

Methodology for Assigning Credit Ratings to Non-financial Corporations under the International Scale

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1 Scope of the Methodology

The Methodology for Assigning Credit Ratings to Non-financial Corporations under the International Scale (hereinafter, the Methodology) of the Analytical Credit Rating Agency (Joint-Stock Company) (hereinafter, ACRA or the Agency) determines the criteria for assessing the creditworthiness of non-financial corporations (hereinafter, rated entities) for the purposes of assigning credit ratings under ACRA's international rating scale.

When assigning ratings, the Agency applies a universal approach described in this Methodology, while also providing consistent and comparable indicator assessment scores for all sectors and jurisdictions.

The Agency does not apply this Methodology to assess financial institutions (including banks, insurance companies, leasing companies, microfinance companies, international financial institutions and supranational development institutions), project finance companies, organizations engaged mainly in financial intermediary activities, or sovereign rated entities. The Methodology does not apply to nonfinancial companies performing technical functions (holders of tangible or financial assets, etc.).

The Methodology is not an exhaustive document and references other ACRA methodologies. For companies in various industries, ACRA uses a variety of rating analysis factors and assessment principles set out in the annexes of this Methodology (hereinafter, Industry Appendices).

The Methodology shall be applied on an ongoing basis until a new version is approved by ACRA's methodology committee.

To keep this Methodology up to date, ACRA will review and amend it in the following cases:

- More than three deviations from this Methodology in a quarter when performing rating actions;
- The need to review based on methodology application monitoring by ACRA's methodology group;
- Non-compliance with Federal Law No. 222-FZ, dated July 13, 2015, "On Activity of Credit Rating Agencies in the Russian Federation, on Amending Article 76.1 of the Federal Law 'On the Central Bank of the Russian Federation' and Recognizing Null and Void Certain Provisions of Legislative Acts of the Russian Federation;"
- Immediate review of the Methodology requested by ACRA's Compliance and Internal Control Service.

ACRA reviews the Methodology in accordance with its internal documents no later than one calendar year from the date of its latest review. The Methodology may be amended based on the review.

When using this Methodology, any deviation from it is documented and disclosed by ACRA on its official website at www.acra-ratings.com when publishing a credit rating or a credit rating outlook, stating the reason for the deviation.

If any errors are found in this Methodology that have affected or may affect credit ratings and/or credit rating outlooks, ACRA will analyze and review it in accordance with established procedures. Information about such actions and the new version of the Methodology will be

submitted to the Bank of Russia in a manner set forth by the latter. If the identified errors affect previously assigned ratings, ACRA will disclose that information on its official website.

If the proposed changes to this Methodology are significant (such as the modification of individual factors or the wording of the Methodology) and affect or may affect existing credit ratings, ACRA will:

- 1) provide the Bank of Russia with information about the proposed changes in the Methodology, stating the reasons for, and implications of, such changes, including the effect on credit ratings assigned in accordance with the Methodology, as well as post this information on its official website at www.acra-ratings.com;
- 2) assess whether it is necessary to review all credit ratings assigned in accordance with this Methodology within six months of its amendment;
- 3) review credit ratings within six months of the Methodology's amendment (provided the need to review them is discovered based on the conducted assessment).

2 Sources of Information

In its analytical activities, ACRA relies both on the information provided by the rated entity and information from other sources. The main sources of information used by ACRA to perform rating analyses of corporate entities under the international scale are as follows:

- 1) Information provided by the rated entity:
 - Financial statements of the rated entity and companies within its group under IFRS, US GAAP, or comparable national standards with an auditor's opinion and notes for the most recent completed fiscal year and the two prior periods;
 - Quarterly and semiannual statements of the rated entity and its group companies within a group under IFRS, US GAAP, or comparable national standards with an auditor's opinion and notes for the most recent reporting period and comparable prior periods;
 - Management reporting data;
 - Securities prospectus;
 - Quarterly reports of a securities issuer;
 - Publications of the rated entity (press releases, investor presentations);
 - Information provided orally or in writing throughout the rating meeting;
 - Financial and operating model of the rated entity;
 - Internal methodologies and policies of the rated entity;
 - Information provided for rating purposes by the rated entity at ACRA's request in accordance with the disclosure questionnaire and other information provided by the rated entity in the course of the rating process (answers to ACRA's questions, spreadsheet data, and presentations).
- 2) Information from publically available sources:
 - Government statistics;
 - Publications by the regulator in the jurisdiction in which the rated entity operates;

- Mass media data;
- Data from other sources, believed by ACRA to be significant for rating analysis.

3) ACRA's internal information:

- Data related to rating analyses previously performed by ACRA;
- Aggregated financial and operating indicators of other rated entities with relevant analytical adjustments;
- Macroeconomic and industry forecasts by ACRA's internal units.

This list of sources is not exhaustive.

In the absence of enough information in order to apply the Methodology, ACRA refrains from assigning a credit rating. If ACRA identifies that there is not enough information to maintain the current credit rating, ACRA withdraws the credit rating with no further action taken with respect to it. All rating actions are reflected in rating press releases and/or reports published on ACRA's official website.

The sufficiency of information is determined based on the possibility of performing rating analyses in accordance with ACRA's general rating process principles¹. The main criteria of information sufficiency is as follows:

- Ability to perform quantitative and qualitative analyses of the financial and business activities of the rated entity;
- Ability to analyze external and internal risk factors that may affect the creditworthiness of the rated entity;
- Ability to perform comparative analysis against peers.

