ACRA

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

Real Estate Development and Infrastructure Construction

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 real estate development and infrastructure construction companies.

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

1 Industry Companies

The assessment approaches described in this document apply to companies in the construction industry[1] whose main business is:

- Real Estate Development: the development and sale of residential real estate (from small houses intended for one or several families to multi-apartment buildings);
- Infrastructure construction: construction of (1) civil infrastructure (roads, tunnels, bridges, ports), (2) industrial infrastructure (factories, power plants, processing facilities for various industries), (3) commercial real estate (offices, shopping centers, warehouses), and (4) social infrastructure (schools, hospitals).

2 Rating Factor Structure

Creditworthiness analyses of rated entities in the 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 construction companies

Profile	Factors	Factor weighting	Sub-factors
Operational Profile	Business profile	20%	Market position
			Volatility of financial results
			Diversification and dependence on supply of materials and subcontracting
	Financial policy and corporate governance	10%	Financial policy
			Corporate governance
Financial profile	Size	15%	Revenue (USD bln)
	Profitability	15%	EBITDA margin
	Leverage	15%	Total debt to EBITDA
			Total debt to capital
			Qualitative leverage assessment
	Coverage	15%	Funds from operations (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

[1] Unless otherwise specified, the term "companies in the construction industry' refers to companies whose activities are related to both infrastructure and residential construction.

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 construction industry company, and assessment specifics.

To assess operational profile qualitative indicators for rated entities in the construction 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 is based on a qualitative analysis of a number of indicators, including the company's market position and the size of its market share, as well as an analysis of its product line.

To analyze companies in the real estate development industry, types of housing formats, cost of construction, volatility of historical results, geographical diversification, dependence on supply of construction materials, and the level of subcontracting are evaluated. In addition, ACRA evaluates the ability of companies to complete projects on time and within the construction budget.

In infrastructure construction, ACRA evaluates geographic diversification by regions, including the level of their economic development. In order to assess the volatility of financial results, ACRA evaluates whether segments in the activities of various companies are correlated. The business profile is evaluated based on the sub-factors listed below.

3.1.1. Market position

For market position, ACRA assesses a company's position and its significance for both domestic and international markets, as well as its competitive advantages and the ability to sustain them in the future. In addition, a company's ability to increase the number of projects, consistency and success of strategy implementation, as well as experience in implementing complex projects are evaluated.

The qualitative assessment category for market position is determined according to Table 2.

Table 2. Qualitative assessment of market position

Assessment category	Main features
I	**Infrastructure construction:** implements the largest projects in the country, participates in international projects, an industry leader; project portfolio is well diversified by country or region of presence; has unique experience in implementing complex infrastructure projects (also applicable to subcontractors) **Real estate Development:** national player with well-balanced presence in various regions of the country, share in national market by volume of at least 70%; has a clear competitive advantage in a number of positions over other players; very effective cost management and the ability to sustain profitability; successful and consistent implementation of strategy, including a well balanced policy towards land bank; long-term successful history of finishing projects on time and within budget.
II	**Infrastructure construction:** implements major projects in the country and abroad; project portfolio is moderately diversified by country or region of presence; has significant experience in implementing complex infrastructure projects (also applicable to subcontractors) **Real Estate Development:** national player with a balanced presence in various regions of the country, share in national market by volume of at least 50%; has a strong market position, is one of the leading players in the real estate ; competitive advantage in at least one segment; effective cost and the ability to sustain margins; balanced policy towards management of land bank, history of finishing projects mostly on time and within budget
III	**Infrastructure construction:** implements projects in one country, but projects are well diversified across several economic regions; has experience in implementing complex infrastructure projects (also applicable to subcontractors) **Real Estate Development:** one of the three largest players in the country's real estate market (share of regions in the national market of at least 30%), a leader in a number of segments; high brand recognition in the country and stable market position; consistent and successful implementation of the strategy; policy towards land bank acquisitions can be aggressive
IV	**Infrastructure construction:** implements projects in a limited number of economic regions of the country; has little experience in implementing complex infrastructure projects (also applicable to subcontractors) **Real estate development:** among the top five players in the country's real estate market (share of regions in the national market of less than 30%); high brand recognition in one key region of presence, but partial loss of market position possible due to increased competition; some inconsistency in strategy implementation; aggressive policy towards land bank acquisitions
V	**Infrastructure construction:** implements projects in one region of the country or in one segment that generates most of the revenue; does not have sufficient experience in implementing complex infrastructure projects (also applicable to subcontractors) **Real Estate Development:** low brand recognition; very high risk of concentration on a single region or project; strategy not consistently implemented, characterized by increased aggressiveness, stated goals not achieved

Source: ACRA

3.1.2. Volatility of financial results

The volatility of financial results is often associated with inconsistent or unsuccessful implementation of the strategy or with external shocks that may occur during construction. Stable financial and operational results make it possible to better forecast a company's performance in the future and reduce the likelihood of a shock liquidity deficit, which has a positive impact on a company's credit rating.

