

Methodology
Rating the Printing Industry

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Insight beyond the rating.

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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.
- 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.

DBRS METHODOLOGY: A THREE-STAGE PROCESS

- (1) Calculate the business risk rating (BRR), looking at the strengths and challenges of the industry.
- (2) Rate the company on a straight issuer rating, without any reference to any security that may be rated. The company rating is a function of its own business risk and financial risk.
- (3) The third step is to rate the security, considering the level of collateral, ranking of the debt relative to other issues and recovery rates in liquidation in terms of non-investment-grade securities.

(1) *Business Risk Rating (BRR)*

- The industry business risk looks at these five factors:
 - Profitability and cash flow characteristics of the industry.
 - The competitive landscape.
 - Stability of the industry.
 - Regulation.
 - Any other inherent industry risks.
- 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.

(2) *Company-Specific Factors*

- Is the company stronger, equal to or weaker than the industry and the business risk rating of the industry?
- The Company-Specific Business Risk Factors section examines specific business risks of the company versus the strengths of the company.
- Stage 2: The Financial Risk Profile section looks at the key financial ratios, which include the following:
 - Percentage of debt in the capital structure.
 - EBIT interest coverage.
 - Cash flow-to-debt.
 - Debt-to-EBITDA.
 - EBITDA-to-interest.
 - Current ratio.

Stage 1: Industry Business Risk Rating for the Printing Industry

DEFINITION OF THE INDUSTRY

- The printing industry is defined as relating to the companies engaged in the various forms of commercial printing. Major product lines include advertising material of all types, yellow pages and telephone books, various magazines, newspapers, catalogues, books and a wide range of business forms, invoices and labels.
- Advances in technology have eliminated many of the smaller printers, with mid-sized entities unable to compete on costs with larger players who possess the latest technology. As a result, this industry has undergone significant consolidation to create a few very large players and some medium-sized regional players.

THE BUSINESS RISK RATING

- The business risk rating for the printing industry is BB (high). This rating assessment recognizes that printing is an industry undergoing significant structural change, facing a wide range of challenges. (1) Technological change has enabled low-volume, inexpensive printing runs of high-quality colour. The industry has shifted to a low-margin, higher-volume run on printing jobs, and eliminated many smaller and even mid-sized printing companies that were not cost-competitive. (2) Internet/web electronic payment trends have eliminated much of the need for paper, especially in advertising and, increasingly, in other forms of media. (3) Printing runs have trended toward lower-margin, high-volume output, with bidding from large customers with the power to influence pricing. Fixed-price, longer-term contracts add to the risks for printing companies as printers need to absorb changes in input costs such as paper. (4) Printing is highly transportation- (and energy-) intensive, with the need for more plants near population centres since the timely delivery of printed products is often paramount. (5) Printing is traditionally labour intensive, with strong unions influencing wage costs and benefits. (6) Capital intensiveness stems from the need to have modern, state-of-the-art equipment in many plants near major centres. This, coupled with the need to finance working capital, can add to the debt levels carried by companies in the industry.
- The stronger companies have been able to provide good service and maintain top reputations with a large, diversified customer base. They have been able to keep up with technology and contain operating costs in a highly competitive industry that is going through substantial structural changes. As such, these companies would garner greater consideration in DBRS's rating assessment. Smaller companies with weaker market positions with little diversification in terms of product or customer group would be considered weaker. The industry ratings reflect these risks and characteristics.

INDUSTRY PROFITABILITY AND CASH FLOW

- Profitability in the industry is low-to-average, with a high degree of fixed costs and substantial structural change causing a decline in the strength of the industry. Well-established players tend to have better profitability and cash flow. Capex levels tend to be higher than in the media industry but medium-to-low overall, with equipment upgrades required every few years.
- The industry now concentrates on printing high-volume, low-margin products, where the distance travelled to transport products is limited.
- As magazine and newspaper demand slows, the number of business formats grow; that is, the more popular electronic and Internet/web-based products become, the more demand for printed product shrinks.
- The printing area is highly labour intensive, with strong unions. However, the power of these unions is declining rapidly as plants are closed and employment in the industry declines.
- The printing industry is very transportation sensitive, which also makes it energy sensitive.
- Printing is capital intensive, with costly and technologically advanced printing equipment needed to achieve efficiency and cost-competitiveness.
- High transportation costs and the need for timely delivery of products requires a network of printing plants (usually located near major population centres).
- Competition tends to be intense as a result of firms bidding against each other, with large customers having greater pricing power.