If information is limited, ACRA may decide to assign a credit rating taking into account the analytical assumptions and adjustments made by rating analysts. For example, in certain cases, a rated entity is not able to produce comprehensive IFRS or US GAAP financial statements because of its business specifics. In such cases, the financial ratios used in credit assessments may be adjusted when determining if there is sufficient information. If the rated entity's financial statements under national standards are used as the main source of financial information, a credit rating may not be assigned unless the national standards can be mapped to IFRS or US GAAP and the information disclosed in such statements is sufficiently detailed.

Credit analysis specifics imply the need to adjust some of the reporting items and recalculate financial ratios accordingly in order to perform comparable analyses of companies from different sectors and jurisdictions. Therefore, financial indicators published by ACRA may not always match the indicators in the rated entity's audited financial statements or the financial ratios calculated on their basis.

3 Default of a Corporate Entity

ACRA defines a default by a corporate entity according to the [Key Concepts Used by the Analytical Credit Rating Agency within the Scope of its Rating Activities](#).

In addition, in the context of this Methodology, default is understood to mean any event resulting in a declaration of default by creditor companies including, but not limited to, a

¹ Please refer to Rating Actions Procedures and General Principles of the Rating Process of the Analytical Credit Rating Agency (Joint Stock Company).

failure to pay within the stipulated time period, the stipulated amounts of coupon, interest, or principal on a direct financial obligation or on an obligation subject to an unambiguous, irrevocable, and unconditional guarantee from the corporate, or any violations of covenants subsequently resulting in a declaration of default. Default does not include technical default instances, i.e., default events remedied within due time (remedy period).

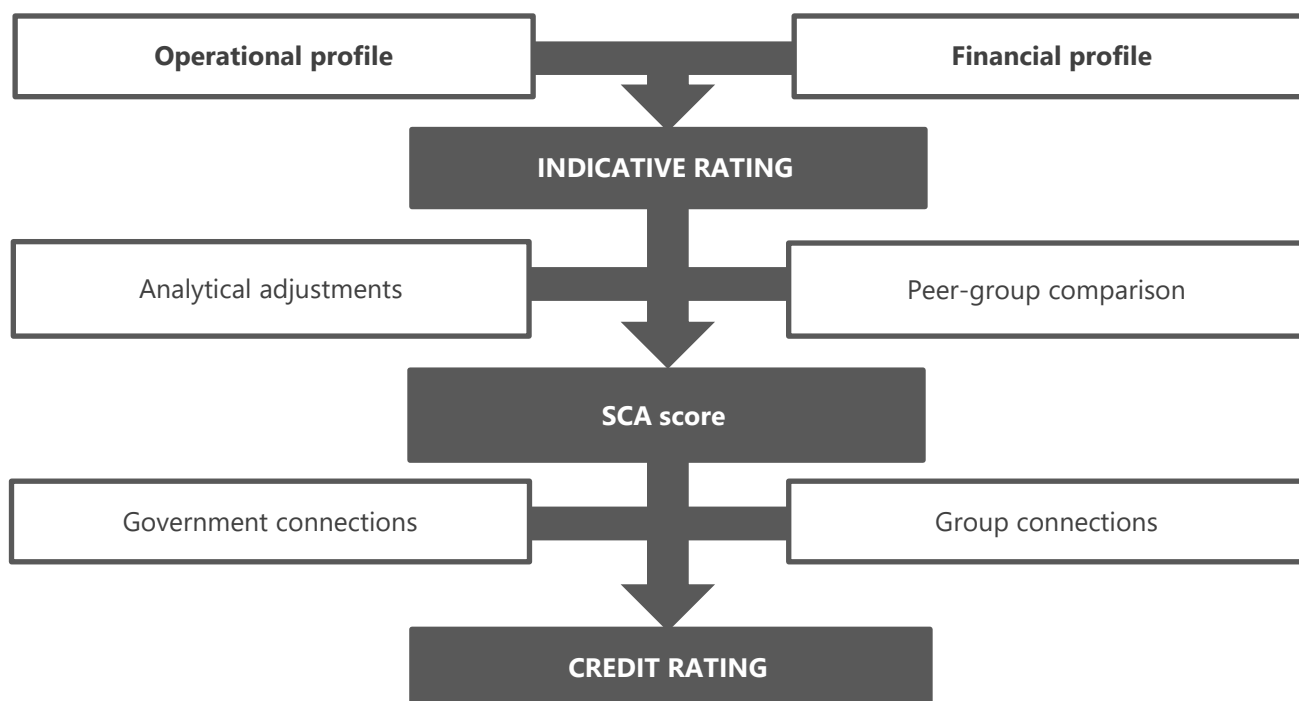
4 Rating Analysis Structure

The rating analysis comprises three main stages:

- 1) Indicative rating assessment based on the assessment of the operational profile and the financial profile;
- 2) The rated entity's standalone creditworthiness assessment (hereinafter, SCA) based on the indicative rating and subject to analytical adjustments and comparison with the peer group;
- 3) Credit rating assignment based on the rated entity's SCA score taking into account the degree of connection with a government and/or group.

The main rating analysis stages are presented in Figure 1.

Figure 1. Main rating analysis stages



Source: ACRA

4.1. Indicative Rating Assessment

The indicative rating assessment consists of the following stages:

- Deriving assessment scores for individual indicators (subfactors) within the operational and financial profiles;
- Deriving the aggregate scores for the blocks of indicators (factors) within the operational and financial profiles;
- Deriving the final weights of indicators within the operational and financial profiles;
- Assigning an indicative rating.

4.1.1. Assessment of operational and financial profile subfactors

When determining the indicative rating, ACRA assesses the operational and financial profiles of the rated entity. Each profile consists of blocks of indicators (factors) that are subdivided into separate indicators (subfactors).