The qualitative assessment category for volatility of financial results is determined according to Table 3.

Table 3. Qualitative assessment of volatility of financial results

Assessment category	Main features
I	Very low volatility of key financial indicators due to a large and stable project portfolio; historical operating activities ensure very high predictability of financial results; impeccable history of implementing projects on time and within budget
II	Low volatility of key financial indicators due to a moderately large and stable project portfolio; historical operating activities ensure good predictability of financial results; history of successfully implementing projects on time and within budget
III	Moderate volatility of key financial indicators due to a moderately changing project portfolio; historical operating activities provide sufficient predictability of financial results; history of mostly successfully implementing projects on time and within budget
IV	High volatility of key financial indicators due to a changing project portfolio; historical operating activities do not provide sufficient predictability of financial results; history of implementing projects indicates deviations from deadlines for commissioning facilities and partial budget excess
V	Very high volatility of key financial and operational indicators due to a limited project portfolio; forecasting financial results is not possible; history of implementing projects indicates frequent deviations from deadlines for commissioning facilities and budget excess

Source: ACRA

3.1.3. Diversification and dependence on materials and subcontracting

Construction companies are often dependent on material suppliers and subcontractors. In this regard, they cannot fully control all stages of construction, which increases the risk of delays and postponement of project completion dates, as well as the risk of cost over-run. In addition, the success of major projects depends on a company's experience.

In infrastructure construction, an important factor in the successful implementation of large-scale projects is technical capabilities, including the provision of or free access to necessary construction materials or the availability of internal resources for a number of contracting jobs.

Real estate development is one of the most sensitive industries to geographical and project diversification by housing format or type. Therefore, suspending or restrictions on a company's project may lead to difficulties with the development of another project and to a sharp deterioration in operational and financial indicators. Broad project diversification by region and format/type reduces the negative impact on operating results.

The qualitative assessment category for diversification and dependence on materials and subcontracting is determined according to Table 4.

Table 4. Qualitative assessment of diversification and dependence on materials and subcontracting

Assessment category	Main features
I	**Infrastructure construction:** share of subcontracting contracts is minimal, has its own construction facilities and materials to a large degree; implements major projects in the country, participates in international projects**Real Estate Development:** planned revenue is well diversified across a large number of projects of various types and formats (less than 5% of revenue falls on a single project); acts as a major contractor in complex national and international projects; share of revenue from external contracting jobs at least 50% of annual revenue; has its own sales platform
II	**Infrastructure construction:** share of subcontracting contracts is insignificant, has its own construction facilities and materials to a large degree **Real Estate Development:** planned revenue for the largest project does not exceed 10% of planned revenue for three years; acts as a major contractor in complex national and international projects; share of revenue from external contracting jobs at least 30% of annual revenue; has its own sales platform
III	**Infrastructure construction:** share of subcontracting contracts is significant, has its own construction facilities and materials to a partial degree **Real Estate Development:** planned revenue for the largest project does not exceed 15% of planned revenue for three years; significant part of construction jobs is carried out in-house, to a large extent has its own construction materials or easy access to materials and subcontracting jobs; high level of management functions, including the function of general contractor and technical supervisor; in-house design functions; has its own sales platform, share of agency sales is minimal
IV	**Infrastructure construction:** share of subcontracting contracts is significant, partially has its own construction facilities and materials; implements major regional projects **Real Estate Development:** a leader in the country's real estate market, planned revenue for the largest project does not exceed 25% of planned revenue for three years; partially performs construction work internally and partially has its own construction materials; high level of management functions, including the function of general contractor and technical supervisor; mainly performs design functions in-house; has its own sales platform, share of agency sales does not exceed 25%
V	**Infrastructure construction:** relies fully on subcontracting; has little to no proprietary construction facilities and materials; implements regional projects **Real Estate Development:** a leader in the residential real estate market in one of the country's key regions, planned revenue for the largest project does not exceed 33% of planned revenue for three years; construction works are subcontracted; does not own production facilities; high level of management functions, including the function of general contractor and technical supervisor; mainly performs design functions in-house; does not have its own sales platform

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 the 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 the qualitative indicators in the financial profile of rated entities, ACRA uses a common set of characteristics that translate into a qualitative assessment category for all industries (for a general description of the qualitative assessment of financial profile indicators, see Section 6 of the Methodology).

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

4.1. Size

To assess the business scale of companies in the industry, ACRA uses the size of their revenue, which is important in assessing creditworthiness. In addition, revenue dynamics are analyzed: companies that demonstrate high growth rates in this indicator are rated higher than those with stagnant revenue or low growth rates.

4.2. Profitability

Profitability is assessed based on EBITDA. ACRA believes this best reflects a company's ability to manage operating costs efficiently. Companies in the industry have to adjust and balance operating costs between projects to maintain profitability. High profitability indicates a company's ability to optimize costs in a volatile environment.

