Methodology

Rating Companies in the Oilfield Services Industry

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Introduction to DBRS Methodologies

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

• There are generally three components to the DBRS corporate rating process: (1) an industry risk rating (IRR); (2) an issuer rating; and (3) considerations for specific securities. The figure below outlines this process.

• An IRR is a relative ranking of most industries that have a DBRS methodology, typically using just three ranges of the DBRS long-term debt rating scale (i.e., “A,” BBB and BB), without making use of the “high” or “low” descriptors. The IRR is a general indication of credit risk in an industry and considers, among other things, an industry’s: (1) profitability and cash flow; (2) competitive landscape; (3) stability; (4) regulation; and (5) other factors. An “industry,” for the purposes of the IRR, is defined as those firms that are generally the larger, more established firms within the countries where the majority of DBRS’s rated issuers are based; this remains true for DBRS methodologies that are more global in nature. The industry risk rating helps DBRS set the BRR grid (see below) in that it positions, in an approximate way, an average firm in the industry onto the BRR grid. For firms in industries with low IRRs, the IRR can, in effect, act as a constraint or “cap” on the issuer’s rating.

• The issuer rating is DBRS’s assessment of the probability of default of a specific issuer. It is a function of: (1) the business risk rating (BRR), determined by assessing each of the primary and (where relevant) additional BRR factors in the BRR grid for a specific issuer; and (2) the financial risk rating (FRR), determined by assessing each of the primary and (where relevant) additional FRR metrics. The two components, BRR and FRR, are combined to determine the issuer rating; in most cases, the BRR will have greater weight than the FRR in determining the issuer rating. Throughout the BRR and FRR determination process, DBRS performs a consistency check of the issuer on these factors against the issuer’s peers in the same industry.

• The issuer rating is then used as a basis for specific instrument ratings. DBRS assigns, for example, a recovery rating and notches up or down from the issuer rating to determine a specific instrument rating for instruments of non-investment grade corporate issuers. (See “Rating the Specific Instrument and Other Criteria” below.)

DBRS Rating Analysis Process

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

- The oilfield services industry includes those firms that conduct drilling activities and provide services to the oil and gas exploration and production industry.
- Per the three-tier IRR system described on the previous page, the oilfield services industry is BB.
- The oilfield services industry is characterized by: (1) dependence on the oil and gas industry and vulnerability to its cyclical pricing, capital spending and activity levels; (2) firms that are often highly specialized with limited product offerings; (3) a high degree of fragmentation with low barriers to entry (typically for onshore oilfield services companies); (4) relatively low capital expenditure requirements with a high proportion of variable costs (typically for onshore oilfield services companies); and (5) exposure to event risks that are difficult to mitigate, such as political and environmental risks, including potential oil spills, groundwater contamination, air pollution and land reclamation.

**Onshore Drilling and Related Service Activities**
- Companies that operate within this sector are often smaller in nature, highly specialized, with short-term contracts and have a higher degree of variable costs in comparison to offshore oilfield services companies.
- Operators in this segment are much more exposed to the cyclicality of the oil and gas sector.
- Barriers to entry are substantially lower than offshore, leading to a greater competitive landscape and typically lower ratings.
- Recently, horizontal and multi-stage fracturing hydraulic technologies have enhanced the ability to extract oil and natural gas, resulting in an increase in onshore drilling and related services activities, particularly in North America.

**Offshore Drilling and Related Service Activities**
- Companies that operate within this sector are often large firms (i.e., more than $10 billion in assets), typically operating under longer-term contracts, with high capital costs given the complexities of drilling offshore.
- The operational risk associated with offshore activities is typically much higher relative to onshore activities.
**Oilfield Services Business Risk Rating**

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

<table>
<thead>
<tr>
<th>Oilfield Services — Primary BRR Factors</th>
<th>A</th>
<th>BBB</th>
<th>BB</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size/Scale (Including Operating Flexibility and Market Position)</strong></td>
<td>Superior size scale, substantial operating flexibility, leading market position.</td>
<td>Adequate size, strong operating flexibility, good market position.</td>
<td>Small size, adequate operating flexibility, average market position.</td>
<td>Very small size, low operating flexibility, weak market position.</td>
</tr>
<tr>
<td>Diversification</td>
<td>Well diversified with multiple customers, operating in multiple regions.</td>
<td>Moderately diversified with multiple customers, operating in multiple regions.</td>
<td>Less diversified with greater concentration risk.</td>
<td>Not diversified with a high degree of concentration risk.</td>
</tr>
<tr>
<td>Workforce Expertise/Flexibility</td>
<td>Strong ability to train, develop and retain top-tier employees.</td>
<td>Moderate ability to train, develop and retain top-tier employees.</td>
<td>Limited ability to train, develop and retain top-tier employees.</td>
<td>Low level of employee training, development and retention.</td>
</tr>
<tr>
<td></td>
<td>Substantial flexibility to adjust staffing in an industry downturn.</td>
<td>Moderate flexibility to adjust staffing in an industry downturn.</td>
<td>Limited flexibility to adjust staffing in an industry downturn.</td>
<td>Low level of flexibility to adjust staffing in an industry downturn.</td>
</tr>
<tr>
<td>Capital Expenditure Flexibility</td>
<td>Manageable capital expenditure requirements, which can be delayed indefinitely with minimal impact on the company’s future results.</td>
<td>Moderate capital expenditure requirements, which can be delayed for a substantial period of time with minimal impact on the company’s future results.</td>
<td>High capital expenditure requirements, which, if delayed for a significant period, could reduce the company’s future results.</td>
<td>Significant capital expenditure requirements, which, if delayed for a short period, could impair the company’s future results.</td>
</tr>
</tbody>
</table>

