



Methodology

Rating the Industrial Products Industry

DECEMBER 2007



Insight beyond the rating.

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Note: DBRS provides third-party, independent evaluations in four major areas: the corporate sector, financial institutions, public finance and structured finance. The corporate sector consists of a wide variety of industries.



I. Overview

DBRS ratings are opinions that reflect the creditworthiness of an issuer, a security, or an obligation. They are opinions based on forward-looking measurements that assess a company's ability and willingness to make timely payments on outstanding obligations (whether principal, interest or dividend) with respect to the terms of an obligation. Ratings are not buy, hold or sell recommendations and they do not address the market price of a security.

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 that would be more critical for a peer company. Conversely, there are cases where one weakness is so critical that it overrides the fact that the company may be strong in most other areas.

DBRS rating methodology is underpinned by a stable rating philosophy, which means that in order to minimize the rating changes due primarily to global economic changes, DBRS generally factors the impact of a cyclical economic environment into its rating. Consequently, DBRS takes a longer-term "through the cycle" view of a company and, as such, rating changes are not based solely on normal economic cycles. 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. An equally important aspect of DBRS analysis is its broad industry coverage, which it undertakes in order to understand the major differences and subtle nuances within a particular industry and to form an appropriate rating of a company relative to its competitors.

As a framework, DBRS rating methodologies consist of three components that together form the basis of the rating: an assessment of the company's general business risk profile based on cross-industry and macro business considerations; an assessment of the company's financial risk profile primarily based on quantitative ratio analysis; and consideration of industry-specific factors and measures particularly unique to the company. To some extent, the business risk and financial risk profiles are inter-related. The degree of financial risk considered acceptable for a company depends to a large measure on the business risks it faces.

Critical in the determination of a rating is the application of the analyst's experience and expertise in forming an initial rating opinion and recommendation for the rating committee and the role of the DBRS rating committee as the final decision maker. DBRS rating committees, which comprise experienced and knowledgeable DBRS personnel, strive to provide objective and independent rating decisions which are based upon all relevant information and factors, incorporate both global and local considerations, apply DBRS-approved methodologies and reflect the opinion of DBRS.

II. General Business Risk Profile

A fundamental component of DBRS analysis is the consideration of macro business factors that apply to most, if not all, industries within the corporate sector. The general business risk profile is largely a qualitative assessment of the environment a company is affected by and operates in. An assessment of the general business risk profile serves as a backdrop for the analysis of the company's financial risk profile as well as other qualitative and quantitative factors that are particularly unique to the company. Differing business risk profiles impact the assessment of a company's financial risk profile, and thus, it is important to understand the extraneous influences and business factors a company is or could be affected by despite its financial strength.

KEY CONSIDERATIONS IN EVALUATING A COMPANY'S BUSINESS RISK PROFILE

The following considerations, while not intended to be an exhaustive list, indicate the key areas DBRS considers in evaluating a company's business risk profile:

Economic Environment

The importance of the industry within the overall economy, in terms of either how it impacts or is impacted by the economy, shapes a company's viability. Also of importance is how the industry is influenced by current economic factors such as inflation or deflation, supply and demand, interest rates, currency swings and demographics.

Legislative and Regulatory Environment

Whether an industry is regulated or not is key, as the degree of regulation and legislative oversight can severely restrict or assist a company depending on its stage of growth, industry influence and regulatory relations. A regulated industry imposes a certain rigour and governance. It is also important to understand the frequency of change or stability in industry rules and whether regulations may require companies to make costly modifications to their infrastructure.

Competitive Environment

The nature of the market structure (e.g., monopoly versus oligopoly) determines the extent of competitiveness and the barriers to entry a company may face. Many industries are undergoing significant structural changes such as consolidation or deconsolidation, excess capacity, or competitive threats from new capacity in "low-cost" countries such as China, Brazil and Russia in both domestic and international markets. Even small changes in the competitive environment can have a profound impact on a company.

Country Risk

Governments often intervene in their economies and occasionally make substantial changes in policy regarding competition, ownership, wage and price controls, restrictions on foreign currency, capital and imports/exports, among other things. Such policy changes can significantly affect a company, and 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. The assessment of country risk is not limited to direct government actions to interfere with the private sector, but also encompasses the full range of financial and economic events that can spill across a country, causing widespread defaults in otherwise healthy corporate credits. As such, country risk can have considerable implications for corporate ratings. A country ceiling is assigned to corporate foreign currency ratings based on the country's susceptibility to systemic shocks and the private sector's ability to maintain its foreign currency debt payments when shocks occur.



