

METHODOLOGY FOR ASSIGNING CORPORATE CREDIT RATINGS (NON-FINANCIAL NON-INVESTMENT HOLDING COMPANIES) – FULL VERSION

TABLE OF CONTENTS:

1. General definitions	3
1.1 Scope of Methodology	3
1.2 Default definition	3
1.3 Key rating assumptions	3
1.4 General provisions and regulations	4
2. Sources of information	5
3. Rating classes	7
International scale	7
4. Rating assignment process (credit ratings and stand alone credit ratings)	9
4.1 Structure and order of analysis	9
4.2 Types of companies	12
4.3 Range of weights	14
4.4 Rating scale	16
4.5 Order of the rating assignment process	17
4.6 Special order of assigning ratings “C” and “D”	18
5. System of indicators	19
5.1 Business risk analysis	19
5.1.1 Degree of business diversification	19
5.1.2 Growth prospects and trends in key sales markets	21
5.1.3 Market position	21
5.1.4 Investments in projects	23
5.1.5 Relations with counterparties	24
5.2 Financial risk analysis	25
5.2.1 Liquidity	25
5.2.2. Debt load	32
5.2.3. “Stress” liquidity	Error! Bookmark not defined.
5.2.4. Diversification of liabilities by creditors	37
5.2.5. Profitability	37
5.2.6 Exposure to currency risks	38
5.3 Corporate risks analysis	40
5.3.1 Owners	40
5.3.2 Current decision-making practice	42
5.3.3 Efficiency of relations with subsidiaries and affiliated entities	43
5.3.4 Degree of information disclosure	44
5.3.5 Quality of strategic business planning	47

5.3.6 Risk management organization	49
5.3.7 Insurance coverage	50
5.4 Internal stress-factors and internal support-factors	52
5.4.1 Internal stress factors	52
5.4.2 Internal support factors	53
5.5. External stress-factors and external support-factors	53
5.5.1 External stress factors	53
5.5.2 External support factors	53
6. CIR Indicators	56
7. The rules for the determination of the outlook on the credit rating of a non-financial corporate	57

1. General definitions

1.1 Scope of Methodology

Rating-Agentur Expert RA GmbH (RAEX-Europe) (hereinafter referred to as the Agency) assigns credit ratings (rating of creditworthiness) to non-financial corporates (hereinafter referred to as “rated entity” or “entity”) in accordance with this methodology.

Non-financial corporate creditworthiness is the ability of a company to fulfill its financial obligations to creditors fully and in a timely manner.

Credit rating of a non-financial corporate represents the opinion of the Agency on the ability of the company to fulfill its financial obligations fully and in a timely manner.

Stand alone credit rating of a non-financial corporate represents the opinion of the Agency on the ability of the company to fulfill its financial obligations fully and in a timely manner without taking into account external stress- and support-factors.

1.2 Default definition

Any of the following cases shall be considered as default by the Agency:

- Non-fulfillment of financial liabilities on bonds after the end of the period of technical default (more than 10 business days or shorter period if such period is defined by the covenants of bonds issuance), including: failure to pay interest (coupon) on bonds; non-redemption of a nominal value of bond; non-fulfillment of liability to purchase bond (if such liability included to the issuing covenants (offer to purchase));
- Non-fulfillment of other financial liabilities bearing interest and which shall be repaid (for more than 30 business days);
- Non-fulfillment of other financial liabilities formally not bearing interest, after 10 business days from the day when the court decision entered into force;
- If the rated entity’s debt liabilities were restructured within the last two months and, after this, its creditors have worse conditions as compared with what was initially mentioned in the agreements (for instance, if the current agreement on subordinated debt includes the option of transferring this debt to shares of the entity, this is not considered as default by the Agency);
- If a court recognized the company as bankrupt.

According to the Agency’s definition, the date of default is the date of the end of the corresponding period after the first case of non-fulfillment of liabilities listed by the Agency.

1.3 Key rating assumptions

The following are our rating assumptions:

1. There is a stable cause-effect relationship between the level of creditworthiness (hereinafter referred to the rating level) of the rated entity and the qualitative and quantitative factors, listed in this methodology;
2. Qualitative and quantitative factors can have a linear and non-linear effect on the creditworthiness of the rated entity, the effect can be direct and reverse. A non-linear

effect of the factors is shown by using stress- and support-factors, that have a strong effect on the rating (see Section 5);

3. The weight of each factor is determined according to the degree of its influence on the creditworthiness;
4. Indicators can have “limited intervals” for their influence on the rating score; if the value of an indicator goes beyond the “limited interval”, it does not affect the rating score. If the value of the indicator is higher than the benchmark of the maximum score (for an indicator having a positive correlation with the creditworthiness level), it does not have an additional positive effect on the rating score. If the value of the indicator is below the benchmark of the minimum score (for an indicator having a negative correlation with the creditworthiness level), it does not have an additional positive effect on the rating score. If the value of the indicator is below the benchmark of minimum score (for an indicator having a positive correlation with the creditworthiness level), it does not have an additional negative effect on the rating score (with the exception of indicators included in the stress-factors). If the value of an indicator is higher than the benchmark of the minimum score (for an indicator having a negative correlation with the creditworthiness level), it does not have an additional negative effect on the rating score (with exception for the indicators included in the stress-factors).
5. All macro risks are covered by the Country and Industry Risk (CIR) score.

1.4 General provisions and regulations

In accordance with the Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 on credit rating agencies and further amending or supplementing regulation (hereinafter – the CRA regulation) RAEX-Europe strictly follows the requirements regarding the maintenance of its methodologies:

- The Agency uses methodologies that are rigorous, systematic and continuous;
- The Agency discloses on its website information on the methodologies, models and key rating assumptions accompanied with the explanation of assumptions, parameters, limits and uncertainties surrounding the models and rating methodologies;
- Methodologies, models and key rating assumptions such as, mathematical or correlation assumptions, used for determining credit ratings are properly maintained, up-to-date and subject to a comprehensive review on a periodic basis;
- There are internal procedures established for regular review of methodologies in order to be able to properly reflect the changing conditions in the underlying asset markets;
- The Agency monitors and reviews its methodologies on an ongoing basis and at least annually, in particular where material changes occur that could have an impact on a rating. The Agency monitors the impact of changes in macroeconomic or financial market conditions on ratings;
- There is a review function responsible for periodically reviewing the Agency’s methodologies and any significant changes or modifications thereto as well as the appropriateness of those methodologies, where they are used or intended to be used for the assessment of new financial instruments;
- The Agency publishes the proposed material changes or proposed new rating

methodologies on its website, together with a detailed explanation of the reasons for and the implications of the proposed material changes or proposed new rating methodologies, inviting stakeholders to submit comments within a period of one month;

- The Agency notifies ESMA of the intended material changes to the rating methodologies or the proposed new rating methodologies when the proposed changes or proposed new rating methodologies are published on its website. After the expiry of the consultation period, the Agency notifies ESMA of any changes due to the consultation;
- When the rating methodologies are changed, the Agency immediately discloses the likely scope of ratings to be affected, informs ESMA and publishes on its website the results of the consultation and the new rating methodologies together with a detailed explanation thereof and their date of application. The affected ratings are reviewed as soon as possible and no later than six months after the change, in the meantime placing those ratings under observation. The Agency re-rates all ratings that have been based on those methodologies if, following the review, the overall combined effect of the changes affects those ratings;
- Changes in ratings are issued in accordance with the Agency's published methodologies. The Agency ensures that the ratings and the outlooks it issues are based on a thorough analysis of all the information that is available to it and that is relevant to its analysis according to the applicable rating methodologies. The information the Agency uses in assigning ratings and outlooks is of sufficient quality and from reliable sources. The Agency issues ratings and rating outlooks stipulating that the rating is the Agency's opinion and should not be regarded as a recommendation to buy, hold or sell any securities or assets, or to make investment decisions;
- Changes in the quality of information available for monitoring an existing rating are disclosed with the rating review and, if appropriate, a revision of the rating is made;
- If the Agency becomes aware of errors in its methodologies it shall immediately notify ESMA about those errors and all affected rated entities, explaining the impact on the ratings and indicating the need to review issued ratings. If errors have an impact on the ratings, the Agency shall publish them on its website and correct the errors in the methodologies.

2. Sources of information

The following sources of information are used for assigning a rating score :

- Questionnaire filled in by the rated entity according to the Agency's form;
- Financial statements prepared under local GAAP for the last two years;
- IFRS reporting certified by an auditor (including the auditor's report and notes) for the last two complete years;
- Annual reports of the corporate (if any);
- Market researches for the key markets where the rated company operates, prepared for the last 12 months (if available);
- Description of the organizational structure;
- Documents determining the development strategy of the company;

- Forecast cash flow for the next two years, divided by quarters;
- Appraiser's report on the value of fixed assets, portfolio of securities and other assets, prepared not more than 3 years ago.

When assigning credit ratings, the Agency may use a combination of different sources of information, listed above (for instance, some data could be sourced from IFRS statements and other data local GAAP statements. However, if data were available in both IFRS and local GAAP, the preferred source of information for the Agency would be IFRS compliant financial statements).

When assigning ratings, the Agency can reclassify some accounting entries, on the basis of their economic meaning. For example: long-term liabilities can be reclassified to the short-term liabilities if the creditor has a right to call for early repayment. In this case, financial ratios are adjusted in order to provide comparability of different rated objects.