4.3. Leverage

ACRA uses the ratio of total debt to EBITDA to assess leverage. In some cases, for example, when residential companies operate under certain financing schemes, the total debt indicator may be subject to analytical adjustments and net debt may be used. Delays in revenue recognition for companies in the industry are mitigated by accounting for the forecast estimate, as well as by the additional use of the total debt to equity indicator, which is applied only to companies operating in the residential sector. Qualitative characteristics are also used to assess leverage.

4.4. Coverage

To assess the coverage factor for rated entities in the industry, ACRA uses an indicator calculated as the ratio of FFO before interest payments to interest payments.

In some cases, when using certain financing schemes, the amount of interest payments can be subject to analytical adjustments and net interest payments may be used.

4.5 Liquidity

In order to assess liquidity, ACRA uses the short-term liquidity ratio and qualitative characteristics.

4.6. Cash Flow

To assess the cash flow of rated entities in the industry, ACRA uses the FCF margin indicator, as well as the qualitative assessment of FCF stability.

Consistently positive FCF allows construction companies to invest in increasing construction volumes, land, and provide necessary liquidity cushions.

Table 5. Operational profile factors

Factors	Sub-factors	Sub-factor weighting	Sub-factor score				
			5	4	3	2	1
Business profile	Market position	40%	V	IV	III	II	I
	Volatility of financial results	30%	V	IV	III	II	I
	Diversification and dependence on materials and subcontracting	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

<table>
<tr><th rowspan="2">Factors</th><th rowspan="2" colspan="2">Sub-factors</th><th rowspan="2">Sub-factor weighting</th><th colspan="5">Sub-factor score</th></tr>
<tr><th>5</th><th>4</th><th>3</th><th>2</th><th>1</th></tr>
<tr><td rowspan="2">Size</td><td rowspan="2">Revenue (USD bln)</td><td>Real Estate Development</td><td rowspan="2">100%</td><td>[0; 1,5)</td><td>[1,5; 2,5)</td><td>[2,5; 5)</td><td>[5; 30)</td><td>[30; ∞)</td></tr>
<tr><td>Infrastructure construction</td><td>[0; 1)</td><td>[1; 2)</td><td>[2; 4)</td><td>[4; 20)</td><td>[20; ∞)</td></tr>
<tr><td rowspan="2">Profitability</td><td rowspan="2">EBITDA margin</td><td>Real Estate Development</td><td rowspan="2">100%</td><td>(-∞; 5%)</td><td>[5%; 15%)</td><td>[15%; 25%)</td><td>[25%; 35%)</td><td>[35%; ∞)</td></tr>
<tr><td>Infrastructure construction</td><td>(-∞; 2%)</td><td>[2%; 5%)</td><td>[5%; 10%)</td><td>[10%; 15%)</td><td>[15%; ∞)</td></tr>
<tr><td rowspan="3">Leverage</td><td colspan="2">Total debt to EBITDA</td><td>50%</td><td>(8; ∞)</td><td>(5; 8]</td><td>(3; 5]</td><td>(1; 3]</td><td>[0; 1]</td></tr>
<tr><td colspan="2">Total debt to capital</td><td>30%</td><td>(2; ∞)</td><td>(1,5; 2]</td><td>(1; 1,5]</td><td>(0,5; 1]</td><td>[0; 0,5]</td></tr>
<tr><td colspan="2">Qualitative leverage assessment</td><td>20%</td><td>V</td><td>IV</td><td>III</td><td>II</td><td>I</td></tr>
<tr><td>Coverage</td><td colspan="2">Funds from operations (FFO) before interest payments to interest payments</td><td>100%</td><td>(-∞; 1)</td><td>[1; 2)</td><td>[2; 5)</td><td>[5; 8)</td><td>[8; ∞)</td></tr>
<tr><td rowspan="2">Liquidity</td><td colspan="2">Liquidity ratio</td><td>50%</td><td>(-∞; 0,8)</td><td>[0,8; 1)</td><td>[1; 1,25)</td><td>[1,25; 1,5)</td><td>[1,5; ∞)</td></tr>
<tr><td colspan="2">Qualitative liquidity assessment</td><td>50%</td><td>V</td><td>IV</td><td>III</td><td>II</td><td>I</td></tr>
<tr><td rowspan="2">Cash flow</td><td colspan="2">Free cash flow (FCF) margin</td><td>50%</td><td>(-∞; -10%)</td><td>[-10%; 0%)</td><td>[0%; 5%)</td><td>[5%; 10%)</td><td>[10%; ∞)</td></tr>
<tr><td colspan="2">Qualitative assessment of FCF stability</td><td>50%</td><td>V</td><td>IV</td><td>III</td><td>II</td><td>I</td></tr>
</table>

Source: ACRA

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