Principles of Assessing Industry Factors in the Rating Analysis of Non-financial Corporations

Oil and Gas (Integrated Producers)

This document is part of the Methodology for Assigning Credit Ratings to Non-financial Corporations under the International Scale (hereinafter, the Methodology) and describes the specifics in conducting rating analyses of the operational and financial profiles of oil and gas companies.

The document provides lists of indicators used, factor weights, assessment score boundaries for quantitative factors, and the principles of assessing qualitative factors for the sector.

1 Industry Companies

The assessment approaches described in this document are applicable to companies whose core business is the production, refining or processing, and sale of oil and gas (integrated producers).

2 Rating Factor Structure

Creditworthiness analyses of rated entities in the oil and gas industry are based on assessing eight indicator blocks, which are combined in two profiles and have their own weights totaling 100%. The weights presented in Table 1 are base weights, i.e., they may change depending on the assessment scores derived for factor blocks (see Subsection 4.1.3 of the Methodology for a description of the floating weights concept).

Table 1. Scorecard for the oil and gas sector

Profile	Factors	Factor weighting	Sub-factors
Operational profile	Business profile	20%	Degree of vertical integration
			Geographic diversification
			Production and refining/processing technologies
	Financial Policy and Corporate Governance	10%	Financial policy
			Corporate governance
Financial profile	Size	20%	Production volume (thousand BOE/D)
			Proven reserves (mln BOE)
	Profitability and efficiency	10%	EBIT margin
			Cash costs of production (USD/BOE)
	Leverage	15%	Total debt to funds from operations (FFO) before interest payments
			Qualitative leverage assessment
	Coverage	15%	FFO before interest payments to interest payments
	Liquidity	5%	Liquidity ratio
			Qualitative liquidity assessment
	Cash flow	5%	Free cash flow (FCF) margin
			Qualitative assessment of FCF stability

Source: ACRA

3 Operational Profile

The following describes the basic factors in the rating analysis of the operational profile, the degree of their influence when determining the credit rating of a non-financial corporation, and assessment specifics.

To assess operational profile qualitative indicators for rated entities in the oil and gas industry, ACRA uses a set of characteristics specific to the industry that translate into a qualitative assessment category. Operational profile indicator weights are shown in Table 5.

3.1. Business Profile

The business profile assessment of companies in the oil and gas industry is part of the creditworthiness analysis, as this helps determine the ability of companies to maintain their financial performance during periods of lower demand and falling prices.

The oil and gas industry is highly cyclical and exhibits volatile prices and demand for both crude and refined/processed products. Assessing the ability of companies to maintain a certain level of profitability during periods of low commodity prices is a key component of the business profile assessment. A company's competitive advantages, such as low production cost per BOE, degree of vertical integration, refinery yield, geographic diversification of production, and technological innovations, improve its financial stability.

The business profile is assessed taking into account the following subfactors subject to qualitative assessment.

3.1.1. Degree of Vertical Integration

The degree of vertical integration of a company has a positive effect on its operating efficiency and reduces exposure to adverse changes in hydrocarbon prices, primarily as a result of making refined/processed products with higher added value. Companies with a greater degree of vertical integration and product diversification generate more stable cash flows, which, in turn, increases the predictability of a company's financial condition.

The qualitative assessment category for the degree of vertical integration is determined according to Table 2.

Table 2. Qualitative assessment of the degree of vertical integration

Assessment category	Main features
I	Maximum degree of vertical integration into the entire value chain of oil refining and gas processing (very good downstream capacity)
II	High degree of vertical integration into the value chain of oil refining and gas processing (good downstream capacity)
III	Moderate vertical integration into the value chain of oil refining and gas processing moderate downstream capacity
IV	Insignificant degree of vertical integration into the value chain and limited oil refining and gas processing capabilities (weak downstream capacity)
V	No vertical integration into the value chain of oil refining and gas processing (no downstream capacity)

Source: ACRA

3.1.2. Geographic diversification

Geographic diversification is assessed both in terms of whether a company has production assets in several countries (which decreases geopolitical risks) and in terms of not concentrating production on one field or a limited number of fields (reducing the risks of production halts because of failures or other adverse events).

The qualitative assessment category for geographic diversification is determined according to Table 3.

Table 3. Qualitative assessment of geographic diversification

Assessment category	Main features
I	No dependence on one or two of the largest fields; significant logistic advantage; high diversification of production and sales; strong position in global markets or in several regions
II	Significant and diversified hydrocarbon resource base; logistic advantage; good diversification of production and sales; strong regional market position
III	Largest field has a notable share in the total production structure; minimal logistic advantage; moderate diversification of production and sales; good position in the market of one country
IV	Largest field may account for more than half of total production volume; no logistic advantages; weak diversification of production and sales; moderately weak market position limited to several local markets
V	Largest deposit accounts for most of total production volume; logistic constraints complicate sale of products; no diversification of production or sales; weak market position with presence in one region

Source: ACRA

3.1.3. Production and refining/processing technologies

The use of advanced production and refining/processing technologies can significantly increase the efficiency of a company's operations and reduce the cost of production, providing greater flexibility in periods of adverse price changes.

Refining/processing efficiency and yield also affect a company's level of product diversification and its ability to produce a high-margin final product.

The qualitative assessment category for the production and refining/processing technologies indicator is determined according to Table 4.