The Agency can take into account future changes in the financial statements on the basis of the forecasts of the Agency, plans of the rated entity and (or) if the Agency has reliable information on changes in the structure of assets and liabilities. For instance, if the Agency knows that the rated entity has plans to buy another company; such investments are deducted from the capital of the rated entity.

If the information provided by the rated entity is not enough for the analysis, the Agency has to refuse from assigning a rating or maintaining the current rating. If the rated entity has a live rating in this situation, this rating is withdrawn without confirmation.

Adequacy of the information for the assignment of the credit rating is determined on the basis of ability or disability to make an assessment in accordance with this methodology.

The main criteria used to determine the adequacy of the information are following:

- Ability to make an analysis of the rated entity on the basis of factors, listed in this methodology (see Section 5);
- Ability to make an analysis of all stress- and support-factors, listed in this methodology.

If the mentioned criteria are satisfied, but the Agency was not provided with the full set of information requested, the Agency has the right to assign a rating taking into account adjustments for the score of some factors, which must be approved by the rating committee. As a general rule, such adjustments are of a conservative nature. The Agency considers the absence of information as a negative driver of the creditworthiness assessment.

The Agency checks the reliability of the financial statements and other information provided by the company in accordance with the internal procedure of the Agency. If the Agency detects signs of significant non-reliability of the financial statements and other information provided by the company, the Agency may refuse to assign a rating or maintain a current rating. If the company has a live rating in this situation, this rating is withdrawn without confirmation.

If the Agency detects signs of minor manipulation with the financial statements and other information provided by the company, the Agency can reduce the score for some factors (for instance, the score for corporate governance) or assign a stress-factor.

If two or more sources of information contradict each other and the company does not provide a proper explanation of these contradictions, the source of information that better and more conservatively reflects the risks of the rated object is used.

If the company has radical changes in its business model and there is no representative information about risks of the new business model, the Agency may refuse to assign a rating or maintain a current rating. If the company has a live rating in this situation, this rating is withdrawn without confirmation.

This methodology is used to assign credit ratings and stand alone credit ratings to non-financial non-investment holding companies.

3. Rating classes

During the process of rating assignment (for both types of ratings – stand alone credit rating and final credit rating), the Agency uses international scale. **All public documents contain ratings only according to the international scale.**

International scale

The Company can be classified into one of the following rating classes:

Class AAA: The highest level of creditworthiness.

In the short-run the company will ensure timely fulfillment of all its financial liabilities, both current and contingent, with exceptionally high probability. In the mid-run there is a significant probability that the liabilities will be fulfilled even in case of significant unfavorable changes in the macroeconomic and market indicators.

Class AA: Very high level of creditworthiness.

In the short-run the company will ensure timely fulfillment of all its financial liabilities, both current and contingent, with very high probability. In the mid-run there is a significant probability that the liabilities will be fulfilled if the macroeconomic and market indicators remain stable.

Class A: High level of creditworthiness.

In the short-run the company will ensure timely fulfillment of all its financial liabilities, both current and contingent, with high probability. In the mid-run the probability of fulfilling the liabilities requiring significant payments depends greatly on the stability of the macroeconomic and market indicators.

Class BBB: Moderately high level of creditworthiness.

In the short-run the company will ensure timely fulfillment of all its current financial liabilities as well as small- and medium-sized contingent liabilities with high probability. Probability of financial difficulties in case of incurred contingent liabilities requiring significant lump-sum payments is considered as moderately low. In the mid-run the probability of fulfilling the liabilities depends on the stability of the macroeconomic and market indicators.

Class BB: Sufficient level of creditworthiness.

In the short-run the company will ensure timely fulfillment of all its current financial liabilities as well as small- and medium-sized contingent liabilities with high probability. Probability of

financial difficulties in case of incurred contingent liabilities requiring significant lump-sum payments is considered as moderate. In the mid-run the probability of fulfilling the liabilities depends on the stability of the macroeconomic and market indicators.

Class B: Moderately low level of creditworthiness.

In the short-run the company will ensure timely fulfillment of almost all of its current financial liabilities with high probability. Probability of not fulfilling incurred contingent liabilities requiring large payments is moderately high. In the mid-run the probability of fulfilling the liabilities depends on the stability of the macroeconomic and market indicators.

Class CCC: Low level of creditworthiness.

In the short-run the probability of not fulfilling occurring financial liabilities of the company is high.

Class CC: Very low level of creditworthiness (close to default).

In the short-run the probability of not fulfilling financial liabilities of the company is very high.

Class C: The lowest level of creditworthiness (partial default).

The company is not ensuring timely fulfillment of part of its financial liabilities.

Class D: Default / Bankruptcy.

The company is not ensuring fulfillment of all its financial liabilities / the company is going through the bankruptcy procedure.

One of the above rating levels (the company's final creditworthiness and company's stand alone creditworthiness) that can be assigned to the company (excluding AAA and ratings below CCC) may be supplemented with (+) or (-) sign depending on the value of the rating score.

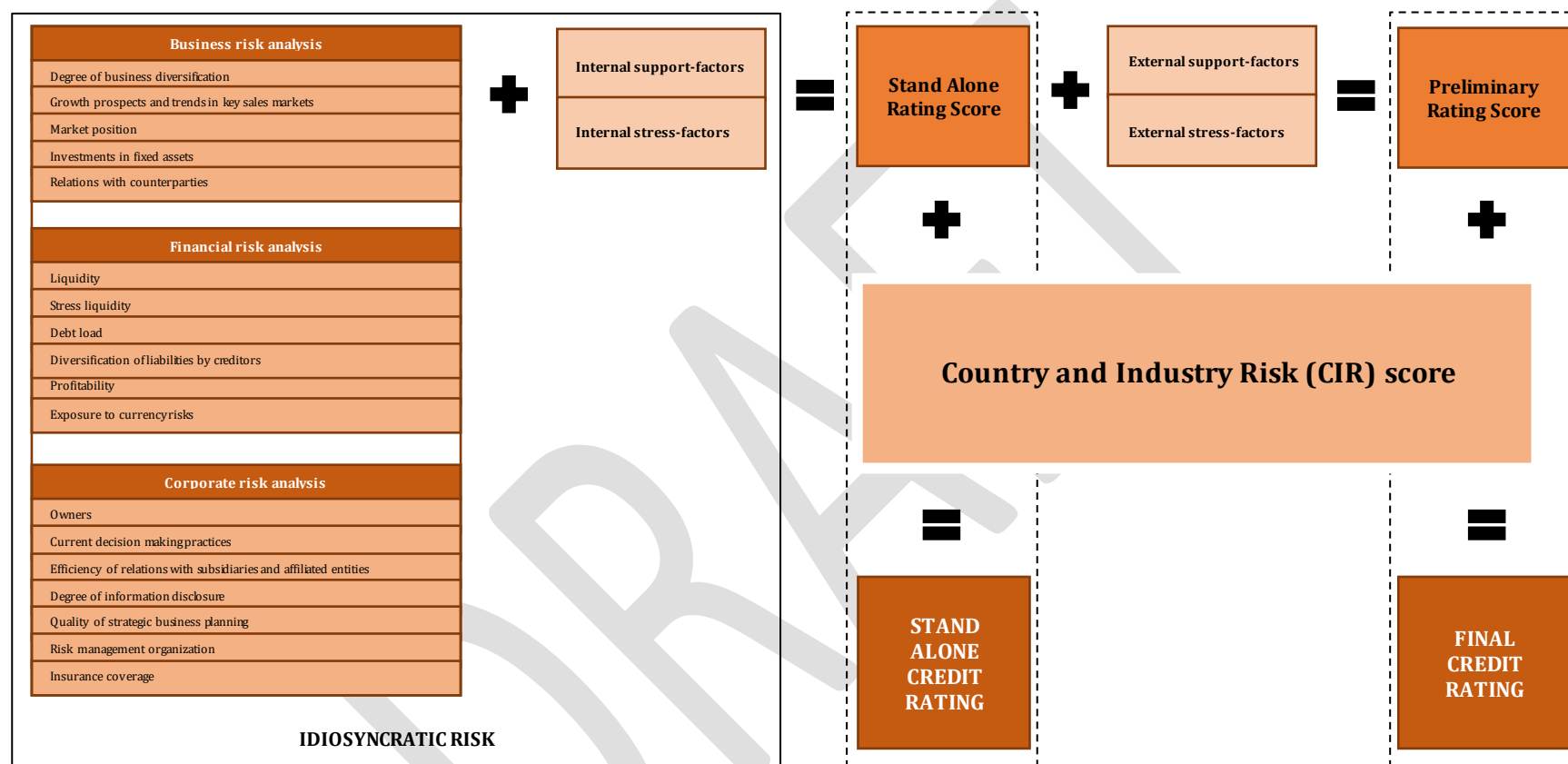
4. Rating assignment process (credit ratings and stand alone credit ratings¹)

4.1 Structure and order of analysis

4.1.1 The creditworthiness analysis of a company has several levels. First of all, we calculate a **stand alone rating score**. This includes the analysis of the financial stability of the company plus any additional support- and stress-factors which have internal nature. This **stand alone rating score** is then adjusted by the **Country and Industry Risk (CIR) score** (see graph 1 below) in order to obtain the **stand alone credit rating** which serves as an indication of the creditworthiness of the entity without taking into account any potential negative or positive impact from factors external to the company's operation. In order to come up with the **preliminary rating score**, we add any external stress- and support factors to the **stand alone rating score**. Once we have this preliminary score, we once again adjust the score with the **CIR score** in order to obtain the **final credit rating**.