INDUSTRY COMPETITIVE LANDSCAPE

- Competition is intense, as different types of firms compete against each other.
- Bidding is often on long-term contracts at fixed rates for low-margin, high-volume business.
- Customers are often large entities, and in a strong position to set prices.
- Quality of service and the reputation of the major players is high, so price can be a key component in the bidding process.
- The smaller operators who used to do low-volume, higher-margin jobs have gradually been eliminated by computerized technology, unless they are in a unique market and/or customer base.
- Mid-sized entities need competitive advantages to exist in a rapidly changing industry.

INDUSTRY STABILITY

- Stability is influenced by advertising demands, which makes revenue sensitive to the state of the economy.
- EBITDA stability is influenced by the company's ability to contain costs, as it bids on long-term, often fixed-price contracts. It is worth noting that contracts are increasingly priced without paper costs.
- The trend away from paper to web-based advertising is also influencing stability of demand.
- In terms of customer diversity, a printing company's customer base is evaluated, as this can affect seasonal or cyclical variations in cash flow. Typically, a printer with a large number of customers participating in a wide range of industries is considered superior to one with a smaller and more concentrated client list.
- A printer's relationship with its employees is also assessed. Some printers maintain a labour force primarily dominated by unions, which can make it more difficult to reduce both fixed and variable costs as structural changes occur in the industry. Additionally, unionized labour increases the potential for work stoppage and interruptions which could have an impact on cash flow from operations. Companies with good employer-employee relationships and a flexible workforce are generally better able to manage costs and profitability in a more adaptable way, which is a positive factor.

INDUSTRY REGULATION

- Regulation is low, with open market conditions prevailing in most markets.
- The market is the de facto 'regulator' in this industry.

OTHER INHERENT INDUSTRY CONSIDERATIONS

- A well-diversified product mix is an important consideration for printing companies. Companies that can offer a range of services, such as pre-media, digital solutions and direct mail in addition to traditional print – with strong market shares in most services – are generally stronger than small companies that only concentrate on one segment of the market. Despite this, niche-based printers with strong market share can also be resilient. As traditional printing products increasingly migrate to digital mediums, printing service diversification and the ability to provide additional services becomes more important.
- The ability of a printer to pass on additional costs to clients is an important consideration. While most long-term contracts contain provisions for variations in the costs of some inputs, such as paper, others may not. Paper is generally the most volatile input in the printing process; however, other variable costs can be unpredictable. The inability of a printer to pass on variable costs could affect profitability and cause erratic variations in cash flow.
- The facilities, equipment and asset quality of printing companies is evaluated, as newer plants and equipment are generally more efficient and operate at a lower cost with less waste. Newer equipment also allows a printer to better meet clients' unique and growing demands for high-quality documents and formats. Additionally, older equipment may be indicative of higher future capital expenditures, since this equipment will eventually have to be replaced for the company to remain competitive.

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.