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

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

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

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

Contractual Position
- Companies in the oilfield services industry generally operate in competitive environments where profitability varies with commodity pricing and drilling activity. Having a good contractual position (e.g., long-term contracts) reduces volatility of earnings and cash flow.

Regulatory/Environmental Factors/Event Risk
- Environmental regulation is growing, especially with respect to water usage, the treatment of chemicals used in shale drilling and the potential impact on nearby drinking water.
- The sector is subject to government laws and regulations relating particularly to safety and the environment. DBRS will expect issuers to have well-developed enterprise risk management programs to address these risks, in particular, event risks such as oil spills. Where such an event has taken place, depending upon its materiality, negative pressure on the rating may result.
Financial Risk Rating

PRIMARY FRR METRICS
- The FRR grid below shows the primary FRR metrics used by DBRS to determine the FRR. While these primary FRR metrics are shown in general order of importance, depending upon an issuer’s activities, the ranking can vary by issuer.
- DBRS ratings are primarily based on future performance expectations, so while past metrics are important, any final rating will incorporate DBRS’s opinion on future metrics, a subjective but critical consideration.
- It is not unusual for a company’s metrics to move in and out of the ranges noted in the grid below, particularly for cyclical industries. In the application of this matrix, DBRS looks beyond the point-in-time ratio.
- Financial metrics depend on accounting data whose governing principles vary by jurisdiction and, in some cases, industry. DBRS may adjust financial statements to permit comparisons with issuers using different accounting principles.
- Please refer to DBRS Criteria: Financial Ratios and Accounting Treatments – Non Financial Companies for definitions of, and common adjustments to, these ratios in the FRR grid below.
- Liquidity can be a material risk factor, especially for lower-rated non-investment grade issuers. DBRS will consider available sources of liquidity including cash on hand, cash flow, access to bank lines, etc., as well as uses of liquidity such as operations, capital expenditures, share buybacks and dividends for every issuer.
- DBRS considers an issuer’s financial policy including factors such as its targeted financial leverage, its dividend policy and the likelihood of share buybacks or other management actions that may favour equity holders over bondholders.
- While market pricing information (such as market capitalization or credit spreads) may on occasion be of interest to DBRS, particularly where it suggests that an issuer may have difficulty in raising capital, this information does not usually play a material role in DBRS’s more fundamental approach to assessing credit risk.

Oilfield Services — Primary FRR Metrics

<table>
<thead>
<tr>
<th>Primary Metric</th>
<th>A</th>
<th>BBB</th>
<th>BB</th>
<th>B</th>
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</thead>
<tbody>
<tr>
<td>Debt-to-cash flow</td>
<td>&lt; 1.5x</td>
<td>1.5x to 2.0x</td>
<td>2.0x to 3.0x</td>
<td>&gt;3.0x</td>
</tr>
<tr>
<td>EBIT-to-interest</td>
<td>&gt; 10.0x</td>
<td>5.0x to 10.0x</td>
<td>3.0x to 5.0x</td>
<td>&lt; 3.0x</td>
</tr>
<tr>
<td>Debt-to-capital</td>
<td>&lt; 25%</td>
<td>25% to 35%</td>
<td>35% to 50%</td>
<td>&gt; 50%</td>
</tr>
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ADDITIONAL FRR METRICS
- While the primary FRR metrics above will be the most important metrics that DBRS will use in determining the FRR of an issuer, other metrics may be used, depending upon an issuer’s activities, capital structure, pension liabilities and off-balance-sheet obligations.
- Profitability, particularly in the medium term, can be an important differentiator of credit risk. DBRS may assess profitability through a variety of metrics, including operating margins and return on capital.
- While free cash flow (i.e., net of changes in working capital, dividends and capital expenditures, etc.) can be volatile and, on occasion, negative, DBRS may use this and/or other cash flow metrics to assess a company’s ability to generate cash to repay debt.
- As is the case with the oil and gas sector, on which this services sector depends, the high cyclicalities of the industry leads to financial ratios that can vary widely through the cycle. As a result, financial metrics (in comparison with BRR factors) will be of even lower relative importance than they are for most industries, particularly for investment-grade credits.
### Blending the BRR and FRR into an Issuer Rating

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

### Rating the Specific Instrument and Other Criteria

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