

Credit Risk Early Warning Signals

Which entities are most vulnerable to oil price volatility? Case Study using S&P Global Ratings Scores & Factors

Introduction

The attacks on the state oil producer Saudi Aramco's Abqaiq oil-processing facility triggered higher oil prices and heightened geopolitical tensions that have been ramping up in the Middle East. The strikes by aerial drones, claimed to have been conducted by Houthi rebels in Yemen, resulted in Saudi Arabia cutting crude production by 5.7 million barrels per day (bpd)¹.

How do you quickly screen which entities are most at risk to oil price volatility?

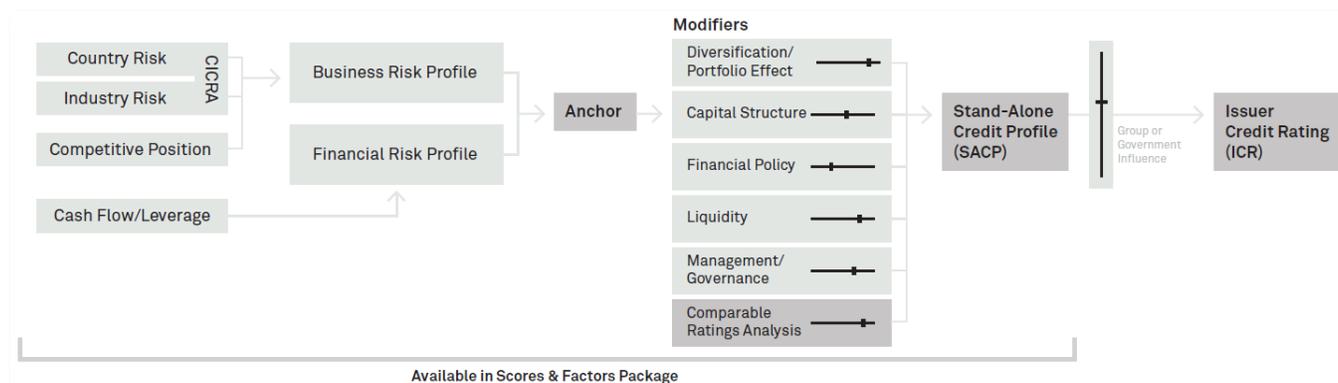
The need for granularity in credit ratings

While credit ratings provide a guide towards an entity's vulnerability to business, economic and industry conditions, the underlying scores and factors of a credit rating, which provides the framework used by S&P Global Ratings analysts in their analysis of an issuer's credit rating, help us drill down into the components of the credit rating. These underlying scores and factors can be used to identify entities with relatively high risks to oil price volatility across all rated entities and even within the same credit rating.

In addition to the stand-alone credit profile (SACP), which is S&P Global Ratings' opinion of an issue's or issuer's creditworthiness when the issuer is absent any external support, the Scores & Factors package provides the underlying business, financial, industry, and economic risk factors and assessments. These scores and factors drive an analyst's rating recommendation for Corporations and Banks.

¹ Source: "As Inventories Cushion Oil Price Impact, Abqaiq Strike Spotlights Risks To Spare Capacity", by S&P Global Ratings on RatingsDirect® on S&P Global Market Intelligence. September 17, 2019.

Figure 1. S&P Global Ratings Scores & Factors available for Corporate Issuers



Source: “Criteria | Corporates | General: Corporate Methodology”, S&P Global Ratings, November 19, 2013. For illustration only.

Identify energy companies with high Business Risk within each S&P Global Ratings’ level

The Business Risk Profile comprises the risk and return potential for a company in the markets in which it participates, the competitive climate within those markets (industry risk), the country risks within those markets, and the competitive advantages and disadvantages the company has within those markets (competitive position).