¹ Without taking into account external stress- and support-factors.

Graph 1. Main integral factors of the rating analysis



* the weights which the **stand alone rating score** and the **preliminary rating score** and the **CIR score** carry towards the **stand alone credit rating** and the **final credit rating**, depend on the value of the **CIR score**.

4.1.2 The analysis of the company's **financial stability** includes analysis of three sections: *business risk analysis (1), financial risk analysis (2) and corporate risk analysis (3)*. Each section is divided into several large integral factors.

The assessments of individual indicators within the framework of analysis of each integral factor can be continuous or discrete. However the final score for each indicator is always in the range between “-1” to “1”. In case of a discrete assessment, the score for the indicator may be equal to one of the following values:

1	Factor (indicator) has positive influence on the creditworthiness level
0,5	Factor (indicator) has moderately positive influence on the creditworthiness level
0	Factor (indicator) has neutral influence on the creditworthiness level
-0,5	Factor (indicator) has moderately negative influence on the creditworthiness level
-1	Factor (indicator) has negative influence on the creditworthiness level

4.1.2.1 The score for each integral factor is determined as a weighted sum of the scores for separate indicators within each integral factor. Weights of the indicators are provided in the first part of each section (see Section 5), describing integral factors.

4.1.2.2 If one or more factors are not relevant for the analysis of a particular company, the weight assigned to these factors is equal to zero. As a consequence, the weights of the other factors increase proportionally.

4.1.3 In order to determine the **stand alone rating score** of the company, the rating score for the company's **financial stability** is adjusted taking into account internal support- and stress-factors. The stand alone rating score is then adjusted by the **CIR score** to obtain the **stand alone credit rating**.

Internal support-factor (moderate or strong) can be assigned to the company for factors that are not assessed or insufficiently assessed in the rating model because of specific characteristics of the rated company or temporary influence of such factors. Temporary influence of the factor means that the rating score for the company decreased temporarily in accordance to the opinion of the rating committee, and a significant increase in the rating score is expected for the next quarterly date. In other words, temporary influence of the factor means that there is a high probability that the influence of such factor will dissipate in the next three months.

Internal stress-factors (moderate or strong) include risks of having funds in troubled banks, negative effects of non-monetary transactions, short time of existence of the company, negative influence from the debt burden, poor asset quality and others. They can be assigned to the company for factors that are not assessed or insufficiently assessed in the rating model because of specific characteristics of the rated company or temporary influence of such factors. Temporary influence of the factor means that the rating score for the company decreased temporarily in accordance to opinion of the rating committee, and a significant increase in the rating score is expected for the next quarterly date. In other words, temporary influence of the factor means that there is a high probability that the influence of such factor will dissipate in the next three months. The purpose of detecting stress factors is to take into account the internal

factors whose effect in the current external conditions is so adverse (it may result in closing up the business, default, etc.), that even the maximum penalty (“-1”) by the relevant component is insufficient (according to the opinion of the Agency).

4.1.4 In order to determine the **preliminary rating score** of the company, the **stand alone rating score** is adjusted taking into account external support- and stress-factors.

External support-factors include support received from the owners, government authorities and other type of support. They take into account financial and administrative resources which are external to the company, and which can be used in case of deteriorating financial conditions, as well as factors which are not assessed or insufficiently assessed in the rating model because of specific characteristics of the rated company or temporary influence of such factors.

External stress-factors include the risk of negative influence from the owners and other stress-factors. This type of factor also includes risks which are not assessed or insufficiently assessed in the rating model because of specific characteristics of the rated company or temporary influence of such risks. The purpose of detecting stress factors is to take into account the external factors whose effect in the current external conditions is so harmful (it may result in closing up the business, default, etc.), that even the maximum penalty (“-1”) by the relevant component is insufficient (according to the opinion of the Agency).

4.1.5 The **preliminary rating score** is then adjusted by the **CIR score** in order to obtain the **final credit rating** according to the international scale (see graph 1 above). RAEX-Europe publishes **only final ratings in accordance with the international scale**.

4.1.6 The level of creditworthiness of the company shall be assessed as equal to the level of the creditworthiness of another entity², in the following cases:

4.1.6.1 The company’s creditworthiness is evaluated on the basis of the financial statements of the parent company if the following conditions are satisfied:

- the company raises funds in the bond market for the parent company;
- the parent company is a guarantor of the loans of the rated company;

4.1.6.2 The company’s creditworthiness shall be evaluated on the basis of the financial statements of the subsidiary if the following conditions are satisfied:

- the company does not carry out operational activity;
- the company owns stocks or shares in the authorized capital of only one subsidiary, and it’s share in the ownership structure exceeds 95%;
- consolidated financial statements are not prepared;
- the amount of debt which is not translated to the level of the subsidiary, does not exceed 10% of the equity.

4.2 Types of companies

This methodology is used for assigning ratings to **non-financial non-investment holding companies** (through classifying companies according to the creditworthiness classes).

² In exceptional cases, the rating can be assigned on the basis of the company’s own financial statement even if the indicated conditions are satisfied.

Definitions (terms used internally by the Agency):

Type of company	Definition	Application of this methodology
Non-financial non-holding company	Operating company engaged in non-financial activity, which generates stable cash flow. This is the most common type of company.	Yes
Non-financial holding company (conglomerates)	Company which participates in the equity of "operating businesses". Representatives of such companies are included in the management bodies of the operating businesses.	Yes
Financial company	Company which provides any kind of financial services (except for credit, factoring, leasing and insurance services, e.g. companies which are rated according to different methodologies), or carry out operations of purchasing and selling financial assets.	No
Investment holding company	Company which specializes in granting of loans, and acquisition of debt securities and equity investment for long periods of time. This type of companies may acquire equity securities in the medium term (up to one year) for speculative purposes. In most cases, the representatives of such companies are not included in the management bodies of the entities whose securities were purchased. This type of company has a certain influence over the strategy of the assets; however, there is none or very limited control.	No
"Support" company	Company whose main activity is the implementation of financial transactions inside one group of companies. The support company has no assets or liabilities on its own, but assets and liabilities belong to the group of companies served by the support company. Generally, support companies show "mirror" balance sheet, i.e. granted and received loans have same volumes, maturity and currency. Interest rate in this case provides a small margin to "support companies".	No
SPV company	Company whose purpose is to implement one or several investment projects. The company does not carry out other activities in addition to the main purpose project. Servicing debt is only possible with funds received from the project.	Case-dependent

IMPORTANT! The company is considered as an SPV as long as the majority of funds have not been invested and the project has not started to generate stable and sufficient cash flows to support its own operations. After reaching this point, the SPV shall be considered a non-financial non-investment holding company.

4.3 Range of weights

The detailed table of weights and coefficients for determining the rating score for the company's **financial stability** (see the table below):

Factor	Weight
1. Business Risk Analysis	20
1.1 Degree of business diversification	6
1.1.1 Diversification of activities by business lines	4
1.1.2 Geographical diversification of the business	2
1.1.2.1 Geographical diversification of sales	1
1.1.2.2 Geographical diversification of production facilities locations	1
1.2 Growth prospects and trends in key sales markets	2
1.3 Market position	6
1.4 Investments in fixed assets	2
1.5 Relations with counterparties	4
1.5.1 Share of the largest supplier in costs	2
1.5.2 Share of the largest buyer in revenue	2
2. Financial Risk Analysis	60
2.1 Liquidity	13
2.1.1. Estimation of current liquidity ratios	
Absolute liquidity ratio	2
Quick liquidity ratio	2
Current liquidity ratio	4
Forecast liquidity on the horizon of 12 months	5
2.2 Stress liquidity	4
2.3 Debtload	27
2.3.1. Total debt load level	12
FFO leverage	1,5
Net FFO leverage	1,5
CFO leverage	2,0
FCF to total debt	2,0
Debt to EBITDA	2,5
Net debt to EBITDA	2,5
2.3.2 Interest and short-term debt coverage	15
EBITDA-to-interest coverage ratio	3
FFO-to-interest coverage ratio	3
Short-term debt to EBITDA	3
Short-term debt to FFO	3
FCF to total short-term debt	3
2.4 Diversification of liabilities by creditors	2
2.5 Profitability	9
Profitability of assets by net profit (ROA), %	2

Profitability of capital by net profit (ROE),%	1
FFO Margin	2
EBITDA margin, %	2
EBIT margin, %	2
2.6 Exposure to currency risks	5
3. Corporate risks analysis	20
3.1 Owners	6
3.1.1 Information about the ultimate beneficiaries	2
3.1.2. Structure of the share capital	2
3.1.3 Quality of information disclosure about the owners	2
3.2 Current Decision Making Practice	2
3.3 Efficiency of relations with subsidiaries and affiliates (S&A)	1
3.4 Degree of information disclosure	4
3.4.1 Disclosure of general information	1
3.4.2 Disclosure of financial Information	2
3.4.3 Assessment of the company's auditor	1
3.5 Quality of strategic business planning	3
3.6 Risk management organization	1
3.7 Insurance coverage	4
3.7.1 Level of insurance coverage	2
3.7.2 Quality of insurance coverage	2
Internal stress factors	
Funds in "troubled" banks	
Effect of non-monetary transactions	
Short period of the company's existence	
Influence from debt burden	
Poor asset quality	
Other stress factors	
Internal Support Factors	
Market position	
STAND ALONE RATING SCORE	
CIR score adjustment	
STAND ALONE CREDIT RATING	
External Stress Factors	
Influence by the owners	
Other stress factors	
External Support Factors	
Support from the government	
Support from the owners	
Other	
PRELIMINARY RATING SCORE	
CIR score adjustment	
FINAL CREDIT RATING IN INTERNATIONAL SCALE	

