs for eventual capital projects.
- In assessing the financial cushion carried by an institution, DBRS will exclude investment assets that are committed for near- to medium-term purposes or the use of which is constrained by external parties, such as government research grants or externally restricted endowments. As such, DBRS's concept of "expendable financial resources" will include operating cash balances, unrestricted short-term and long-term marketable securities and internally restricted endowments, which can generally be "un-endowed" to meet financial obligations, if necessary.
- As part of this assessment, DBRS will also pay attention to the resources allocated to fundraising operations and the success of the university at fundraising, as this provides an indication of the speed at which financial resources can be expected to grow over time, or be replenished if drawn for various purposes.

### *Labour Relations*

- Frequent and prolonged labour disruptions can not only negatively affect cost structures but also erode the image of a university and adversely affect enrolment trends.
- Important factors include the following: historical relationship between the institution and its employees, degree of unionization, major labour contract details (e.g., expiry date of collective agreements, wage agreements and pension provisions), negotiation process and strike history.

### *Adequacy of Infrastructure Base*

- The analysis of the infrastructure base of a university may provide considerable insight into the capacity of the institution to pursue its mission and accommodate enrolment growth and into potential capital financing requirements. The review primarily focuses on the capacity of existing facilities in relation to enrolment projections for the foreseeable future, as well as any evidence of deferred maintenance based on third-party assessments.
- Also considered is the approach used by the university to maintain capital assets in a state of good repair and to finance and manage capital projects (e.g., fixed-price contracts and cost recovery from operating units). The purpose of each major project being financed through a debenture issue is carefully analyzed by DBRS, along with the certainty of expected cash flows associated with those projects.

## 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 issuer 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 issuer 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 an issuer's ability to meet its financial obligations; therefore, considerations include the issuer'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.
- Note that country risk is not a consideration for this methodology as it only applies to Canadian universities

### 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 an issuer, particularly when there are significant changes, challenges or major decisions facing the issuer. 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.

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## Issuer-Specific Financial Risk Factors

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### 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 Canadian university industry. For example, an issuer 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 issuer 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.

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#### Canadian University Industry Financial Metrics

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Key Ratio	AA	A	BBB
Debt per full-time equivalent (FTE)	< \$10,000	\$10,000 to \$15,000	> \$15,000
Interest coverage	> 2.5x	1.3x to 2.5x	< 1.3x
Expendable resources* - to-debt	> 80%	5% to 80%	0%
Surplus-to-revenue (five-year average)	> 1%	0% to 1%	Steady deficits

\* Include cash on hand, operating reserves and unrestricted or internally restricted endowment assets.

- 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 issuer. 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 an issuer'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 an issuer'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 issuer financial statements that are based on Canadian Generally Accepted Accounting Principles (GAAP) and U.S. GAAP, for the most part. When issuer 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 an issuer, the following provides a general overview that encompasses a broader range of metrics and considerations that could be meaningful in some cases.

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## Overall Considerations in Evaluating an Issuer's Financial Risk Profile

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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 Canadian university industry.

### OPERATING PERFORMANCE

- The primary objective of this part of the analysis is to establish the volatility and predictability of major spending items, the adequacy of the financial resources available to the university to fulfill its mission and the ability of the management team to manage operations within its means. As such, DBRS primarily focuses on the institution's revenue and expenditure bases by core activities (e.g., teaching, research and ancillary services), the framework in place to plan and manage day-to-day operations, the track record of operating results and management's planning and cost-control efficiency.
- Through this detailed analysis, DBRS also identifies the areas of relatively high operating risk and attempts to develop an understanding of the likely trajectory of operating results for the years to come.

### *Revenues*

- DBRS closely examines the composition and diversification of the revenue base of universities in order to assess the resilience and growth potential of each major revenue source; namely, government grants, tuition fees, ancillary revenues, donations and endowment income.
- Given the significance of provincial funding in the revenue base of Canadian universities (generally 40% to 60%), one could expect ratings on universities to be closely related to those of their sponsoring provincial governments, more so since provincial governments also define key aspects of university operations such as governance structure, fee-setting autonomy, program offerings and, in certain cases, borrowing capacity. Nonetheless, Canadian universities are independent, non-government entities.



- As such, despite the importance allocated to the provincial rating in the analysis, the rating on a university is primarily based on the institution's own merits and may diverge substantially from that of its sponsoring government. Listed below are the major areas typically scrutinized by DBRS when assessing the revenue base of a university, some of which may also have been discussed as part of the qualitative factors presented previously.

#### **Government Funding**

- Dependence on public funding.
- Provincial rating.
- Stability of public funding and attitude of the government toward post-secondary education.
- Historical relationship between the province and its universities. In the particular, the willingness of the province to financially support its institutions when under stress and concrete examples of such actions may be important considerations in the analysis, especially for weaker credits.

#### **Tuition Fees**

- Relative importance of tuition-fee revenue.
- Tuition-fee levels relative to competing institutions and jurisdictions.
- Government constraints over fee-setting autonomy.