Industry Cyclical

Cyclical is influenced by factors such as levels of consumer spending, consumer confidence and the strength of the economy. The degree of cyclical is influenced by the market segment in which a company specializes. Non-cyclical industries are better able to withstand dramatic economic changes, as are companies with more predictable cycles, than those with significant peaks and troughs. It is important to examine a company's strategies and performance over the longer term and understand them in cyclical highs and lows.

Management

The capability and strength of management is a pivotal factor in company success. An objective profile of management can be obtained by assessing the following: the appropriateness of core strategies; rigour of key policies, processes and practices; management's reaction to problem situations; its 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 are also critical considerations.

Corporate Governance

Effective corporate governance requires a healthy tension between management, the board of directors and the public. There is no one "right" approach for all companies. A good board can have a profound impact on growing companies, those in fragile financial states or those undergoing significant change. Beyond a review of management, assessment should focus on the appropriateness of board composition and structure (including the independence and expertise of the audit committee) to approve executive compensation and corporate strategy, and to oversee execution and opportunities for management self-interest. Other important areas include the extent of disclosure of financial and non-financial information (including aggressiveness of accounting practices and control weaknesses), share ownership (including director's) and shareholder rights.

III. General Financial Risk Profile

The financial risk profile is largely a quantitative assessment of the company's financial strength and an estimation of its future performance and financial profile. DBRS reviews three key areas: earnings, cash flow, and additional measures for balance sheet and financial flexibility. Within each area, DBRS focuses on key metrics and considerations which are assessed over time noting that the trend in the ratios is also important to the rating. However, ratios alone cannot be used as an absolute test of financial strength. With a focus on future expectations, the primary goal of financial risk assessment is to understand the inter-relationship between the numbers, interpret what they mean, and determine what they indicate about the company's ability to service and repay debt on a timely basis given the industry background.

KEY CONSIDERATIONS IN EVALUATING A COMPANY'S FINANCIAL RISK PROFILE

The following financial considerations and ratios tend to be analyzed for the majority of industries in the corporate sector. There may be additional quantitative factors and ratios that are considered on an industry-specific basis which are noted under Section IV – Industry-Specific Factors.

Also refer to the Corporate Sector – Glossary of Ratio Definitions.

A. Earnings

DBRS's earnings analysis focuses on core or normalized earnings 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., 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's analysis.

Typical earnings ratios include:

- Gross margin
- Return on common equity
- Return on capital
- EBIT margin and EBITDA margin

B. Cash Flow/Coverage

DBRS's cash flow analysis focuses on the core cash flow generating ability of the company to service current debt obligations and other cash requirements as well as 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 much non-recurring items as possible. 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 and future capital expenditure and dividend/stock repurchase programs, as applicable.

Typical cash flow ratios include:

- EBIT interest coverage and EBITDA interest coverage
- EBIT fixed charges coverage
- Cash flow/total debt and cash flow/adjusted total debt
- Cash flow/capital expenditures
- Capital expenditures/depreciation



- Debt/EBITDA
- Dividend payout ratio

C. 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 strength including 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, plans for maintenance or expansion, and the expected source for funding these requirements. Where the numbers are considered significant and the adjustments would meaningfully impact 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 include:

- Current ratio
- Turnover – Receivables and inventory
- Asset coverage (times)
- Per cent total debt to capital and per cent adjusted total debt to capital
- Per cent adjusted net debt to capital

The following factors focus on the company's liquidity:

- Maintaining sufficient bank-lines or cash balances
- Prudent use of cash balances for dividends or stock repurchases
- Terms and conditions of credit facilities including unique terms and/or financial covenants
- Debt management approach including dependence on short-term versus long-term debt, fixed versus variable rate debt, and debt maturity schedule
- Interest rate and/or foreign exchange exposure
- Relationship and strength or weakness of a parent holding company or associated companies, if applicable

IV. Industry-Specific Factors

Each industry within the corporate sector has unique features that cannot be broadly applied across all industries. For example, capital spending is a key area in the utilities industry, reserves are particular to the mining industry, adequate R&D is critical for the pharmaceutical industry, and seasonality significantly impacts merchandisers. Against the backdrop of the general business and financial risk profiles, a company's unique strengths and weaknesses and industry-specific issues need to be factored into the credit analysis to form an appropriate rating. These particular business and financial issues and measures also help to shape the company's status relative to its peers.