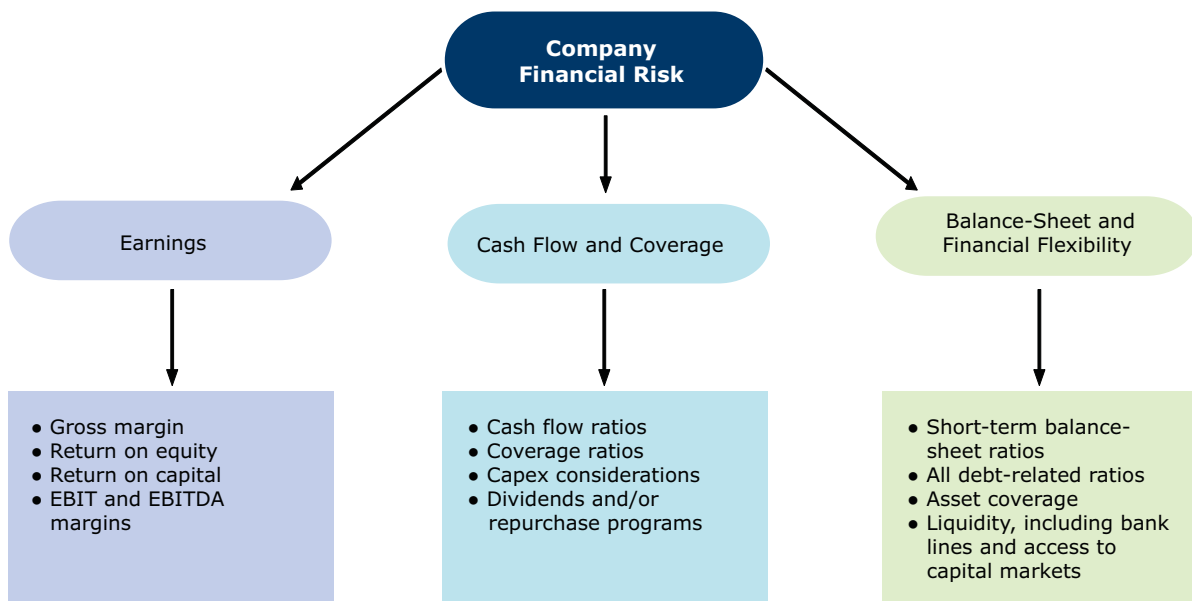
BUSINESS RISK PROFILE

- 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 printing 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
Technology/Facilities	• State-of-the-art technology and facilities, enabling product and cost leadership.	• Good use of technology and modern facilities to produce high-quality products and contain costs.	• Low-to-average use of technology with mature facilities to produce reasonable quality products and contain costs.	• Weak use of technology, with antiquated facilities which reduce quality and limit efficiencies.
Cost Containment	• Excellent in containing costs to remain cost-competitive.	• Very good in containing major costs.	• Adequate performance in cost control.	• Poor performance in cost control.
Reputation and Service	• High level of reputation in providing quality products and services.	• Reasonable reputation in providing products and services.	• Low-to-average reputation in providing products and services.	• Poor reputation, poor service.
Diversification	• Variety of customers and geographic areas served provides stability.	• Reasonable degree of diversification by customer and geographic area.	• Some concentration in terms of customer and geographic area.	• High concentration of customers in limited geographic areas.
Contract Bidding	• Excellent record bidding on long-term, fixed-price contracts.	• Good record building on contracts.	• Some ineffective bidding on contracts.	• Bad record in bidding on contracts.
Labour Intensity Capital Intensity Transportation Intensity Technology Intensity Paper Intensity Internet Intensity	• High.	• High.	• High.	• High.



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 printing 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.

Printing Industry Financial Metrics

Key Ratio	A	BBB	BB	B
% Debt in the capital structure	Under 30%	30%-45%	45%-60%	Over 60%
EBIT coverage	Over 5.0x	3.0x-5.0x	1.5x-3.0x	Under 1.5x
Cash flow-to-debt	Over 30%	20%-30%	10%-20%	Under 10%
EBITDA-to-interest	Over 7.0x	4.0x-7.0x	2.0x-4.0x	Under 2.0x
Debt-to-EBITDA	Under 2.0x	2.0x-3.5x	3.5x-5.0x	Over 5.0x
Return on equity	Over 9%	7%-9%	5%-7%	Under 5.0%

- The above ratios provide a broad indication of financial risk, which combined with the business risk and other factors determine the final rating of a company.
- The industry tends to be capital intensive and working capital intensive, which adds to debt levels.
- The transportation sensitivity of the industry required having many smaller plants near population centres, although industry rationalization is gradually changing this.
- The capital intensiveness of the industry plus working capital needs raises debt levels, which weakens the absolute strength of most financial ratios.
- 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 printing 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 margins.
- Fixed charges coverage.
- 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.
- Capex-to-revenue.



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

- Percentage of debt in the capital structure.
- Gross debt-to-EBITDA.
- Net debt-to-EBITDA.

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 printing 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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