4.4 Rating scale

The final credit rating class according to the international scale is derived from the combination of the CIR score and the preliminary credit rating score. The following table shows a summary of the possible rating classes which can come up from the different combinations between the CIR score and the preliminary credit rating score:

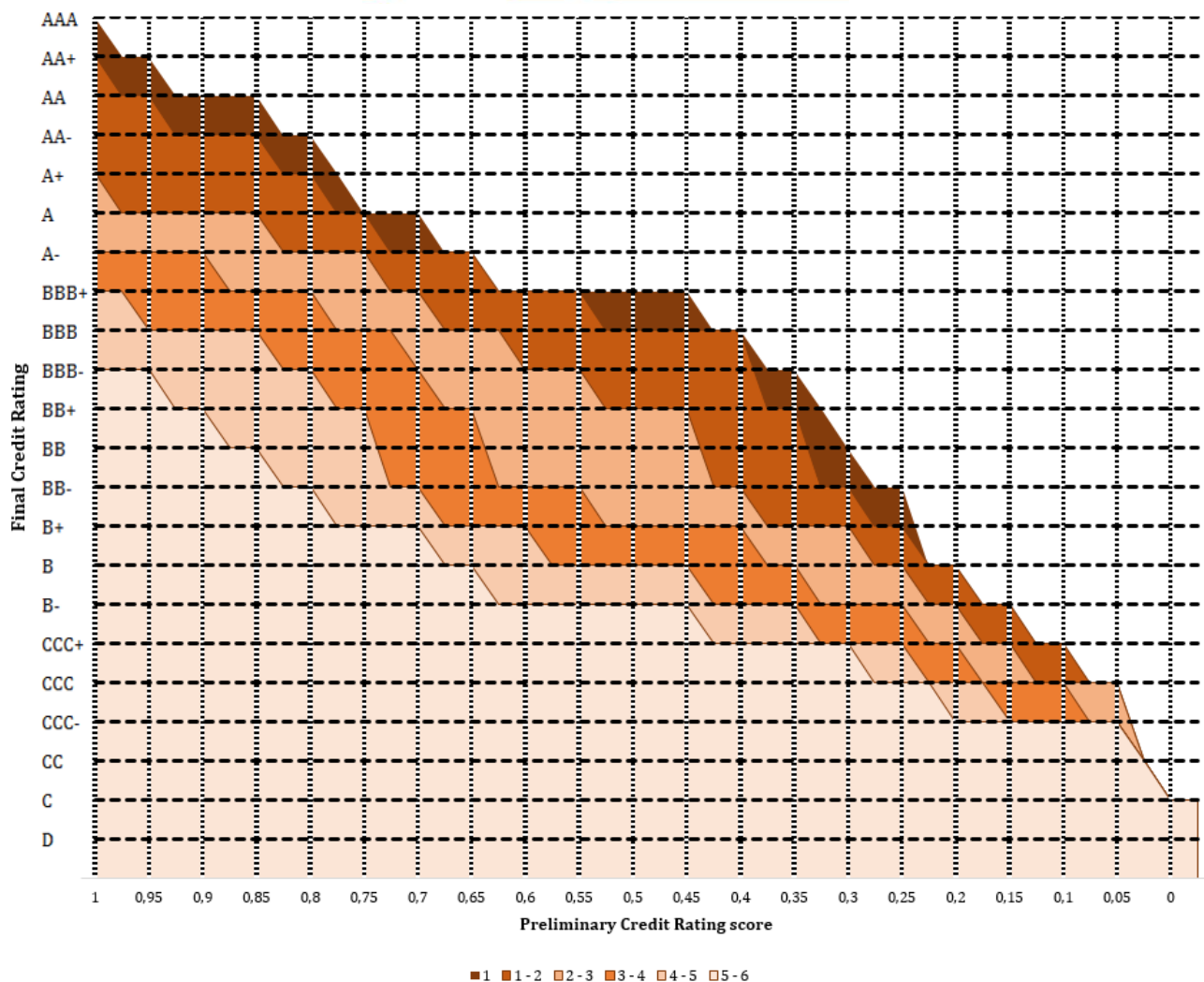
		CIR					
		1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6
PRELIMINARY RELIABILITY RATING	1	AAA / AA+	AA+ / A+	A+ / A-	A- / BBB+	BBB+ / BBB	BBB- / BB-
	1 - 0,95	AA+ / AA	AA / A+	A / A-	A- / BBB+	BBB / BBB-	BBB- / BB-
	0,95 - 0,9	AA	AA- / A	A / A-	A- / BBB	BBB / BB+	BB+ / B+
	0,9 - 0,85	AA / AA-	AA- / A	A / BBB+	BBB+ / BBB	BBB / BB	BB / B+
	0,85 - 0,8	AA- / A+	A+ / A-	A- / BBB+	BBB+ / BBB-	BBB- / BB-	BB- / B
	0,8 - 0,75	A	A / BBB+	A- / BBB	BBB / BB	BB+ / B+	B+ / B
	0,75 - 0,7	A / A-	A- / BBB+	BBB+ / BBB-	BBB- / BB-	BB- / B	B+ / B-
	0,7 - 0,65	A- / BBB+	A- / BBB	BBB / BB	BB+ / B+	B+ / B	B / B-
	0,65 - 0,6	BBB+	BBB+ / BBB	BBB- / BB-	BB- / B+	B+ / B-	B- / CCC+
	0,6 - 0,55	BBB+	BBB+ / BBB-	BBB- / BB-	BB- / B+	B / B-	B- / CCC+
	0,55 - 0,5	BBB+	BBB / BBB-	BB+ / BB-	B+ / B	B / B-	B- / CCC+
	0,5 - 0,45	BBB+ / BBB	BBB / BB+	BB+ / B+	B+ / B	B / B-	B- / CCC+
	0,45 - 0,4	BBB / BBB-	BBB / BB-	BB- / B	B+ / B-	B- / CCC+	CCC+ / CCC+
	0,4 - 0,35	BBB- / BB+	BB+ / B+	B+ / B	B / B-	B- / CCC+	CCC+ / CCC
	0,35 - 0,3	BB / BB-	BB- / B	B+ / B-	B- / CCC+	CCC+ / CCC	CCC+ / CCC
	0,3 - 0,25	BB- / B	B+ / B-	B / CCC+	B- / CCC	CCC+ / CCC	CCC / CCC-
	0,25 - 0,2	B / B-	B / CCC+	B- / CCC	CCC+ / CCC	CCC / CCC-	CCC-
	0,2 - 0,15	B- / CCC+	B- / CCC	CCC+ / CCC	CCC / CCC-	CCC-	CCC-
	0,15 - 0,1	CCC+ / CCC	CCC+ / CCC	CCC / CCC-	CCC / CCC-	CCC-	CCC-
	0,1 - 0,05	CCC / CCC	CCC / CCC	CCC / CCC-	CCC-	CCC-	CCC-
	0,05 - 0	CC	CC	CC	CC	CC	CC

“C” is assigned in case the company does not fulfil part of its liabilities;

“D” is assigned if the company does not fulfil all its liabilities

“E” is assigned if the company is going through a liquidation procedure

In order to illustrate the distribution of the ratings per CIR score and the range of possible rating classes per combination of CIR score and the Preliminary Credit Rating score, we provide the following chart where the shaded areas represent each CIR level:



4.5 Order of the rating assignment process

4.5.1 During the process of assessing the factors of the company's **financial stability** the "automatic scores" for most of the factors taking into account the benchmarks for the corresponding factors and indicators are acquired. The "automatic scores" can (in some cases described in the methodology, **must**) be adjusted manually by one or more levels (in this case one level is equal to 0,5): the automatic score obtained serves only as an initial guidance. Each factor must be qualitatively assessed in order to obtain the final score. Even after adjustments, the score for each indicator/factor must be in the interval between "-1" and "1". The sum of the weights for all factors included in the analysis of the company's **financial stability** is equal to "1". Therefore, the rating score at this stage can be in the interval between "-1" and "1".

4.5.2 After assessing the factors of the company's **financial stability**, the internal support- and stress-factors are assessed. Depending on the result of the assessment, a "penalty" or a "bonus" is subtracted from or added to the rating score of the company's **financial stability** analysis. The internal support- and stress-factors are listed in Section 5.4. If a **moderate** stress-(support-) factor is detected, **0,1** is deducted (added) from (to) the rating score. If a **very strong** stress (support) factor is detected, **0,3** is deducted (added) from (to) the rating score. If a

maximum stress (support) factor is detected, **0,4** is deducted (added) from (to) the rating score. If several stress (support) factors are detected, “penalties” and “bonuses” are summed up (except when the factors are of the same type). The resulting rating score is the **stand alone rating score** of the company. Then, the **stand alone rating score** (already including internal stress- and support-factors) is adjusted for external stress- and support-factors. The resulting rating score is the **preliminary rating score** (this score is in the interval between “0” and “1”) and is used only for internal purposes.