Table 4. Qualitative assessment of production and refining/processing technologies

Assessment category	Main features
I	Leader in terms of production and refining/processing technologies; high oil and gas refinery/processing yield; refines/processes virtually all extracted feedstock
II	High level of production and refining/processing technologies; moderately high oil and gas refinery/processing yield; refines/processes most extracted feedstock
III	Medium level of production and refining/processing technologies; medium oil and gas refinery/processing yield; refines/processes half of extracted feedstock
IV	Most upstream process operations are delegated to third-party contractors; low oil and gas refinery/processing yield; refining/processing mostly includes initial stages with only some re-refining processes
V	All process operations are delegated to third-party contractors; only carries out initial refining/processing

Source: ACRA

3.2. Financial Policy and Corporate Governance

To assess financial policy and corporate governance, ACRA uses a common set of characteristics that translate into a qualitative assessment category for all industries (for a general description of the concept of corporate governance qualitative assessment, see Section 5 of the Methodology). The assessment of financial policy and corporate governance is carried out according to Table 5.

4 Financial Profile

The following describes the basic factors in the rating analysis of the financial profile, the degree of their influence when determining the credit rating of a non-financial corporation, and assessment specifics.

To assess qualitative indicators in the financial profile of rated entities in the oil and gas industry, ACRA uses a common set of characteristics that translate into a qualitative assessment category for all economy sectors (for a general description of qualitative assessment of financial profile indicators, see Section 6 of the Methodology).

Quantitative indicators in the financial profile are assessed in points on the basis of being part of a particular range and qualitative indicators, on the basis of qualitative assessment categories according to Table 6.

4.1. Size

To assess the business scale of oil and gas companies, ACRA uses the operating indicators of production volume and the size of proven reserves.

Significant production volumes demonstrate the scale of a company's business and the extent of its influence on the balance of the global energy market and ensure easier access to wider target markets, as well as the possibility of their diversification.

The proven reserves factor assesses a company's ability to maintain current levels of production and operating performance. Furthermore, the size of proven reserves, the recovery of which is economically justified, determines a company's long-term stability. The rating analysis takes into account how developed the reserves are, the cost of further exploration, and the cost of production. Having large proven reserves provides a company with greater flexibility in budgeting the costs of exploring new deposits during periods of declining commodity prices.

4.2. Profitability and Efficiency

The profitability of oil and gas companies is measured based on EBIT and cash costs per BOE.

The EBIT margin reflects a company's ability to manage operating costs efficiently. As the industry is highly cyclical, companies often have to balance out production rates and operating expenditures to maintain profitability.

Low cash costs per BOE is an important competitive advantage that ensures the stability of a company during sharp declines in commodity prices.

4.3. Leverage

The leverage assessment is a key factor in analyzing the financial sustainability of companies in the oil and gas industry given the industry's high exposure to the business cycle. To assess leverage, ACRA uses an indicator calculated as the ratio of total debt to FFO before interest payments. Qualitative characteristics are also used to assess leverage.

4.4. Coverage

To assess coverage, ACRA uses an indicator calculated as the ratio of FFO before interest payments to interest payments.

4.5. Liquidity

To assess liquidity, ACRA uses the short-term liquidity ratio and qualitative characteristics.

4.6. Cash Flow

To assess cash flow, ACRA uses the FCF margin, as well as the qualitative assessment of FCF stability.

The ability to fund an investment program with operating cash flow is important to companies in the industry, especially in unfavorable pricing conditions. In this context, companies in higher rating categories can generate positive FCF even during periods of adverse price dynamics.

Dividend payouts made by a company are analyzed separately. Amid high capital costs, high dividend payouts can exert significant pressure on FCF.

Table 5. Operational profile factors

Factors	Sub-factors	Sub-factor weighting	Sub-factor score				
			5	4	3	2	1
Business profile	Degree of vertical integration	40%	V	IV	III	II	I
	Geographic diversification	30%	V	IV	III	II	I
	Production and refining/processing technologies	30%	V	IV	III	II	I
Financial policy and corporate governance	Financial policy	50%	V	IV	III	II	I
	Corporate governance	50%	V	IV	III	II	I

Source: ACRA

Table 6. Financial profile factors

Factors	Sub-factors	Sub-factor weighting	Sub-factor score				
			5	4	3	2	1
Size	Production volume (thousand BOE/D)	70%	[0; 20)	[20; 50)	[50; 150)	[150; 1,000)	[1,000; ∞)
	Proven reserves (mln BOE)	30%	[0; 30)	[30; 100)	[100; 500)	[500; 5,000)	[5,000; ∞)
Profitability and efficiency	EBIT margin	50%	(−∞; 3%)	[3%; 7%)	[7%; 15%)	[15%; 30%)	[30%; ∞)
	Cash costs of production (USD/BOE)	50%	(40; ∞)	(30; 40]	(20; 30]	(10; 20]	[0; 10]
Leverage	Total debt to FFO before interest payments	70%	(5; ∞)	(3.5;5]	(2;3.5]	(1;2]	[0; 1]
	Qualitative leverage assessment	30%	V	IV	III	II	I
Coverage	FFO before interest payments to interest payments	100%	(−∞; 2)	[2; 4)	[4; 10)	[10; 20)	[20; ∞)
Liquidity	Liquidity ratio	50%	(−∞; 0.8)	[0.8; 1)	[1; 1.25)	[1.25; 1.5)	[1.5; ∞)
	Qualitative liquidity assessment	50%	V	IV	III	II	I
Cash flow	FCF margin	50%	(−∞; −10%)	[−10%; 0%)	[0%; 5%)	[5%; 10%)	[10%; ∞)
	Qualitative assessment of FCF stability	50%	V	IV	III	II	I

Source: ACRA

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