Significant differences between industries call for rating analysis flexibility. ACRA uses an individual approach to analyze companies in each industry, therefore the composition of subfactors and their weights is industry-specific and disclosed as part of separate Industry Appendices.

During the analysis, each indicator is assigned a score on a scale consisting of five categories (from 1 to 5). A larger numerical value corresponds to a lower score for this indicator, while a smaller value corresponds to a higher score.

In certain cases, when analyzing qualitative indicators, some subfactor characteristics may correspond with several assessment categories at the same time, which is especially true for qualitative factors. In this case, an assessment score shall be assigned based on an expert opinion, taking into account the most important parameters. Assessment score ranges for industry subfactors (if industry-specific) are disclosed as part of separate Industry Appendices.

4.1.2. Assessment of operational and financial profile factors

The composition of indicators inside blocks is individual to each industry, but to ensure comparability within the indicative rating assessment, ACRA makes use of a consistent composition of factors shown in Table 1, regardless of the industry.

The assessment score for a factor (block of indicators) is determined based on the average weighted assessment score for the subfactors making up the block. The weights of indicators in the block are fixed. They are set individually for each industry and listed in the relevant Industry Appendices. The sum of indicator weights in a block is 100%.

Table 1. The composition of factors in indicative rating assessment

Profile	Factors (blocks of indicators)
Operational profile	Business profile
	Financial policy and corporate governance
Financial profile	Size
	Profitability
	Leverage
	Coverage
	Liquidity
	Cash flow

Source: ACRA

4.1.3. Description of the floating weights concept

Under this Methodology, factors (blocks of indicators) are assigned weights reflecting their importance in determining the rated entity's creditworthiness. ACRA uses a floating weights

method, in which the weights of individual factors can increase as their scores deteriorate. The final weights of indicator blocks are determined in several steps:

- 1) Determining the base weights of indicator blocks. The base weights of indicator blocks reflect the accepted relationship between weights that reflects most accurately the credit quality of rated entities under normal operating conditions. The base weights of indicator blocks are set individually for each industry and listed in the relevant Industry Appendices. The sum of base weights of indicator blocks within one industry is 100%;
- 2) Determining the multipliers of the base weights of indicator blocks. Base weight multipliers for the indicator blocks of leverage, coverage, and liquidity of are set based on the assessment score derived for the block and the based weight in accordance with Table 2. When applying a multiplier other than 1, the weight multipliers of all other blocks used in indicative rating assessment are reduced proportionally;

Table 2. Multipliers for base weights of financial profile factors

Blocks of indicators	Assessment score for the indicator block				
	1	2	3	4	5
Leverage	1.0	1.0	1.0	1.5	2.0
Coverage	1.0	1.0	1.0	1.5	2.0
Liquidity	1.0	1.0	1.0	3.0	6.0

Source: ACRA

- 3) Determining the final weights of indicator blocks. The final weights of indicator blocks are determined by multiplying the base weight of the block by the corresponding multiplier. The sum of the final weights of indicator blocks is 100%.

4.1.4. Assigning an indicative rating

When assigning an indicative rating, the derived factor assessment scores are multiplied by their final weights. The resulting scoring points are rounded to the hundredth and translated to an indicative rating assessment score in accordance with Table 3. The rating model for corporations uses 17 notches, from AAA to CCC/C.

If the group structure includes business lines in various industries, the indicative rating assessment may be mixed: the scoring points derived on the basis of separate Industry Appendices are weighted to derive the rated entity's resulting scoring points in proportions that depend on the contribution of each business line in the overall operating income and translated into the final indicative rating.

Table 3. Correspondence of scoring points and indicative ratings

Category	Rating	Scoring points range	Increment
AAA	AAA	[1.00; 1.20)	0.20
AA	AA+	[1.20; 1.40)	0.20
	AA	[1.40; 1.60)	0.20
	AA-	[1.60; 1.80)	0.20
	A+	[1.80; 2.00)	0.20
A	A	[2.00; 2.20)	0.20
	A-	[2.20; 2.40)	0.20
	BBB+	[2.40; 2.60)	0.20
BBB	BBB	[2.60; 2.80)	0.20
	BBB-	[2.80; 3.00)	0.20
	BB+	[3.00; 3.20)	0.20
BB	BB	[3.20; 3.40)	0.20
	BB-	[3.40; 3.60)	0.20
	B+	[3.60; 3.80)	0.20
B	B	[3.80; 4.00)	0.20
	B-	[4.00; 4.20)	0.20
	CCC/C	CCC/C	[4.20; 5.00]

Source: ACRA

4.2. Assigning a Standalone Credit Assessment Score

A standalone credit assessment is based on a 19-notch scale from AAA to C. The SCA score is assigned on the basis of the indicative rating.

As part of assigning an SCA score to the rated entity, ACRA assesses the need to adjust the derived indicative rating depending on the jurisdiction in which the rated entity operates and may also make a comparison against the peer group.

The SCA score is assigned taking into account the mathematical sum of adjustments. The assigned SCA score, however, cannot differ from the indicative rating by more than six notches. When an SCA score is assigned on the basis of a CCC/C credit rating, the base SCA score will be a rating of CCC, but a rating of CC or C may also be assigned based on an expert opinion.

4.2.1. Analytical adjustments

Jurisdiction risk

Under this Methodology, country risk is accounted for in the form of an adjustment to the indicative rating. The number of adjustment notches depends on the jurisdiction's credit rating (credit estimate) and the indicative rating.

Jurisdiction risk adjustment is determined according to the following principle: the rated entity's indicative rating should not, in most cases, exceed the credit rating or credit estimate of the country in which it operates.

The number of jurisdiction risk adjustment notches is determined based on an expert opinion. Jurisdiction risk may include regulatory risks of individual industries, the developing nature of the legal system, and other risks arising when doing business in a particular jurisdiction. Applying adjustments may lower the SCA score by no more than three notches from the indicative rating.