KEY CONSIDERATIONS IN EVALUATING A COMPANY WITHIN THE INDUSTRIAL PRODUCTS INDUSTRY

The industrial products industry applies to a wide variety of companies involved with the production and distribution of goods and equipment for a variety of end-markets. The significant diversity of the industry requires a methodology that broadly applies to companies primarily involved with the manufacturing of products with moderate to long production cycles and relatively high capital investment requirements.

A summary of the key considerations and drivers of DBRS ratings for companies principally operating within the industrial products industry are listed below. The summary is segmented into primary and secondary factors to reflect the relative importance of each when reviewing a particular company. The following considerations supplement the macro business and financial considerations, respectively, in Sections II and III of DBRS methodology. All three sections, Sections II, III and IV, should be considered together.

PRIMARY RATING CONSIDERATIONS

Market Share and Competition

The competitive landscape is a key consideration with respect to industrial product manufacturers' business risk profile. Competition is based largely on product quality, reputation, performance and product features, with market concentration and product differentiation often having an important influence. Sustainability of sales provides support for ongoing investments in research and development, as well as new plants and equipment. Strong market positions in a particular product group are viewed favourably (as noted), but market share trends are also taken into consideration. Gradually declining market share over several years could result from lower product acceptance (for various reasons) and increased competition.

Diversification

Sales and production diversification should provide increased earnings stability, mainly in the form of reduced reliance on a particular market and business. The extent to which sales are measurably diversified by region, customer and business end-market is assessed by DBRS in order to help gauge future financial stability.

Geographic: Revenues and earnings distributed between several regions in measurable proportions reduces exposure to changing business conditions in a particular market, including fluctuating supply and demand, pricing and input costs. The impact of foreign exchange volatility is also often reduced with diversification, depending on the location of production facilities. During the current decade, Asia, Latin America, and Europe (Central, East) have been higher-growth and lower-cost production regions relative to the United States and Western Europe, and are increasingly important markets for general manufacturers. However, longer-term industrialization of these regions may result in increased competition from local manufacturers (notably in China).



Customer/Business: Limited reliance on one or two specific businesses or products for sales and earnings reduces the financial impact associated with declining acceptance or demand volatility for a particular product, depending on the relative profitability and life cycle of each segment. However, excess product diversification can result in limited market penetration and lack of synergies with core operations, and be of limited benefit or a drawback to a company's financial and business profile. Industrial product manufacturers often distribute a modest range of products within specific segments, which can help to reduce sales volatility. Excess customer concentration could be a concern, but is relatively uncommon.

Cost Position

Industrial product manufacturing generally involves a high degree of fixed costs, largely on account of the capital-intensive nature of production. As such, high operating leverage increases the importance of stable or rising unit shipment volumes in order to optimize operational efficiency. The relative age of production facilities is also considered, with older plants requiring higher levels of maintenance and investment. DBRS notes the trends in a company's unit sales, product innovation, capacity utilization, and warranty expenses (when available), as this can provide an indication of current and future productivity and efficiency. Furthermore, consideration is given to the expected impact of efficiency initiatives, which may include workforce reductions and non-recurring charges, as well as the use of Six Sigma programs to enhance productivity. Importantly, a company's cost position is considered relative to its industry peers as a means of assessing its ability to manage expenses within its control.

Supply chain management with respect to production inputs and raw materials is another important consideration. Production of industrial products is generally highly energy- and raw material-intensive and producers are often exposed to volatile commodity costs. A company's ability to manage such costs (notably steel and other metals) is taken into consideration, given the potentially significant impact on earnings. The ability to pass on rising costs to consumers and the nature of contracts (i.e., short- or long-term versus spot exposure) are all considered as part of a company's ability to moderate input cost volatility. Relationships with multiple suppliers typically improve bargaining power and reduce the risks associated with potential supply disruptions.

Financial Volatility

Industrial products companies are generally impacted by cyclical changes in the economy, which can lead to significant volatility in financial performance. DBRS notably takes into account the sensitivity of industrial companies' financial profiles to changes in economic demand (i.e., GDP growth rates) and supply (i.e., inventory, imports), which is also dependent on product mix. Companies with a larger share of higher value-added, specialized products are generally less impacted by change in supply and demand fundamentals.