#### **Enrolment Outlook**

- Primary areas of growth and volatility of enrolment.
- Student recruitment strategy, provincial demographic profile and university participation rate.

#### **Housing, Dining and Parking Revenues**

- Relative importance and stability of revenues.
- Average pricing and pricing power in the local market.
- Current and projected demand for services.
- Financial sustainability of activities and efficiency in managing operations.

#### **Fundraising, Endowment and Investment Income**

- Relative importance in revenue base.
- Major sources of donations (e.g., corporations, governments and individuals).
- Restrictions on the use of fundraising proceeds.
- Fundraising growth potential (e.g., strength of alumni base, success of past campaigns and fundraising infrastructure).
- Sources, trend and stability of investment income (e.g., endowment funds, reserves and cash balances).
- Sustainability of endowment payout ratio.
- Investment strategy and historical returns on investments.

#### ***Expenditures***

As part of the expenditure analysis, DBRS takes a close look at the nature and volatility of major spending items, especially labour costs. Historical and expected trends are analyzed, along with the management team's track record of spending discipline and expected ability to control future cost pressures.

#### **Operating Expenditures**

- Labour costs (e.g., faculty, support staff and ancillary operations).
- Proportion of unionized employees.
- Relationship with major unions.
- Compensation and benefit levels relative to peer institutions.
- Terms of major labour agreements, including annual salary and benefit increases.
- Staffing level and expected staff recruitment and turnover.
- Utilities and maintenance.
- Ancillary operations (e.g., dining, housing and parking).
- Rigidity of other voluntary and mandatory expenditures (e.g., student aid).

### Debt Servicing

- Current and projected debt service costs in relation to revenues and operating cash flows.
- Stability of interest charges.

### Research

- Nature and relative importance of research activities.
- Stability and management of related cash flows.
- Impact of research on the university's profile and bottom line.
- Related infrastructure and labour requirements, since research funding tends to be more volatile than operating funding (i.e., does the university have the flexibility to terminate research staff if funding dries up?).
- Pressure exerted by research activities on infrastructure or other spending areas.

### Operating Balance

- The historical operating performance of a university may provide valuable information on the style of its management team, the risk related to its core activities and the challenges likely to be faced by the institution going forward. DBRS analyses the size and stability of past surpluses as well as the key factors behind past deficits (if any) to obtain a clearer picture of the trend expected to be followed by operating results and cash flow generation in the years ahead.
- This segment of the assessment is fairly broad and brings together the findings gathered through the assessment of the academic profile and the previous steps of the operating profile analysis.
- DBRS recognizes that Canadian universities are non-profit organizations and, as opposed to corporations, they do not seek to maximize their surpluses. Nonetheless, consolidated results should at least be balanced on a fairly consistent basis and management should have demonstrated a strong commitment to managing within its means.
- While special circumstances may warrant a shortfall, a track record of repeated deficits could materially damage the credit profile of a university. In such a situation, DBRS would, at a minimum, expect to see a clear and realistic plan to restore fiscal soundness within a reasonable time frame to prevent undue erosion in the credit profile.

Typical key operating indicators include the following:

- Operating balance (surplus or deficit)-to-total revenue.
- Provincial funding and tuition fees-to-total revenue.
- Actual expenditures-to-budgeted total expenditures.
- Facility condition index (Deferred maintenance-to-asset base replacement costs).
- Full-time equivalent (FTE) enrolment and application growth trends.
- Offer rate (i.e., per cent of applications that lead to an offer).
- Yield rate (i.e., per cent of offers accepted by students).
- Undergraduate, graduate and part-time enrolment as a per cent of total enrolment.

## BALANCE-SHEET AND FINANCIAL FLEXIBILITY CONSIDERATIONS

- As part of determining the overall financial risk profile of a Canadian university, DBRS evaluates various other factors to measure the current and projected strength and financial flexibility. The main objective of this section is to evaluate the extent of financial flexibility enjoyed by the institution through its balance sheet and the level of protection provided to bondholders. Accordingly, DBRS pays particular attention to the level of financial obligations carried by the university in relation to the resources expected to be available to fulfil those obligations going forward.
- The review is comprehensive and encompasses a wide range of financial commitments in addition to traditional debt, including leases and post-employment benefit obligations, which are allocated a lower weighting than traditional debt in the analysis. This is the most forward-looking portion of the credit rating assessment, with DBRS endeavouring to develop a medium-term financial scenario for each rated university.