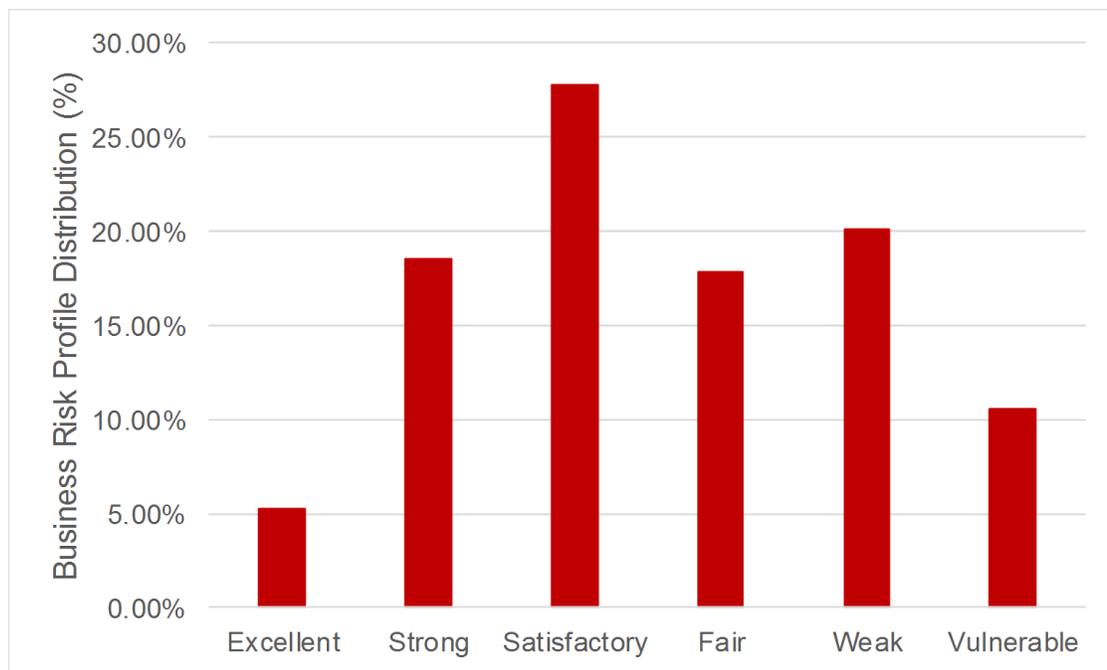
All things being equal, an entity with higher business risk within the same industry would have a higher risk of credit risk deterioration when industry conditions worsen, even if it shares the same credit rating as another company with higher business risk.

The volatility in oil prices and heightened geopolitical risk come at a challenging time where a number of energy companies are exhibiting signs of vulnerability:

- According to a sample of 303 S&P Global Ratings rated entities in the above sectors, where scores and factors are available:
 - **30.7%** have “**Weak**” or “**Vulnerable**” Business Risk (Figure 2). (On a scale of 1-6, with 6 being worst, 5 = Weak, 6 = Vulnerable).
 - **24.7%** have **high Business Risk (“Weak” or “Vulnerable”) AND high Financial Risk (“Aggressive” or “Highly Leveraged”)**, as shown in red in Figure 3, which indicates potential systemic weakness in this industry.
- Countries indicating a higher percentage of such entities relative to the global sample include: **Thailand, United Kingdom, United States, Argentina, Indonesia, and Monaco.**²

² We indicate entities where % of entities with business risk scores at 5 or above and financial risk scores of 5 and above is higher than the global average; and the number of entities in the sample is at least three.