SECONDARY RATING CONSIDERATIONS

Distribution Channels

Well-diversified and efficient distribution channels tend to mitigate risk and add operational flexibility. For example, excess sales exposure to a non-owned distribution channel facing challenges (i.e., financial distress) could negatively impact earnings from lower unit sale volumes at a greater rate than if volumes are spread between several sales channels. Key considerations in the event of excess sales concentration include the history of the relationship, negotiating power, margins and the financial position of the customer. Strong relationships and significant market coverage can lead to increased barriers to entry for competitors, among other advantages (e.g., after-sale parts and services usually managed by the distributor). The ability to provide financial services to customers, given the high cost of most capital equipment, can also be a competitive advantage.



Size

The scale of a company, particularly with respect to annual sales and equity base, often provides added support for the rating. High relative sales provide an indication of market position, as well as a company's ability to compete. In particular, larger sales can translate into a greater market advantage, opportunities for efficiency gains and the ability to offset competitive threats via increased resources for marketing initiatives and innovation. To a lesser degree, the size of a company's equity base is also a consideration, with large equity bases providing an increased ability to absorb significant one-time write-downs (e.g., goodwill impairments, cost restructurings) and enhanced options for financing.

Product Development Cycle

DBRS assesses the product development cycle of companies within the industrial products industry, which tends to vary widely but is generally at least a few years long. Longer product development cycles generally increase financial risk, given that capital is tied up for a longer period of time in the development of a product and the product is more subject to changing market conditions. As such, ceasing the development or manufacture of a poorly-received product is more onerous, which also increases the importance of flexible cost structures.

Technology

The pace of technological change in the industrial products industry is generally slow, which provides a degree of stability to sales. However, product innovation has increased in importance, particularly in competitive markets and partly due to rising input costs, as a means to maintain margins. The ability to introduce new products that are well received (as evidenced by market share and earnings, among other factors) can become a competitive advantage and mitigate the impact of broader industry changes. Trends in research and development spending (and the related success over time) are regularly monitored. In general, products with the greatest share of technology or engineering content are less impacted by price competition and add a degree of earnings stability.

Barriers to Entry

High barriers to entry are common for various industrial products markets, given the often high capital expenditures associated with production, significant research and development, extensive distribution requirements, and importance of brand image and operating history. High barriers to entry generally increase the competitive position of an industrial company, which adds a degree of sales stability.

Labour

The characteristics of a company's labour force are also taken into consideration, despite labour being a modest share of general manufacturer costs relative to cost of goods sold. Highly unionized workforces are less flexible, which, in particular, reduces the ability to adjust quickly to changing market conditions and increases the risk of work stoppages in the event of a strike. In addition, legacy costs for pension and healthcare benefits (notably for companies with large under-funded pensions) add to expenses and increase the potential for large operating cash outflows. DBRS assesses a company's ability to control these costs, which may include the migration of production facilities to regions with significantly lower employment costs and increased outsourcing.

Captive Finance Operations

Industrial products companies with captive finance operations (where the bulk of the finance subsidiary's portfolio includes receivables related to its parent company's sales) are generally viewed more favourably by DBRS than are producers without these operations. The finance company is considered a separate division within the company, and is usually assigned the same rating largely due to their interdependence. Finance companies help to facilitate product sales and serve as an additional marketing resource for the manufacturing parent company. In addition, finance companies provide earnings stability for the consolidated entity, but are usually a modest share of overall profit. When leveraged appropriately, DBRS excludes the impact of



the finance subsidiary from the industrial company's parent's balance sheet (treated on an equity basis) and, when possible, from the income and cash flow statements upon analyzing its financial profile. For further information, refer to the DBRS methodology on analyzing finance companies.

Environmental

Industrial product manufacturers are subject to various environmental regulations and, in some cases, ongoing litigation, mainly on account of the raw materials used in the production process, emissions, etc. As a result, there is a risk of future costs and/or penalties related to pollution clean-up and litigation (e.g., asbestos-related lawsuits). Future changes in environmental laws could also require additional measures to reduce pollution and subsequently increase production costs.

Market Maturity

DBRS assesses the degree of market maturity in traditional domestic markets, and to what extent demand tracks GDP growth. New emerging markets have become increasingly important to generate measurable earnings growth. Increased international sales also provide increased stability via earnings diversification, although expansion risks exist.

Regional Characteristics

DBRS assesses the importance of several characteristics specific to an industrial products company operating in a particular geographic region. DBRS reviews the strength of the country of domicile and any other countries of significance, as well as political risks, the tax environment, potential government support, the importance of the industry in question to the country of domicile, and the expected stability and economic outlook for the geographic environments in which the company operates.

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