4.5.3 “Other” stress-factors, as well as “other” support-factors (see Sections 5.4 and 5.5) can be internal and external. Simultaneous addition of other internal and external stress-factors, or simultaneous addition of other internal and external support-factors, are not allowed by this methodology.

4.5.4 The **preliminary rating score** is adjusted by the **CIR score** in order to obtain the **final credit rating** in international scale. RAEX-Europe publishes only final ratings in accordance with the international scale.

4.6 Special order of assigning ratings “C” and “D”

4.6.1 Typically, the higher the rating score, the higher the credit rating assessment and lower the risk of non-fulfilment of financial liabilities. However, regardless of the rating score the credit rating may differ if the cases listed below are satisfied:

Rating	Description
C	<ul style="list-style-type: none"> The share of short-term liabilities (which the company must fulfill within 12 months) in the structure of the company's debt exceeds 50%; + absence of sufficient volume of liquid assets, or agreement on debt rescheduling or refinancing;
C	<ul style="list-style-type: none"> Technical default within the framework of the bond issue; <p>OR</p> <ul style="list-style-type: none"> The share of short-term liabilities (which the company must fulfill within 12 months) in the structure of the company's debt exceeds 75%; + absence of sufficient volume of liquid assets or documented agreement on debt rescheduling or refinancing;
C	<ul style="list-style-type: none"> Default on coupon within the framework of the bond issue; + absence of documented agreement on debt rescheduling or refinancing;
D	<ul style="list-style-type: none"> Default on claim for early bond redemption or on repayment within the framework of the bond issue;

	<p>+</p> <p>absence of sufficient volume of liquid assets, or documented agreement on debt rescheduling or refinancing;</p> <p>OR</p> <p>The company is in the process of default.</p>
--	--

5. System of indicators

5.1 Business risk analysis

Factor	Weight
Degree of business diversification	6
Growth prospects and trends in key sales markets	2
Market position	6
Investments in fixed assets	2
Relations with counterparties	4

5.1.1 Degree of business diversification

The diversification of products or services, revenues and production facilities is beneficial for a corporation in order to avoid concentration risks. Dependence on a single product or service affects the company negatively as it raises the risk of reducing sales in case there is lower demand for that product or service. Moreover, it can also affect the company negatively in case there is a shortage of a key raw material to produce the product or to perform the service. Low geographic diversification of sales could hurt the company whenever there is a financial distress in the region where sales are concentrated; on the other hand, the more diversified the regions, the less volatiles the earning will be. Finally, corporates which sourcing, operating or production facilities are located in one single region have a higher risk of halting operations in case there are labor issues, machinery stoppages, logistics problems, among others potential disruptions.

5.1.1.1 Diversification of activities by business lines

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Explanatory notes to the financial statements according to IFRS;

1	The share of each of the main kinds of products in total revenue does not exceed 50%. The company produces more than five different kinds of products or services in EACH part of its business.
0,5	The weight of the largest part of the business in the company's revenue according to the last completed year is within the range from 50% to 75%. The company produces more than five different types of products or services within the main part of its business.
0	ALL OTHER CASES
-0,5	The weight of the largest part of the business in the company's revenue according to the last completed year exceeds 75%. The company

	produces from two to five different types of products or services within the main part of its business.
-1	The company specializes in production of one type of product or provision of single service.

5.1.1.2 Geographical diversification of the business

5.1.1.2.1 Geographical diversification of sales

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Explanatory notes to the financial statements according to IFRS;

1	<p>The share of revenue according to the last completed year, generated by sales in the main country of the company's activities, does not exceed 50%. The company operates in five or more countries.</p> <p>OR</p> <p>The share of revenue according to the last completed year, generated by sales in the main country of the company's activities, is from 50% to 75%. The share of exports in the revenue structure according to the last completed year exceeds 25%.</p>
0,5	<p>The share of revenue according to the last completed year, generated by sales in the main country of the company's activities, does not exceed 50%. The company operates in less than five countries.</p> <p>OR</p> <p>The share of revenue according to the last completed year, generated by sales in the main country of the company's activities, is from 50% to 75%. The company operates in five or more countries.</p>
0	The share of revenue according to the last completed year, generated by sales in the main country of the company's activities, is from 50% to 75%. The company operates in less than five countries.
-0,5	The share of revenue according to the last completed year, generated by sales in the main country of the company's activities, exceeds 75% but is less than 95%.
-1	The company's activities are concentrated in one region (or country) by more than 95%.

* The Agency can also take into account regions/provinces in order to assess diversification if these regions/provinces are considered to have uncorrelated systemic risks.

5.1.1.2.2 Geographical diversification of production facilities locations

- 1) Questionnaire filled in by the company;
- 2) Explanatory notes to the financial statements according to IFRS;

1	Production facilities of the company are located in more than 3 countries OR The company provides services
0	All other cases
-1	The company has one immobile production facility located in one countries

* The Agency can also take into account regions/provinces in order to assess diversification if these regions/provinces are considered to have uncorrelated systemic risks.

5.1.2 Growth prospects and trends in key sales markets

The purpose of this factor is to assess the prospects of the main industry in which the rating object operates. As part of the assessment, we analyze the industry's main trends and their current and potential impact on the company. **Sources of information:**

- 1) Independent market researches;
- 2) Company's estimations;
- 3) Materials from the rating interview;

1	According to independent market researches or estimations provided by the company, the volume of main markets for the company tends to expand in the short term.
0	According to independent market researches or estimations provided by the company, the main markets for the company are stagnating.
-1	According to independent market researches or estimations provided by the company, the volume of the main markets for the company tends to shrink in the short term.

Note: Independent market researches are more preferable as a source of information.

Note: In cases of presence or absence of resourcing and infrastructure constraints, the score can be adjusted by the expert by 0,5 (plus or minus).

Note: "support companies³" shall be assessed with "0,5" within the framework of this factor.

5.1.3 Market position

The level of competition in the market on which the company operates as well as the competitive positions of the company itself are highly important to assess the creditworthiness of the company. Significant competitive positions usually allow companies have a significant

³ Company whose main activity is the implementation of financial transactions inside one group of companies and organization of cash flows within this group. Related parties form the majority of the liabilities and assets of this company. Generally, support companies present "mirror" balance sheets, i.e. granted and received loans have the same volumes, maturity and currency. Interest rate in this case provides a small margin to "support companies".

impact on the dynamics of prices for their products as well as on legislative initiatives. While assessing this factor we consider that a high amount of revenues, as compared to the market average, in combination with a high share of the total market's revenues is positive for the creditworthiness of the company. At the same time, a corporate with a very strong brand recognition is positively assessed if they are important market players for the regions where it operates. Furthermore, a high amount of assets as compared to the market benefits the creditworthiness assessment. The Agency assesses all of these factors at the regional and global level. By analyzing the above-mentioned factors we can determine the competitiveness position of the entity; however, the final assessment will also depends on the type of market and industry where the company operates.

Sources of information:

- 1) Strategy of the company;
- 2) Cash-flow forecast;
- 3) Materials from the rating interview;
- 4) Independent market researches.

First of all, we analyse the strength of the company's competitiveness and market position using the table below. If the company scores 1, it means the company is a market leader. If the score is around 0, this shows that the entity has a moderate competitive position. Finally, a score of -1 will reflect a company with weak competitive position.

Score	Factor
1	<p>The company is in the top percentile of revenues share globally and regionally within the industry of operation.</p> <p>The company is in the top percentile of assets share globally and regionally within the industry of operation.</p> <p>The market concentration in the country is low or moderate within the industry of operation.</p> <p>The company has an important market share in at least one of the countries where it operates or in at least one of the products or services it specializes on.</p>
-1	<p>The company is in the lowest percentile of revenues share globally and regionally within the industry of operation.</p> <p>The company is in the lowest percentile of assets share globally and regionally within the industry of operation.</p> <p>The market concentration in the country is high within the industry of operation.</p> <p>The company has a negligible market share in all of the countries where it operates or in all products or services it specializes on.</p>

After performing the previous assessment, we now know if the company is a market leader or if it has either a moderate or weak competitive position. Once we establish this, we use the table below in order to come up with the final score for market position.

Competitive position of the company	Monopoly or oligopoly	Moderately concentrated market	Deconcentrated market
Market leader	1	1	0,5
Medium competitive position	1	0,5	0
Weak competitive position	-	-0,5	-1

The type of the market is determined, primarily, on the basis of the Herfindahl-Hirschman index:

- Monopoly or oligopoly (Herfindahl-Hirschman index, $HHI \geq 0.200$).
- Moderately concentrated market ($0,100 \leq HHI < 0,200$).
- Deconcentrated market ($HHI < 0.100$).

In the absence of statistics necessary for the calculation of the Herfindahl-Hirschman index, analytical adjustments are applied, which, as a rule, are of a conservative nature. The competitive position of the company is then determined on the basis of the following analysis:

- risks of emergence of potential competitors;
- the ability of customers and suppliers to influence prices;
- level of competition in the market;
- risks of appearance of substitute products.

The evaluation for the competitive position is further reduced / increased depending on the specifics of the company's industry.

The score for market and competitive positions can be reduced by 0,5 in case there is a high risk of violation of any antimonopoly legislation in place.

For capital-intensive industries, the score can be increased by 0,5-1 if the company has new fixed assets and the need for additional investment is minimal. On the contrary, if the corporate needs large-scale investments in fixed assets / infrastructure, even for maintaining the current production volume and / or the fixed assets of the company are extremely worn out, significant expenses are required to update those points can be reduced by 0,5-1.