Figure 2: Distribution of Business Risk Scores of energy companies globally



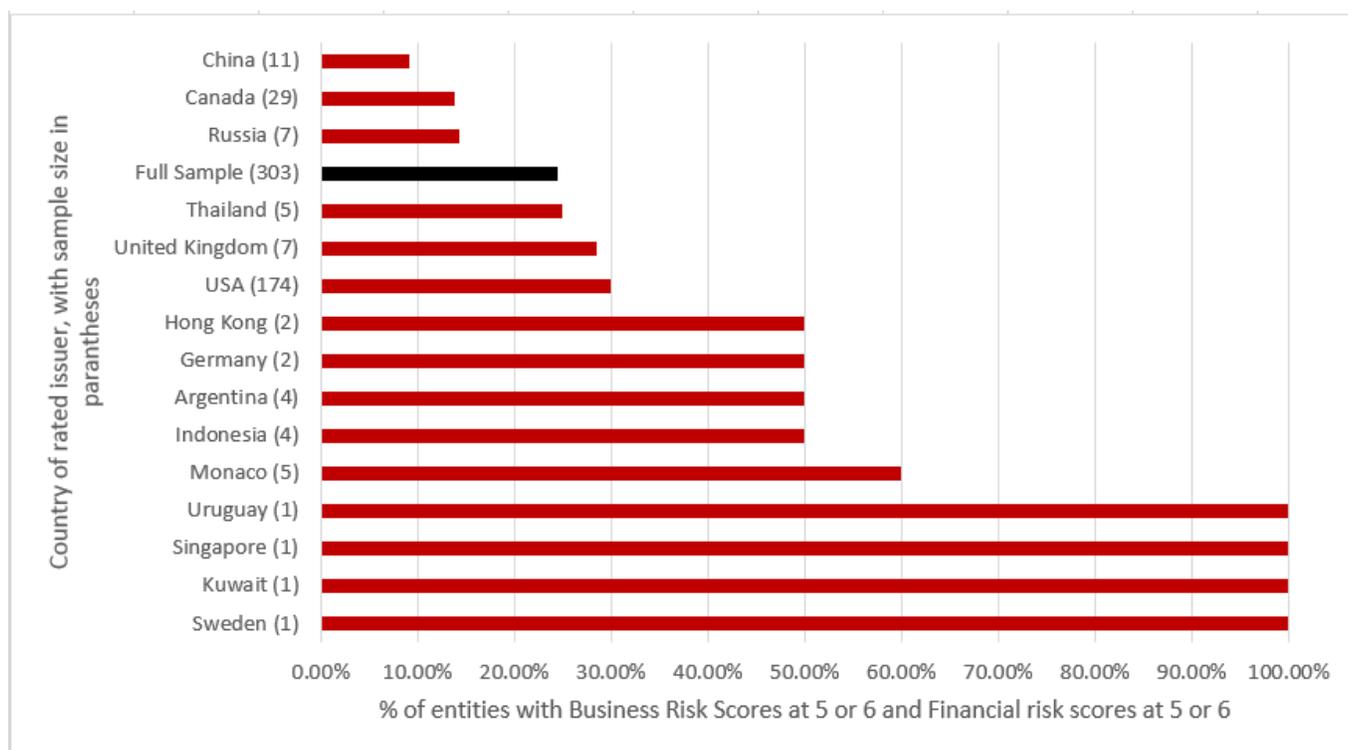
Source: RatingsXpress: S&P Global Ratings Scores & Factors Package, S&P Global Market Intelligence. As of July, 2019. For illustrative purposes only.

Figure 3: Distribution of Business Risk and Financial Risk Scores of energy companies globally

Business Risk Profile	Financial Risk Profile					
	Minimal	Modest	Intermediate	Significant	Aggressive	Highly Leveraged
Excellent	0.00%	0.66%	1.65%	2.31%	0.66%	0.00%
Strong	0.33%	2.97%	5.28%	7.26%	2.64%	0.00%
Satisfactory	1.32%	4.29%	8.25%	8.25%	3.96%	1.65%
Fair	0.33%	1.32%	2.64%	5.28%	4.62%	3.63%
Weak	0.00%	0.00%	1.32%	2.64%	9.90%	6.27%
Vulnerable	0.00%	0.33%	0.33%	1.65%	4.29%	3.96%

Source: RatingsXpress: S&P Global Ratings Scores & Factors Package, S&P Global Market Intelligence. As of July, 2019. For illustrative purposes only.

Figure 4: % of entities with Weak or Vulnerable Business Risk Scores AND Significant or Aggressive Financial Risk Scores, by country (sample size in parentheses)



Source: RatingsXpress: S&P Global Ratings Scores & Factors Package, S&P Global Market Intelligence. As of July, 2019. For illustrative purposes only.

Even for companies within the same industry and with the same credit rating from S&P Global Ratings, we can see that there is some dispersion in the Business and Economic Risk Scores. In this example below, we sample the Business and Financial Risk Scores of energy companies with a “BBB-” credit rating. This rating level is particularly interesting because a ratings downgrade would put the entity into the “speculative grade” category, which could affect credit risk approvals and investment decisions.

Figure 5: Distribution of Business Risk and Financial Risk Scores of energy companies with “BBB-” credit rating

Business Risk Profile	Financial Risk Profile					
	Minimal	Modest	Intermediate	Significant	Aggressive	Highly Leveraged
Excellent	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%
Strong	0.0%	0.0%	2.3%	2.3%	13.6%	0.0%
Satisfactory	2.3%	9.1%	15.9%	34.1%	4.5%	0.0%
Fair	0.0%	2.3%	4.5%	2.3%	0.0%	4.5%
Vulnerable	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: RatingsXpress: S&P Global Ratings Scores & Factors Package, S&P Global Market Intelligence. As of July, 2019. For illustrative purposes only.