Event risk

In the course of the rating analysis, ACRA takes into account the probability of an adverse event that may result in a sharp decrease in the rated entity's fundamental credit quality. . Such events may include:

- M&A transactions in which the rated entity is involved;
- Anticipated debt refinancing challenges or difficulties in financing strategic projects;
- Implementation of a forced capital restructuring program;
- Upcoming regulatory changes;
- Closure of foreign markets due to reasons beyond the rated entity's control;
- Anticipated or current conflict between the rated entity's shareholders;
- Drastic changes in financial policy, e.g., extraordinary dividend payout or significant stock buyback;
- Default, restructuring or risk of breaking off relationships with the rated entity's largest counterparties;
- Anticipated or current litigation against the rated entity.

The above list is not exhaustive. Since such events may affect the rated entity's operations and financial performance in widely different ways, ACRA analyses each event on a case-by-case basis in terms of its influence on the rated entity's indicative rating.

As a rule, event risks only place one-way downward pressure on the rated entity's indicative rating. As such, ACRA takes into account the neutralizing factors that may mitigate the negative effect of an adverse event. The number of event risk adjustment notches is determined based on an expert opinion. Applying adjustments may lower the SCA score by no more than three notches from the indicative rating.

4.2.2. Peer-group analysis

When making a comparative analysis against the peer group, ACRA may use the data provided by other rated entities in the course of their rating assessment, as well as data from financial statements of companies not rated by ACRA.

Peer-group analysis covers quantitative and qualitative characteristics. ACRA takes into account both historical operating and financial performance and internal forecasts (if any). As most compared quantitative and qualitative indicators are assessed irrespective of those of other rated entities, the analysis is aimed at:

- Ensuring the comparability of ratings and consistency in application of the Methodology;

- Taking into account interaction between rated entities within the same industry and across related industries.

Some specific characteristics may not influence the creditworthiness of rated entities compared to other companies, while a few, when compared to those of industry peers, may affect the rated entity's SCA score positively or negatively.

The rated entity having an advantage over its peers (e.g., exceptional unchallenged leadership in production costs or extremely low leverage for its industry) may affect the SCA score positively. At the same time, any shortcomings identified in the course of the peer analysis (e.g., extremely low transparency compared to industry peers) may decrease the SCA score. When assigning an SCA score, both positive and negative adjustments are made irrespective of how other factors are assessed. Upon comparison against the peer group, the SCA score may be adjusted by no more than two notches from the indicative rating assessment score in either direction.

4.3. Assigning a Credit Rating

As part of a credit rating assignment to the rated entity, ACRA assesses the need for adjustments to the derived SCA score depending on the degree of connection with a government and/or group of companies.

If the rated entity is not part of a group of companies and/or it is not connected with a government, it may be assigned a credit rating that matches the SCA score. If such a connection does exist, the credit rating may be adjusted by a certain number of notches from the SCA score (depending on the mathematical sum of adjustments) in either direction. Adjustments shall be made in accordance with ACRA's other methodologies.

RD, SD, and D ratings are assigned when the rated entity is in default on any or all of its financial obligations.

A credit rating outlook reflects ACRA's opinion on the likelihood of change in the credit rating over a certain time interval (usually 12 to 18 months).

A change in the credit rating outlook is typically associated with ACRA's internal forecasts of possible changes in quantitative and qualitative factors and key internal and external risk factors that affect the SCA score and the changes that the Agency expects will take place in the relationships with the government and/or the group of companies. In addition, when a credit rating outlook is determined, ACRA takes into account recent developments in the operating environment and economy. A change in a credit rating outlook is not necessarily a precursor to a change in the credit rating.

5 Assessing the Operational Profile

Assessment of the operational profile is a fundamental component in the credit analysis of a rated entity. The operational profile analysis is based on the assessment of qualitative indicators. The operational profile comprises two main blocks of indicators: business profile, and financial policy and corporate governance.

5.1. Business Profile

Sector-specific factors may complicate a detailed comparison not only of rated entities from different sectors and jurisdictions under a single methodology, but sometimes also those representing the same industry and jurisdiction.

As a rule, business profile indicators (subfactors) include an assessment of the regulatory framework, the structure and diversification of the rated entity's business, as well as the characteristics of markets and distribution channels. A list of the indicators used for each industry is disclosed as part of Industry Appendices, except in cases where the rated entity falls into the category of other industries. For rated entities from other industries, the business profile is assessed on the basis of cost analysis and the factors affecting costs, the structure and diversification of the rated entity's business, as well as the characteristics of the markets and distribution channels. The final assessment score in this case is based on an expert opinion.

The resulting business profile score may be adjusted based on an expert opinion, but by no more than one point.

5.1.1. Market position

For a number of industries, assessment of the market position is a key indicator of the long-term sustainability of companies. For rated entities in these industries, the competitive environment is analyzed both globally and in a specific product category. Concentration of players in the given market segment and market share dynamics are also analyzed. A dominant market position may be due to brand strength and leadership in a particular segment.

Market position is also determined by the degree of market concentration. A company's leadership in a highly concentrated market scores higher than its leadership in a highly fragmented market. A company's strong market positions in the global market may substitute a position in the national market, if offering the product in the national market seems inappropriate. In this case, ACRA pays special attention to assessment of market loss risks.

If ACRA expects a significant change in the rated entity's market share, the score may be subject to further expert adjustment, but by no more than one assessment category up or down.