5.1.4 Investments in fixed assets

If a company has an insufficient amount of investments in means of production, modernization, technology it incurs in the risk of having obsolete machinery and production facilities as well as lower technology and innovative products in relation to their competitors. We analyze this

depending on the industry the company operates. For capital intensive companies we make sure there are enough investments in fixed assets in order to keep up with operations and avoid delays due to faulty equipment and unmaintained facilities. For less capital intensive corporates we pay more attention to investments in technology and IT related projects.

Sources of information:

- 1) Strategy of the company;
- 2) Materials from the rating interview;
- 3) Questionnaire filled in by the company;
- 4) Accounting statements according to local GAAP and (or) IFRS;

1	The expenses on investment projects in the last 3 years have exceeded 20% of total assets as of the last reporting date. The cost of implementation of planned investment projects for the next 3 years will exceed 20% of the total assets of the company as of the last reporting date.
0,5	The expenses on investment projects in the last 3 years were from 10% to 20% of total assets as of the last reporting date. The cost of implementation of planned investment projects for the next 3 years will exceed 20% of the total assets of the company as of the last reporting date.
0	The expenses on investment projects in the last 3 years were from 10% to 20% of total assets as of the last reporting date. The cost of implementation of planned investment projects for the next 3 years will be from 10% to 20% of the total assets of the company as of the last reporting date.
-0,5	The expenses on investment projects in the last 3 years were less than 10% of total assets as of the last reporting date. The cost of implementation of planned investment projects for the next 3 years will be from 10% to 20% of the total assets of the company as of the last reporting date.
-1	The expenses on investment projects in the last 3 years was less than 10% of total assets as of the last reporting date. The cost of implementation of planned investment projects for the next 3 years will be less than 10% of the total assets of the company as of the last reporting date.

5.1.5 Relations with counterparties

A company which is highly dependent on certain counterparties is negative for its creditworthiness assessment. A high level of diversification of the company's sales by customers reduces the level of business dependence on a particular counterparty, which has a positive impact on the rating level. The indicator can be valued at the level of a group of companies at a high level (over 40%) of related companies in sales. Moreover, low diversification of suppliers

is considered a risk factor since it reduces the ability to manage costs and increases the dependence of the production process on the reliability of suppliers. The indicator can be valued at the level of a group of companies with a high proportion of related companies at cost.

Sources of information:

- 1) Questionnaire filled in by the company.

5.1.5.1 Share of the largest supplier in costs

1	Less than 20%
0,5	20-40%
0	40-60%
-0,5	60-80%
-1	More than 80%

5.1.5.2 Share of the largest buyer in revenue

1	Less than 20%
0,5	20-40%
0	40-60%
-0,5	60-80%
-1	More than 80%

5.2 Financial risk analysis

Factor	Weight
Liquidity	13
Stress liquidity	4
Debt load	27
Diversification of liabilities by creditors	2
Profitability	9
Exposure to currency risks	5

5.2.1 Liquidity

The purpose of the analysis is to assess the level of liquidity of the company, taking into account the quality of its assets and liabilities. The company's rating would be affected positively by proper matching of assets and liabilities by maturity terms. A high level of coverage of current (short-term) liabilities on the horizon of one year by assets adjusted for their liquidity and quality has a positive impact on the rating level. The possibility of liquidity gaps on the horizon up to one year (for example, with large payments on debt obligations) negatively affects the rating level.

The numerator of the **current liquidity ratio** includes all current assets if they can be liquidated by the rated entity within one year. Potential sources of additional liquidity, which can be obtained

through the pledging of adjusted non-current assets, can also be added to the numerator. The denominator of the current liquidity ratio is the liabilities with a maturity of up to one year.

The denominator of the formulas for **current**, **quick** and **absolute liquidity ratios** is calculated after deducting the **quasi capital**, reported in the financial statement as a short-term liability.

Quasi capital are borrowed funds (liabilities) that possess characteristics of equity. For example, shareholder loans, instruments which were raised without pledge and do not have a strict repayment schedule, and those that have a subordinated character. Usually, the creditor for such obligations is a party related to the company.

In addition, to the loan agreement with the relevant condition, confirmation of the subordination of obligations can be the following:

- letter from the owner of the company in which plans for financing the rated entity are indicated;
- the terms of granting a loan that exceed the horizon of one year and the terms for external borrowing;
- funds are provided on more favourable terms (at the rate, terms of extension) than other liabilities;
- Lack of financial and non-financial covenants for such obligations;

Bank loans that do not satisfy the subordination conditions cannot be classified as quasi-capital.

5.2.1.1. Estimation of current liquidity ratios

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Accounting statements according to local GAAP and (or) IFRS;

Benchmarks for the liquidity indicators (continuous assessment for all indicators):

Liquidity indicator	Formula for calculation	1	-1
Absolute liquidity ratio	The sum of funds on current accounts, deposits with maturity less than 1 year and short-term financial investments / Short term liabilities minus short-term part of quasi-equity	More than 0,3	Less than 0,05
Quick liquidity ratio	Current assets net of inventory / Short-term liabilities minus short-term part of quasi-equity	More than 0,8	Less than 0,2
Current liquidity ratio	Current assets + Potential sources of additional liquidity / Short-term liabilities minus short-term part of quasi-equity	More than 1,25	Less than 0,3

Forecast liquidity on the horizon of 12 months	12-month forecast of the current liquidity ratio	More than 1,25	Less than 0,3
--	--	----------------	---------------

If the forecast flow from the operating activity of the rated entity is negative, it must be taken into account in the denominator of the formula.

The unused part of confirmed bank credit lines can be added to the numerator of forecast liquidity only if the following conditions are simultaneously met:

1. The nominal rating class of the creditor is equivalent to at least B- in international scale;
2. The creditor cannot unilaterally withdraw the credit line OR the credit line is issued with a pledge of non-current assets.

Payments for operational leasing on the horizon of one year shall be added to the denominators of the coefficients of absolute and current liquidity.

Debt payments can be adjusted based on the forecast turnovers on credit lines and the risks of their withdrawal.

To calculate the forecast liquidity, the Agency prepares a forecast cash flow statement. In order to calculate it, data from the strategic documents of the rated entity can be used, adjusted taking into account the Agency's expectations for the macroeconomic conditions, the potential of the rated entity and the assessment of market prospects.

Possible adjustments:

1. The score for all liquidity indicators can be adjusted when it is close to the violation of the financial covenants on the horizon of 12 months down by 0,5; the final score is not more than 0;
2. If the financial covenants are violated under long-term obligations, they shall be added to the denominators of all formulas of liquidity indicators in full (and not only in the part in which they had to be redeemed on the horizon of 12 months);
3. The score can be lowered for the expected gaps in the maturity of liabilities and assets on the horizon of one year at a maximum by 1,5; but not lower than to -1;
4. The score for liquidity can be lowered for unmatching maturities between assets and liabilities on the long-term horizon. If the ratio of the sum of debt assets over one year to liabilities over one year and the equity is less than 90%, then the score shall be downgraded by 0,5.

5.2.2 Stress liquidity

With this factor we want to assess the level of coverage of all company's liabilities net of the quasi capital by all adjusted assets. "Stress" liquidity reflects the level of the coverage of the company's liabilities by its high quality assets. A high level of "stress" liquidity indicates that the all company's liabilities are well covered even when the assets have been adjusted by their respective risk; this has a positive influence on the rating level.

To assess the **quality of assets** and, thus, **the stress liquidity indicator**, the term “Adjustment coefficient” is used. The adjustment coefficient depends on the fulfilment of certain criteria by an individual asset depending on its type. When adjusting the value of assets, the Agency is guided by the concept of “materiality”. The total share of analysed assets should be at least 90% of the book value of total assets of the company.

The **adjustment coefficient** is the coefficient that adjusts the book value of an asset, depending on its quality. The coefficient is in the range [0: 1], the asset with the highest quality has a score of 1.

Cash, bank deposits, bills of exchange, bonds, loans and receivables accrued on relevant debt instruments	Adjustment coefficient
AAA, AA, A, BBB	1,00
BB	0,90
B	0,75
CCC+	0,50
Below CCC+ or not rated	0,00
A counterparty's license has been revoked, or a moratorium on the payment on its obligations has been introduced, or it is in default, or there are other grounds for believing in a significant impairment of the asset / its “fake nature”	0,000
Shares and contributions to authorized (share) capitals	
Listed	0,8 – 0,0
Unlisted shares and contributions to authorized (share) capitals	0,5 – 0,0
Stocks	
Stocks	0,8 – 0,0
Fixed assets excluding real estate	
Fixed assets used in operating activities	0,8 – 0,0
Fixed assets not used in operating activities	0,5 – 0,0
Real estate, land	
Real estate, except for unfinished construction, land plots	0,8 – 0,5
Investments in unfinished construction, land plots	0,5 – 0,0
Intangible assets	
Goodwill	0
Other intangible assets	0,5 – 0,0
Receivables	
AAA, AA, A, BBB	1,00

BB	0,90
B	0,75
CCC+	0,50
Below CCC+ or not rated	0,00
A debtor's license has been revoked, or a moratorium on the payment on its obligations has been introduced, or it is in default, or there are other grounds for believing in a significant impairment of the asset / its "fake nature" OR Overdue receivables	0,000
Ingots of gold, silver, platinum and palladium, commemorative and other coins from precious metals	1- 0,3
Other assets	Shall be determined individually, but not more than 0,5

Nominal rating class – is the nominal level of the credit rating, which corresponds to the rating class in accordance to the international scale of RAEX-Europe. The nominal rating class shall be determined on the basis of information about the creditworthiness of the entity, available for the Agency. This information can include:

- Credit ratings assigned to the counterparty;
- Public financial statements of the counterparty;
- Non-public financial statements of the counterparty (if this information is available for the Agency);
- Presence of collateral / surety / guarantee on the debt instruments of the counterparty. If the debt instruments have pledge in the form of collateral of the debt instruments of other counterparties, having a rating class higher than the assigned rating class, the expert can upgrade the nominal rating class of the assessed counterparty up to the rating class of collateral;
- Other information from public sources, showing trends of the counterparty's financial position, which can have a significant influence on the default probability.