This table indicates that scores and factors provide more granularity into credit ratings, and allows us to rank entities with the same credit rating by the risk of a credit rating downgrade if all of them are subject to the same deterioration in industry conditions. While a sizable number of companies have “Satisfactory” Business Risk and “Significant” Financial Risk; you can see that the entities marked in red towards the lower right corner of chart 5a have higher Business Risk and Financial Risk than those towards marked in green towards the top left corner.

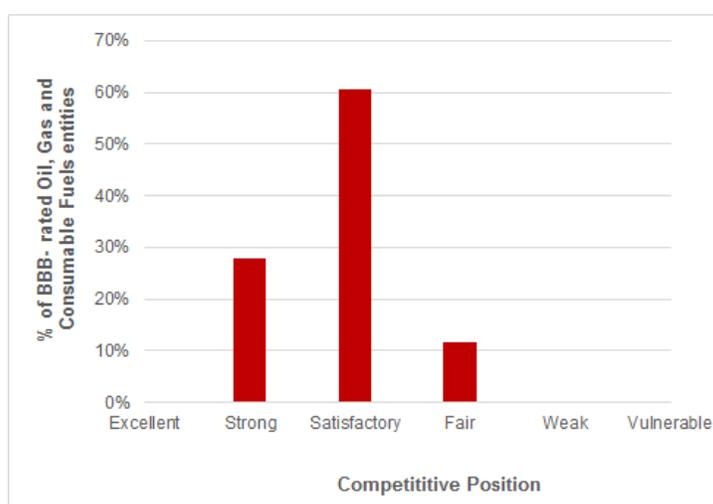
Figure 5a: Distribution of Business Risk and Financial Risk Scores of energy companies with “BBB-” credit rating

Business Risk Profile	Financial Risk Profile					
	Minimal	Modest	Intermediate	Significant	Aggressive	Highly Leveraged
Excellent	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%
Strong	0.0%	0.0%	2.3%	2.3%	13.6%	0.0%
Satisfactory	2.3%	9.1%	15.9%	34.1%	4.5%	0.0%
Fair	0.0%	2.3%	4.5%	2.3%	0.0%	4.5%
Vulnerable	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: RatingsXpress: S&P Global Ratings Scores & Factors Package, S&P Global Market Intelligence. As of July, 2019. For illustrative purposes only.

A company’s “Competitive Position” assesses the relative competitive advantages and disadvantages the company has within those markets. Competitive Position also identifies entities that are best positioned to take advantage of key industry drivers or to mitigate associated risks more effectively³. While most “BBB-” rated companies have “Satisfactory” Competitive Position (Figure 6), approximately 12% of these entities have “Fair” Competitive Position. A deeper dive into the Business Risks is warranted to assess the likelihood of a credit ratings downgrade should oil price volatility persist.

Figure 6: Distribution of Competitive Position Scores of energy companies with “BBB-” credit rating



³ Source: “Corporate Methodology”, by S&P Global Ratings. Available on RatingsDirect® on S&P Global Market Intelligence, November 13, 2013.

Source: RatingsXpress: S&P Global Ratings Scores & Factors Package, S&P Global Market Intelligence. As of July, 2019. For illustrative purposes only.

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S&P Global Ratings Scores & Factors on Xpressfeed is a daily updated database of scores and factors that could provide you with early warning indicators to credit quality deterioration, enabling you to quickly drill down into entities that are most vulnerable to systemic risks, including supply chain disruptions and volatile oil prices.

In addition, Scores & Factors offers the ability to:

- (1) Filter issuers with weak SACP or credit risk attributes (e.g. weak anchor, high financial risk etc.).
- (2) Leverage S&P Global Ratings criteria and SACPs to benchmark their financial ratios (using CreditStats Direct or fundamental data from S&P Global Market Intelligence) against the more granular scores and factors offered by S&P Global Ratings.
- (3) Rank issuers with similar or identical credit ratings by looking at business risk, industry risk, competitive position and SACP scores.
- (4) Filter issuers with weak characteristics e.g. high business risk, high financial risk etc.

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