5.1.2. Regulatory environment

For a number of industries, assessment of the regulatory environment is critical. The score for this factor largely depends on the current regulatory practices and the potential risk of their future changes. Predictable and well-established regulations have a positive impact on the financial sustainability of the rated entity. A politically motivated current legal environment or a history of unpredictable and negative initiatives for the sector can have a negative impact on the rated entity.

5.1.3. Product diversification

Product diversification helps to reduce dependence on demand for a particular product or commodity.

For a number of industries, ACRA analyzes counterparty risks, including those in off-take sectors. Debtor analysis takes into account debtors' credit risk, while supplier analysis focuses on supplier diversification and availability of substitution. Selection of subfactors and their assessment are based on an expert opinion that takes into account the specifics of the rated entity's business in different sectors and jurisdictions.

5.1.4. Geographic diversification

Geographical diversification helps reduce risks associated with economic or social development of a given region or jurisdiction, or with geopolitical risk. The selection of subfactors and their assessment are based on an expert opinion that takes into account the specifics of the rated entity's business in different sectors and jurisdictions. ACRA may take into account, on the one hand, diversification and economic development of the regions where the company operates, and on the other hand, logistical advantages, export opportunities, and other factors.

In the course of analysis, ACRA takes into consideration the differences in the economic conditions in different jurisdictions. The rated entity's profitability in each of its jurisdictions is also taken into account. The share of exports in the revenue structure can further increase diversification of sales and reduce dependence on the phases of the economic cycle in the country of operation (however, the rated entity becomes more exposed to regulatory challenges and political factors).

For some industries, ACRA may also analyze the geographical concentration of key operating assets. The existence of such concentration may indicate exposure to technological risks, or potential logistical constraints, or both.

5.2. Financial Policy and Corporate Governance

A high level of corporate governance and well-established financial policy are capable of ensuring sustainability of the rated entity's operations in the future. In order to identify potential risks, ACRA conducts qualitative analysis in accordance with this section with respect to all companies.

5.2.1. Financial policy

When analyzing financial policy pursued by the rated entity, ACRA determines in whose interests (those of shareholders or creditors) such policy is implemented. The Agency analyzes the balance of creditors' and shareholders' interests both in terms of the policies approved by the rated entity's authorized bodies and in terms of the practical implementation of those policies.

The established dividend payout policies and treasury stock buyback practices, as well as the frequency of updating them are among the key determinants of the company's financial policy. Extraordinary dividend payments, a sharp increase in the total volume of payouts, or

payouts for completed financial periods (that ended earlier than 24 months before the last reporting date) may have a negative impact on the creditworthiness of the rated entity and adversely affect the assessment score for this factor.

Qualitative assessment of financial policy is made in accordance with Table 4.

Table 4. Qualitative assessment of financial policy

Assessment category	Main features
I	Consistently conservative financial policy; stable metrics; desire to preserve financial stability
II	Financial policy provides a good balance between the interests of shareholders and creditors; there is some risk of debt-funded M&A transactions, or the size of dividend payouts may potentially weaken the rating
III	Financial policy mainly promotes the interests of shareholders; financial risk increases as a result of dividend payouts, acquisitions, or other capital structure changes
IV	Financial policy is carried out in the interests of shareholders; a high financial risk as a result of dividend payouts, acquisitions, and other activities that change the capital structure
V	The implemented financial policy can lead to debt restructuring under changing economic circumstances

Source: ACRA

5.2.2. Corporate governance

As a rule, ACRA's rating analysts hold meetings with top managers and shareholders of companies in order to better understand their business strategy, policy and philosophy. Reviewing the rated entity's management strategy allows ACRA to, among other things, assess the likely actions of the management in a stressful situation.

Qualitative assessment of corporate governance is made in accordance with Table 5.

Table 5. Qualitative assessment of corporate governance

Assessment category	Main features
I	Good corporate governance; existence of a detailed strategy that is consistently implemented and an efficient board of directors that includes independent members; clear corporate structure and high financial transparency
II	Acceptable corporate governance; existence of a development strategy that is implemented; existence of a board of directors; somewhat complicated ownership structure and good financial transparency

III	Sufficient corporate governance; development strategy is not formalized and is not always followed; existence of a board of directors; moderately complicated ownership structure and moderate financial transparency
IV	Moderately weak corporate governance; strategy is not fully formulated and often not followed; activities of the board of directors are formal; complicated ownership structure and weak financial transparency
V	Weak corporate governance; lack of development strategy; no board of directors or its activities are merely formal; unnecessarily complicated ownership structure and low financial transparency

Source: ACRA

6 Assessing the Financial Profile

Financial profile analysis is a fundamental component in the credit assessment of a rated entity. In the financial profile analysis we use quantitative and qualitative indicators. The financial profile includes six main blocks of indicators: size, profitability, leverage, coverage, liquidity, and cash flow.

The list of main indicators along with a description of the procedure for their calculation is given in subsection 6.8 of this Methodology. Individual lists of indicators used for each industry, their scoring ranges, as well as base weights of indicators are disclosed within separate Industry Appendices, except in cases where the rated entity falls into other industries. When assessing rated entities in other industries, assessment ranges for some indicators may be determined based on an expert opinion depending on average indicators in the industry (a list of indicators that may be used to assess the financial profile is given in Table 9). In this context, assessment category III usually corresponds to the average sectoral value of the indicator.

ACRA analyzes financial indicators both based on actual data and forecasts, which allows the assessment score to be derived by taking into account the rated entity's expected growth dynamics. For forecasts, ACRA uses its own financial model for the rated entity. As a rule, for the financial profile factors, the weight of actual indicators for the last three years corresponds to the weight of the indicators forecasted by ACRA for the next three years. The greatest weight falls on the last historical year and the first forecast year, however, in certain cases, forecast values may be those carrying more weight.