The nominal rating class of the counterparty can be different from the actual credit ratings of this counterparty assigned by other rating agencies if RAEX-Europe detects that the counterparty would have a different rating if the rating was assigned on the basis of the mentioned information and the methodologies of RAEX-Europe. In order to map credit ratings assigned by different agencies, RAEX-Europe uses the actual statistical distribution of the ratings.

- If the book value of **listed shares** is determined not on the basis of fair value (including on the basis of data of the appraiser's report), the Agency recalculates the value of such shares at market prices on the basis of current trades, and the obtained value is multiplied by the adjustment coefficient. The adjustment coefficient for the listed shares depends on the volume of trades and on the volatility of stock prices. If the volatility is very high, and the trading volume is insignificant relative to other traded comparable companies, the coefficient decreases to 0;
- The adjustment coefficient for **non-listed shares** and contributions to authorized (share) capital depends on the nominal rating class of the issuer of the shares. The appraisal's reports on the value of non-listed shares can also be taken into account;
- The adjustment coefficient for **securities** can be reduced to 0 if they are stored by a custodian bank / depository (at the broker) having a nominal rating class lower than B- according to the international scale of the CRA having a good reputation; and negative (doubtful) reputation, according to the Agency;
- If the carrying amount of the property is determined not on the basis of market value, the Agency recalculates the value of such property at market prices based on the comparison of transactions or the value of the appraiser's report (if such information is available), and the resulting value is multiplied by the adjustment factor. The coefficient of adjustment for real estate depends on the business reputation of the real estate appraiser, the date of the assessment (at the peak of prices or not). In terms of reputation, the Agency negatively assesses the affiliation of the appraiser with the object of the rating, the presence of facts of overstating the value of the property being valued, the exclusion of the appraiser from the professional associations as well as other information that characterizes the appraiser negatively (publications in the media, etc.);
- The adjustment coefficient for investments in construction in progress (if the appraiser's report is absent) depends on the stage of construction of the facility and the location of the facility. If there is a report, the adjustment factor is determined on the basis of the business reputation of the appraiser (see the criteria above);
- Agricultural land plots is usually subject to a lower adjustment coefficient, than for lands for other purposes;
- The adjustment coefficient for other intangible assets depends on the ability "to separate the asset from the rated entity" and demand on it in the market as well as from the terms of the license agreements;
- The adjustment coefficient for mutual funds and mortgage certificates depends on the type of mutual funds and mortgage certificates structure;
- The adjustment coefficient for the receivables is determined on the basis of the following factors:
 - ✓ financial discipline of debtors. As a rule, for debtors, for which there is an overdue debt at the time of valuation, the adjustment coefficient is 0. Exceptions are possible if the debtor's overdue payment are usual part of the business process between the rated entity and the debtor (for example, for the similar agreements in the past, the debtor fulfilled its obligations in full way

after the formation of the overdue debt). This adjustment can only be applied if the debtor has a good financial position;

- ✓ dynamics of the receivables turnover (the ratio of the volume of repaid debt for the period to the volume of accounts receivable at the beginning of the period). A sharp increase in the period of turnover of accounts receivable may indicate a deterioration in the financial discipline of debtors (i.e., the nominal rating class shall be downgraded);
- ✓ presence of collateral for receivables. The higher the share of collateralized receivables and the higher the quality of collateral, the higher the adjustment coefficient (i.e., the nominal rating class);
- ✓ the maximum discount on receivables generated as a result of direct REPO, which is the difference between the value of collateral in of REPO and the value of the borrowed loan.

- The adjustment coefficient for stocks is determined on the basis of:

- ✓ turnover of the main components of the stocks and the dynamics of their turnover.

Example of the formula for the calculation:

Turnover of the non-finalized construction =

*(Period duration in days) * (average amount of non-finalized construction at the beginning and end of the reporting period / credit turnover for non-finalized construction on the turnover-balance sheet for the period).*

The same way the turnover of other stocks shall be calculated. With a sharp increase in the turnover of inventory components in days relative to the characteristic indicator for the company in the past, the adjustment coefficient is proportionally reduced.

- ✓ The score for the reputation of the auditor (usually, auditors who have a good reputation, conduct procedures confirming the quality and safety of stocks);
 - ✓ all illiquid stocks (unused for a long time), which, as a rule, are adjusted to zero;
 - ✓ specifics of the industry, for example, non-finalized apartments will have a high adjustment coefficient for developers.
- The adjustment coefficient for the **fixed assets** depends on the useful life of the fixed assets and their depreciation, the reputation of the auditor as well as on the availability and quality of insurance protection of fixed assets.

- 1) Questionnaire filled in by the company;
- 2) Accounting statements according to local GAAP and (or) IFRS;
- 3) Official web-sites of stock exchanges;
- 4) Appraisers Reports;
- 5) Media publications;

6) Other open sources.

Issued guarantees and sureties (if there is a high probability that these liabilities will be materialized) shall be added to the denominator of the indicator. In order to assess the probability of the risk materialization, the creditworthiness of the counterparty (to whom the guarantee was issued) shall be assessed. If the nominal rating class of the counterparty not lower than BBB- according to the international scale of the CRA having good reputation, then the probability of the risk materialization shall be assessed as low and the guarantee shall not be included to the denominator of the “stress” liquidity. Other guarantees / sureties shall be included taking into account the probability of their repayment (the higher the probability, the closer the coefficient for these off-balance liabilities to 1).

The quasi capital shall be deducted from the denominator of the indicator of “stress” liquidity.

The indicator of the “stress” liquidity shall be assessed continuously with the following benchmarks.

Indicator of liquidity / score	1	-1
Stress current liquidity ratio	More than 1,1	Less than 0,7

5.2.3 Debt load

The purpose of the analysis is to identify the company's risks associated with the severity of the debt service. A high degree of coverage of both general and short-term debt load of the company's cash flows has a positive impact on the rating level. The lack of sufficient flows is assessed by the Agency as a risk factor.

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Accounting statements according to local GAAP and (or) IFRS;

Indicator	Definition	Formula of calculation
EBIT <i>For the last four completed quarters</i>	Earnings Before Interest, and Taxes and it is useful to determine the company's operating performance.	Net income + Taxes + Interests paid - Interests received - Positive currency revaluation + Negative currency revaluation - Positive revaluation of assets + Negative revaluation of assets

EBITDA <i>For the last four completed quarters</i>	Earnings Before Interest, Taxes, Depreciation and Amortization and it is useful to determine the company's operating performance.	Net income + Taxes + Interests paid - Interests received + Depreciation and amortization - Positive currency revaluation + Negative currency revaluation - Positive revaluation of assets + Negative revaluation of assets
CFO <i>For the last completed year or for the last four completed quarters (for the assessment according to IFRS) or if the Cash Flow Statement is available on a quarterly basis</i>	Cash Flow from Operations after taxes, interest paid and changes in the working capital is the amount of cash the company generates from operating activities.	Net income + Depreciation and amortization + Change in AR + Change in Inventory + Change in AP + Impairment of goodwill and intangibles + Change in other operating assets and liabilities
CAPEX <i>For the last completed year or for the last four completed quarters (for the assessment according to IFRS) or if the Cash Flow Statement is available on a quarterly basis</i>	Capital expenditures / acquisition of fixed assets are the funds used by the company in order to buy or maintain equipment, property and other fixed assets.	Correspondent line from the Cash Flow statement from the Cash Flow from Investment Activity
FCF <i>For the last completed year or for the last four completed quarters (for the assessment according to IFRS) or if the Cash Flow Statement is available on a quarterly basis</i>	Operating cash flow after taxes, interests paid, changes in working capital, capital investments and dividends paid	$FCF = CFO - CAPEX - \text{dividends paid}$

FFO (Funds from operations) <i>For the last completed year or for the last four completed quarters (for the assessment according to IFRS (US GAAP) or if the Cash Flow Statement is available on a quarterly basis</i>	Cash flows from operating activity after taxes, but before the inflow or outflow of funds related to the working capital and interests paid. The indicator shows the company's ability to generate cash from operating activities before reinvestments and changes in working capital	$FFO = CFO \pm \text{changes in working capital}$
--	--	---

The indicators CFO, FFO, EBITDA, FCF shall be adjusted by the value of leasing fees (costs previously incurred by the company shall be added). The listed indicators shall be increased by the value of costs on the operating lease if the fixed assets in the operating lease are critical assets for the company's business and the terms of operating leasing are de facto equal to the working period of the object.

In order to calculate debt ratios with CFO and FCF, net interest expenses (interest expenses – interest revenues), shall be added back if they were included for the operating activity in the Cash Flow Statement.