### *Debt*

- A key factor in the assessment of a university's credit profile, debt is measured and assessed by DBRS in relation to enrolment (i.e., debt per FTE), academic revenue and expendable financial resources. However, DBRS does not assess debt in relation to consolidated revenue as such a measure is often misleading and subject to distortions from items that may boost revenue without necessarily adding to the financial flexibility of a university.
- This is the case, for example, for government research funding, which is generally non-discretionary and earned as matching expenditures are incurred. In addition to current debt, DBRS includes in its rating assessment any new leverage expected within a reasonable level of certainty to be incurred by the university over a three- to five-year horizon, highlighting the forward-looking nature of DBRS ratings.
- Debt is only measured net of assets when those assets are set aside for debt retirement and held with a trustee, which guarantees the integrity of the funds until the maturity of the debt. Otherwise, debt is presented on a gross basis, with the related assets included as part of expendable financial resources.
- However, DBRS may allocate a lower weighting to debt directly or indirectly serviced by high-quality third parties. This is the case for Québec universities, which generally carry debt issued by the provincial government in their name to fund provincial grants awarded to them.
- These are direct obligations of the institution and do not benefit from the guarantee of the government. For analytical purposes, however, DBRS views this debt as a government obligation since the government dictates its issuance and ensures its servicing through grants directly paid to the trustee.
- Along with debt measures, DBRS incorporates the following debt-related considerations into its analysis:
  - Internal and external restrictions on borrowing activity (e.g., provincial legislation and university policy).
  - Debt instruments used (e.g., security, seniority, bullet/amortizing and covenants).
  - Debt maturity profile.
  - Purpose of existing and new debt.
  - Projected impact of capital programs and new debt on cash flow, including projected interest coverage (operating cash flow-to-interest charges).
  - Plans to retire debt over time (e.g., internal sinking fund).

### *Debt Servicing*

- Interest charges are also an important consideration in the analysis and are measured in relation to revenues and operating cash flows in order to assess the affordability of outstanding debt. A look into the debt structure and the university's debt-management strategy also helps assess the potential volatility of the servicing requirements. More particularly, analysts examine the maturity structure of the debt stock and its sensitivity to changes in interest rates.
- In keeping with the forward-looking nature of DBRS ratings, analysts will generally seek to develop a three- to five-year outlook for debt and debt-servicing requirements.

### *Other Commitments and Contingencies*

- Other financial obligations may also weigh down the credit profile of a university if they represent a fairly certain future draw on cash flow. The major types of other financial obligations incorporated into DBRS analysis include the following:
  - Pension plan deficits (e.g., nature of plan, adequacy of contributions and trend of deficiencies).
  - Capital leases (e.g., computers and buildings).
  - Unfunded post-employment benefits (e.g., health and dental benefits and accumulated sick leaves).
  - Capital commitments.
  - Other off-balance-sheet liabilities (e.g., operating leases, lawsuits and derivatives).
- While generally less constraining than debt, the other types of financial obligations are important considerations in the credit analysis and are allocated varying weightings, reflecting the materiality, certainty and timing of the associated potential cash flows.
- For example, pension plan liabilities will warrant a greater weighting than post-employment benefit liabilities as employers often have some flexibility to unilaterally modify post-employment benefits for employees still active, if necessary, which is not the case for pension benefit liabilities.



### ***Financial Resources***

- Although DBRS incorporates into its credit assessments of universities all types of financial resources, two categories of liquid financial assets warrant particular attention: short-term unrestricted liquidity and expendable financial resources. DBRS believes these two measures best reflect the flexibility a university has to meet short-term liquidity requirements and weather longer-term unforeseen adverse developments.
- DBRS's short-term liquidity measure includes cash balances and short-term, high-quality securities held by a university for operating purposes. Expendable financial resources, on the other hand, constitute a broader measure of financial flexibility that encompasses short-term sources of liquidity as well as longer-term assets, which have more volatile realizable value.
- In calculating such indicators, DBRS will generally include operating cash balances, unrestricted short-term and long-term marketable securities and internally restricted endowments as those can generally be "un-endowed" to meet financial obligations, if necessary. However, assets subject to external restrictions or whose realizable value appears too uncertain are excluded since the objective is to obtain a conservative and reliable indicator of the resources that can be accessed within a reasonably short time frame to meet unexpected financial obligations.
- As a result, items such as externally restricted endowments and non-core real estate assets will be excluded from DBRS's primary measures of financial flexibility, but they will usually still carry positive implications for the overall credit profile. Below are the primary sources of financial resources scrutinized by DBRS.

### **Short-Term Liquidity**

- Unrestricted cash and marketable short-term securities.
- Reserves.
- Undrawn lines of credit (e.g., committed versus uncommitted, maturity date, provider and covenants).

### **Endowments**

- Size and growth outlook of assets (i.e., externally restricted versus internally restricted).
- Management policies (e.g., payout, asset mix, minimum credit quality and asset diversification).
- Investment performance.

### **Other**

- Unrestricted investment portfolios.
- Non-core real estate (e.g., commercial and residential properties and land).
- Business partnerships.
- Royalties and patents.

Typical balance-sheet ratios include the following:

- Total debt per FTE.
- Debt and other commitment (e.g., pension liabilities) per FTE.
- Debt service coverage ratio (operating cash flow-to-interest charges).
- Expendable financial resources-to-total debt.
- Endowment assets per FTE.

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## Appendix

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### 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.

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### Industry Business Risk Ratings (BRRs)

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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 Canadian universities, 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):** An issuer 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 an issuer 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.

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