The abovementioned approach may be applied, for example, for rating companies with a long operating cycle and uneven cash flows (such as certain machine building subsectors, as well as residential and infrastructure construction).

When the calculated value of an indicator approaches one of the set range boundaries or when the forecast values of the indicator for the next three periods transgress the boundaries of ranges, the quantitative assessment of financial profile indicators may involve borderline-value adjustments.

6.1. Size

In financial analysis, we assess the size of the rated entity, as it is important in terms of economy of scale, stability of business, competitive advantages and, as a rule, access to external financing on more favorable terms.

In order to make comparisons within an industry as correct as possible, ACRA approaches assessing the rated entity's size in different ways depending on the industry to which the rated entity belongs. Annual revenue or net fixed assets are generally used as the main determinants of size. ACRA may also use other size factors in its analyses to ensure the correct comparative assessment of companies within a particular industry.

6.2. Profitability

Financial analysis of a rated entity involves assessing the profitability factor. ACRA uses different indicators to assess profitability, depending on the analyzed industry. For some industries, several assessment indicators may be used.

6.3. Leverage

Financial analysis of a rated entity involves assessing the leverage factor. As a rule, ACRA defines debt obligations (debt) as financial liabilities classified by the rated entity as debt in its financial statements. At the same time, ACRA may make analytical adjustments to debt obligations with regard to off-balance sheet items and balance sheet items, if the Agency believes that they bear the main characteristics of debt.

Depending on the industry and the rated entity's specifics in respect of liquidity management, ACRA may use both gross debt and net debt indicators in the course of its analysis. When calculating net debt, ACRA may choose not to include all the available cash, financial assets and their equivalents as reflected in the financial statement. ACRA assesses the availability of these funds and the ability to convert them into cash promptly.

In addition to quantitative indicators, leverage assessment involves qualitative assessment of the rated entity's debt portfolio which is based on an expert opinion in respect of the following characteristics of debt obligations:

- Type of obligation;
- Structural subordination;
- Amount of obligation;
- Repayment currency;
- Debt repayment schedule;
- Interest rate type;
- Additional fees, if any;
- Revolving credit lines;
- Funds' availability period;
- Presence of collateral;
- Type and nature of collateral;
- Penalties under the agreement;
- Presence of covenants in the agreement;
- Special conditions in the agreement;
- Creditor characteristics;
- Relationships with the creditor.

These characteristics are assessed based on information provided by the rated entity at ACRA's request, as well as on the basis of submitted copies of loan agreements and other internal information from the rated entity.

The structure of the rated entity's debt obligations may be significant for rating assessment. For example, the rated entity's relatively low leverage from a formal point of view may be coupled with the presence of nonconsolidated debt in related parties within the group structure and large off-balance sheet liabilities and, therefore, may not correctly reflect the real debt level. A debt portfolio that exclusively includes short-term liabilities may indicate an increased credit risk, even if leverage is relatively low.

ACRA also takes into account the specifics of contractual and structural subordination of debt obligations. When analyzing off-balance sheet liabilities, ACRA does not only assess their volume, but also the likelihood of their payment and whether it is possible to service them with either the entity's own sources or external sources.

Qualitative assessment of the rated entity's leverage is made in accordance with Table 6.

Table 6. Qualitative leverage assessment

Assessment category	Main features
I	A balanced debt portfolio structure in terms of maturities and the repayment schedule, on the one hand, and in terms of currencies and interest rates, on the other hand; no material off-balance sheet liabilities; a balanced creditor structure
II	A balanced debt portfolio structure in terms of maturities and the repayment schedule, on the one hand, and in terms of currencies and interest rates, on the other hand; there are off-balance sheet liabilities, but their volume is insignificant; a balanced creditor structure, but somewhat dependent on the largest creditor
III	A mostly balanced debt portfolio structure, but with some inessential imbalances with regard to the repayment schedule or currencies/rates; large off-balance sheet liabilities, but the risk of their materialization is insignificant; substantial concentration or excessive diversification of creditors, with acceptable refinancing risks
IV	A somewhat misbalanced debt portfolio structure; the debt service and repayment schedule has pronounced peak periods in the medium term; large off-balance sheet liabilities with a high risk of materialization; substantial concentration or excessive diversification of creditors; the risk of inability to develop a consolidated position on important issues
V	Mainly short-term financing; a significant imbalance between the parameters of inbound cash flow and debt structure; presence of non-earmarked funding (e.g. financing long-term projects with short-term loans); an extremely high volume of off-balance sheet liabilities with a high risk of materialization; substantial dependence on a single creditor

Source: ACRA

Capitalization of operating lease payments

It may be difficult to compare the leverage of rated entities because of the differences in the business models they use. For example, a business model may involve using operating leases instead of purchasing an asset with debt funds. Leverage is also affected by whether the rated entity uses financial or operating leases.

In such case, ACRA capitalizes operating lease payments to compare leverage. The adjustment depends on market interest rates, the average interest rates for the rated entity, and residual useful life of operating lease assets and is based on expert assumptions.

Leverage is adjusted by adding up operating lease costs (in case of operating rentals, they also include associated rental costs) increased by a multiplier. The multipliers used for operating rentals in various industries are disclosed within specific Industry Appendices.

ACRA takes into account the introduction of IFRS 16 and adjusts certain items in the financial statements of the rated entity to be able to compare different companies with different periods of lease contracts.

ACRA takes into account the differences between obligations under loan agreements and operating lease agreements, including no immediate default on debt obligations upon failure to pay under operating lease or rental agreements.

6.4. Coverage

In financial analysis, we assess the coverage factor. It shows the rated entity's ability to cover interest (or fixed) expenses with operating income before interest (and depreciation and amortization) or with operating cash flow before changes in working capital before interest (or fixed payments).

A relatively low financial expense coverage ratio may lead to difficulties in debt servicing in case of declining profitability or increasing volatility in financial markets.

6.5. Liquidity

In financial analysis we assess the liquidity factor. ACRA forms its opinion on short-term and medium-term liquidity of the rated entity by comparing its sources and uses of funds on an appropriate time horizon.

The sources of funds are divided into external and internal liquidity sources. External liquidity sources include credit lines, bond issues, approved government budget funds, proceeds from share capital offerings, and changes in working capital (liabilities). Internal sources of liquidity include cash flow from operations, changes in working capital (assets), cash in the current account, short-term bank deposits, and other short-term investments.

A restriction on the use of a liquidity source (for example, an expected increase in working capital or financial investments without an option to release funds) predicted in the course of analysis is considered equal to an increase in monetary claims. The liquidity assessment may also be affected by the Agency's forecasts regarding changes in payment terms between the rated entity and its key counterparties (both debtors and creditors), as well as changes in the operating cycle.

As part of the liquidity analysis, ACRA takes into account data from financial statements and other information provided. First of all, guaranteed liquidity sources (committed credit lines) are taken into account. In addition, ACRA may take into account nonguaranteed sources of liquidity (available uncommitted credit lines). When analyzing liquidity sources, ACRA reviews their quality (counterparty banks' credit quality, quality of investments and their ability to be converted into cash, etc.).

Along with quantitative indicators, we make qualitative assessment. Qualitative assessment of liquidity analyzes such parameters as interest and principle repayment schedule, diversification of funding sources, as well as compliance with and headroom for the financial covenants under the existing loan agreements. A lack of headroom for covenants or their violation may reduce the ability to attract additional funding, while a need to refinance existing debt may increase if creditors decide to accelerate repayment.

Qualitative assessment of the rated entity's liquidity is made in accordance with Table 7.

Table 7. Qualitative liquidity assessment

Assessment category	Main features
I	Very high liquidity; a comfortable debt portfolio repayment schedule in the long term; diversified internal and external funding sources, including debt and equity offerings in public markets (including international markets); a strong safety cushion for covenants in loan agreements
II	High liquidity; a comfortable debt portfolio repayment schedule in the medium term; diversified internal and external funding sources; a moderate safety cushion for covenants in loan agreements
III	Moderate liquidity; there are peak debt repayment periods in the medium or long term; there are internal funding sources, but the only external source available is bank financing; no safety cushion for covenants in loan agreements in the absence of need to raise new debt
IV	Low liquidity; there are peak debt repayment periods in the short term; exclusive reliance on bank financing; no safety cushion for covenants in loan agreements with a need to raise new debt
V	Extremely low liquidity; there are peak debt repayment periods in the short term; exclusive reliance on bank financing with a significant risk of refusal to provide funds; covenants in loan agreements have been violated; highly unlikely to improve liquidity in the medium term

Source: ACRA

6.6. Cash Flow

In financial analysis, the cash flow factor is assessed, since cash flows are a key source for both debt servicing and making capital expenditures and dividend payments.

In such assessment, ACRA uses the free cash flow (FCF) indicator. It indicates the amount of operating cash flow, net of the two main non-operating cost items, capital expenditures and dividends.

A stable positive cash flow is of key importance, especially for higher rating categories, as it reflects the ability of the rated entity to repay financial obligations, including debt. A significant negative free cash flow may mean little or no ability to service financial obligations without using external sources of liquidity.

In some cases, moderately negative free cash flow may be acceptable—for example, for companies in a growth phase or during the period of large capital investments in modernization or expansion of production assets. If low free cash flow is a result of high dividend payouts that may be cut if needed, and at the same time the rated entity has no significant debt obligations to repay (assessment scores for leverage, coverage, and liquidity factors are in category 1 or 2), the low free cash flow effect, in ACRA’s opinion, may be neutral for the rated entity’s creditworthiness. In this case, the free cash flow assessment score may be adjusted upward by up to two categories, but not above category 3.

Capital expenditures (CAPEX) are one of the largest uses of operating cash flow. ACRA divides CAPEX into two categories: maintenance (to support production at its current level) and expansion (for modernization and increased production), with a key focus on sufficiency of maintenance CAPEX.

Insufficient capital expenditures on maintenance may be acceptable in some periods, but in the long term, they must support operations, at least, at current levels (a good indicator of the sufficiency of maintenance CAPEX is how its amount compares with the level of depreciation).

Dividends are the second major use of operating cash flow associated with the financial policy of the rated entity, whose commitment to the approved dividend payout policy is important for the assessment of its free cash flow stability.

Qualitative assessment of free cash flow stability is made in accordance with Table 8.

Table 8. Qualitative assessment of free cash flow stability

Assessment category	Main features
I	A stably positive FCF on the long-term horizon with regular dividend payouts and a moderate level (within the annual depreciation) of capital expenditures; during the periods of intense growth of investment in fixed assets, negative FCF indicators are possible
II	FCF is weakly positive or close to zero on the long-term horizon with regular dividend payouts and a moderate level (within the annual depreciation) of capital expenditures; during the periods of intense growth of investment in fixed assets or one-off elevated dividend payouts, FCF becomes negative
III	FCF is close to zero or weakly negative on the long-term horizon; the negative value is offset by a decrease in dividend payouts or reduction in scheduled capital expenditures (on par with the annual depreciation) in some periods; at the same time, repayment of peak debt obligations by the rated entity with borrowed funds does not lead to a substantial increase in leverage above the company’s targets
IV	FCF is stably negative with no dividend payouts, only partially sufficient to cover regular capital investments (on par with the annual depreciation)

V	A negative FCF with no dividend payouts, not sufficient to cover regular capital investments (on par with the annual depreciation)
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Source: ACRA

6.7. Forecasting Cash Flows of Rated Entities

ACRA takes into account both historical values and forecast indicators when calculating financial indicators and ratios in its rating model.

For cash flow and financial ratio forecasts, ACRA uses the data provided by the rated entity and a number of internal adjustments and assumptions.

A credit rating may be sensitive to changes in such adjustments, including in the absence of new factual information about the rated entity's operations.

The main assumptions used in preparing the cash flow outlook for rated entities include:

- Assumptions regarding operating performance projections (product/service sales volume or factors affecting this figure; key cost factors; product/service prices);
- Macroeconomic assumptions — ACRA's internal forecast of the dynamics of macroeconomic indicators that may affect the operating performance of the rated entity;
- Industry assumptions, in particular sales prices; factors affecting both the demand for the rated entity's products and the cost of goods/services sold by the rated entity;
- Investment cash flow assumptions, i.e. maintenance and expansion capital expenditures projected by ACRA; the expected M&A activities of the rated entity;
- Leverage assumptions — the amount of debt financing required, according to ACRA's forecasts, for the rated entity's operations, as well as the level of interest rates on new debt financing;
- Assumptions on the rated entity's financial policy, including capital increases and dividend policy;
- Assumptions on intragroup transactions and cash in (out) flows (if applicable).

As a rule, ACRA makes at least two cash flow forecast scenarios:

- The base case scenario includes moderately conservative assumptions, implying likely changes in operational and financial indicators in line with ACRA's own base forecasts.
- The stress scenario includes more conservative assumptions, implying a realistically negative scenario of changes in operating and financial performance under adverse macroeconomic and/or industry conditions, or upon materialization of adverse event risks.

When forecasting, ACRA may adjust quality factors and subfactors affecting the rated entity's assessment, if the Agency expects a change in internal and external risk factors that could alter the assessment categories of one or more quality indicators.

6.8. Main Financial Profile Indicators

Table 9 shows the main indicators used in assessing the financial profile. In case specific indicators are used for some industries, their calculation is disclosed in the relevant Industry Appendix. Absolute indicators are measured in US dollars.

Table 9. Main Financial Profile Indicators

No.	Indicator/Term used	Calculation method/Definition
1	Revenue	The company's revenue
2	EBIT (earnings before interest and taxes)	Operating income +/- ACRA adjustments for non-operating revenues and expenses
3	Total assets	Total company assets
4	EBIT margin	EBIT / Revenue
5	EBITDA (earnings before interest, taxes, depreciation, and amortization)	EBIT + Depreciation and amortization of PP&E and intangible assets
6	EBITDA margin	EBITDA / Revenue
7	EBITDAR (earnings before interest, taxes, depreciation, amortization, and rent)	EBITDA + Operating rent expenses
8	EBITDAR margin	EBITDAR / Revenue
9	ROA	EBIT / Total assets
10	Net income	Net income of the company
11	Net margin	Net income / Revenue
12	FFO (operating cash flow before changes to working capital)	CFO – Change in working capital
13	FFO margin	FFO / Revenue
14	CFO (cash flow from operations)	Cash flow from operations +/- ACRA adjustments
15	CFI (cash flow from investments)	Cash flow from investments +/- ACRA adjustments
16	CFF (cash flow from financing)	Cash flow from financing +/- ACRA adjustments
17	FCF (free cash flow)	CFO – Capital expenditures – Dividends paid to parent company shareholders
18	FCF margin	FCF / Revenue
19	NFCF (net free cash flow)	CFO + CFI + CFF
20	Adjusted cash	Cash and equivalents – Restricted cash flow +/- ACRA adjustments
21	Gross debt	Short-term debt + Long-term debt +/- ACRA adjustments
22	Net debt	Total debt – Adjusted cash
23	Adjusted gross debt	Total debt + Operating rent expenses × Operating rent multiplier
24	Adjusted net debt	Adjusted gross debt – Adjusted cash
25	Net interest expenses	Interest expenses – Interest income
26	Net interest payments	Interest paid – Interest received + Dividends on preferred shares
27	Fixed charges	Net interest payments + Operating rent expenses
28	FFO before net interest payments	FFO + Net interest payments
29	FFO before fixed charges	FFO + Fixed charges
30	Key leverage indicators	Gross (net) debt / EBITDA
31		Adjusted gross (net) debt / EBITDAR
32		Gross (net) debt / FFO before net interest payments

33		Adjusted gross (net) debt / FFO before fixed charges
34		Gross (net) debt / Net worth (with ACRA adjustments)
35		Gross (net) debt / (FFO – Capital expenditures)
36	Key debt servicing indicators	EBITDA / Net interest expenses
37		EBITDAR / (Net interest expenses + Operating rent expenses)
38		EBIT / Net interest expenses
39		FFO before interest payments / Interest payments
40	Short-term financial investments	FFO before fixed charges / Fixed charges
41	Unused portion of short-term credit lines	Liquid short-term financial investments +/- ACRA adjustments
42	Short-term liquidity ratio	Committed credit lines available within the next 12 months – Current payables on these lines
		(Adjusted cash + Short-term financial investments + Unused portion of short-term credit lines + positive FCF) / (Short-term debt + Current portion of long-term debt + Negative FCF)

Source: ACRA

7 Rating Debt Instruments

Ratings of debt instruments include an assessment of the probability of default of a given debt instrument, as well as the potential recovery rate for the holders of such instruments in case of the issuer's default. Credit ratings are assigned to issues of financial instruments in accordance with ACRA's other methodologies.

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