5.2.3.1 Total debt load level

The total debt load of the company (debt) is calculated according to the following formula: debt load of the company according to the financial statements as of the reported date (borrowed funds minus quasi capital) + reserves for assets disposal (if any) + issued guarantees and sureties, adjusted for the probability of incurring on payments on those products.

Benchmarks for the indicators of total debt load (continuous assessment for all indicators)

Coefficient	Benchmarks / score	
	1	-1
FFO leverage*	Less than 2	More than 10
Net FFO leverage*	Less than 2	More than 8
CFO leverage*	Less than 2,5	More than 14,5
FCF to total debt*	More than 10%	Less than 0%
Debt to EBITDA*	Less than 1	More than 7,5
Net debt to EBITDA*	Less than 0,5	More than 7

*Adjusted ratios must be used in case there is a large amount of shareholder loans or other type of quasi-capital.

For the non-capital-intensive industries (such as wholesale), the weight attributed to the indicator “FCF to total debt” shall be transferred to the indicator “CFO leverage”.

If the financial covenants, listed in the agreements with the major creditors, include ratios using net debt and, according to the Agency’s opinion, excessive liquidity reduces the risks for the creditor, additional weight can be added to indicators using net debt.

The debt figure in the above listed ratios, shall be increased by the discounted payments on leasing agreements, if the fixed assets in the operating leasing are critical assets for the company’s business and the terms of the operating leasing contracts are de facto equal to the working period of the object.

The debt figure shall be increased by the present value of the future lease payments for the entire period for which the object will be used.

$$\text{Present value of the future leasing fees} = \sum \frac{CF_n}{(1+r)^n}$$

- CF_n – average yearly fee on all leasing contracts;
- r – average rate on the leasing portfolio;
- n – average term of the leasing contracts;

If the leasing contract has a term of one year, but the Agency believes, that this short-term contract will be prolonged every year, n shall be equal to the average residual useful life of the asset.

Formulas for the calculation of debt ratios:

1. **FFO leverage** = *total debt + debt-like leases + guarantees / FFO + net interest + paid dividends;*
2. **Net FFO leverage** = *total debt + debt-like leases + guarantees – cash & cash equivalents / FFO + net interest + paid dividends;*
3. **CFO leverage** = *total debt + debt-like leases + guarantees / CFO + net interest + paid dividends;*
4. **FCF to total debt** = *FCF + net interest + paid dividends / total debt + debt-like leases + guarantees ;*
5. **Debt to EBITDA** = *total debt + debt-like leases + guarantees / EBITDA;*
6. **Net debt to EBITDA** = *total debt + debt-like leases + guarantees – cash & cash equivalents / EBITDA.*

Formulas for the calculation of adjusted debt ratios:

1. **Adjusted FFO leverage** = *total debt - quasi-capital + debt-like leases + guarantees / FFO + net interest + paid dividends;*
2. **Adjusted Net FFO leverage** = *total debt - quasi-capital + debt-like leases + guarantees – cash & cash equivalents / FFO + net interest + paid dividends;*
3. **Adjusted CFO leverage** = *total debt - quasi-capital + debt-like leases + guarantees / CFO + net interest + paid dividends;*
4. **Adjusted FCF to total debt** = *FCF + net interest + paid dividends / total debt - quasi-capital*

+ debt-like leases + guarantees;

5. **Adjusted Debt to EBITDA** = $\text{total debt} - \text{quasi-capital} + \text{debt-like leases} + \text{guarantees} / \text{EBITDA}$;
6. **Adjusted Net debt to EBITDA** = $\text{total debt} - \text{quasi-capital} + \text{debt-like leases} + \text{guarantees} - \text{cash \& cash equivalents} / \text{EBITDA}$.

5.2.3.2 Interest and short-term debt coverage

Benchmarks for the indicators of current level of the debt load.

Coefficient	Benchmarks / score	
	1	-1
EBITDA-to-interest coverage ratio*	More than 15	Less than 1,5
FFO-to-interest coverage ratio*	More than 10	Less than 1,5
Short-term debt to EBITDA*	Less than 0,5	More than 2
Short-term debt to FFO*	Less than 1,2	More than 5
FCF to total short-term debt*	More than 10%	Less than 0%

*Adjusted ratios must be used in case there is a large amount of shareholder loans or other type of quasi-capital.

For the non-capital-intensive industries (such as wholesale), the weight attributed to the indicator "FCF to total short-term debt" shall be transferred to the indicator "Short-term debt to FFO".

Expenses on the operating leasing for the correspondent period shall be added to the interest payments.

Debt payments can be adjusted on the basis forecast turnovers on the credit lines and risks of the credit lines closing.

Formulas for the calculation of interest and short-term debt coverage ratios:

1. **EBITDA-to-interest coverage ratio** = $\text{EBITDA} / \text{financial expenses}$;
2. **FFO-to-interest coverage ratio** = $\text{FFO} + \text{net interest} + \text{paid dividends} / \text{financial expenses}$;
3. **Short-term debt to EBITDA** = $\text{Short-term debt} / \text{EBITDA}$;
4. **Short-term debt to FFO** = $\text{Short-term debt} / \text{FFO} + \text{net interest} + \text{paid dividends}$;
5. **FCF to total short-term debt** = $\text{FCF} + \text{net interest} + \text{paid dividends} / \text{short-term debt}$.

Formulas for the calculation of adjusted interest and short-term debt coverage ratios:

1. **EBITDA-to-adjusted interest coverage ratio** = $\text{EBITDA} / \text{financial expenses} + \text{interest on quasi-capital}$;
2. **FFO-to-adjusted interest coverage ratio** = $\text{FFO} + \text{net interest} + \text{paid dividends} / \text{financial expenses} + \text{interest on quasi-capital}$;
3. **Adjusted short-term debt to EBITDA** = $\text{short-term debt} + \text{short-term quasi-capital} /$

EBITDA;

4. **Adjusted short-term debt to FFO** = *short-term debt + short-term quasi-capital / FFO + net interest + paid dividends*;
5. **FCF to adjusted short-term debt** = *FCF + net interest + paid dividends / short-term debt + short-term quasi-capital*.

5.2.4. Diversification of liabilities by creditors

A high level of the company's liabilities diversification by creditors increases the negotiating position of the rated entity on conditions, terms, interest rates on the borrowed funds and reduces the risks of financial instability of the company in the event of possible early repayment of obligations and, therefore, positively affects the rating level. Moreover, the Agency does not consider a related party as a largest creditor if the claims from this party are considered as quasi capital due to the fact that risks of prescheduled call on such liabilities are usually negligible.

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Accounting statements according to local GAAP and (or) IFRS.

The structure of the debt liabilities	Benchmarks / score	
	1	-1
The share of the largest creditor (not related with the company) in the structure of liabilities, % (<i>continuous assessment</i>)	Less than 20	More than 60

Issued bonds shall be considered as a one single creditor not related with the company.

5.2.5. Profitability

The purpose of assessing this factor is to determine the company's ability to post good financial results, mainly on the basis of its operating activity. High operating profit and the ability of the company to generate high and stable returns on equity and assets, have a positive effect on the rating level. In order to determine the financial result of the rated entity without the effect of exchange rate and asset revaluation, the Agency calculates ROA, ROE and ROS net of such revaluations and other one-time effects.

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Accounting statements according to local GAAP and (or) IFRS;

Formulas for the calculation of profitability ratios:

6. **Return on assets based on adjusted profit (ROA*)** = *adjusted net profit of the rated entity for the period / average assets at the beginning and end of the correspondent period*;
7. **Return on equity based on adjusted profit (ROE*)** = *adjusted net profit of the rated*

entity for the period / average equity at the beginning and end of the correspondent period;

8. FFO margin = FFO for the period / revenues from sales for the period;

9. EBITDA margin = EBITDA for the period / revenues from sales for the period;

10. EBIT margin = EBIT for the period / revenues from sales for the period.

When calculating the adjusted profit of the rated entity for the period, this indicator shall be considered net of the non-materialized revaluation of all assets as well as other one-time effects influencing the financial result (for instance, insurance payments from the insurance company or expenses related to the legal costs).

For the calculation of ROE indicators, the equity shall be increased by the value of quasi capital.

Profitability indicators shall be assessed on the basis of the benchmarks listed in the table below, continuous assessment.

Indicator	Benchmarks / score	
	1	-1
Return on assets based on the adjusted profit (ROA*), %	More than 5%	Less than -1%
Return on equity based on the adjusted profit (ROE*), %	More than 15%	Less than -3%
FFO Margin	More than 10%	Less than 0%
EBIDTA margin, %	More than 15%	Less than 0%
EBIT margin, %	More than 10%	Less than 0%

If the capitalization ratio⁴ of the rated entity as of the reported date is less than 10%; the score for the indicator ROE* shall be equalized to the ROA* for the same period.

5.2.6 Exposure to currency risks

In order to determine the level of company's dependence from the exchange rates fluctuations, we assess the company's exposure to open currency positions. The currency risk arises when the company's assets and liabilities as well as revenues and expenses are denominated in different currencies, and hedging instruments are not used. The absence of imbalances in currency in incoming and outgoing cash flows (natural hedge) as well as in current assets and liabilities has a positive influence on the rating level. The presence of the hedging instruments to reduce currency risks has also a positive effect on the rating level.

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Accounting statements according to local GAAP and (or) IFRS.

In order to assess the currency risk the following indicators are calculated:

⁴ The capitalization ratio is calculated as a ratio of equity of the rated entity to total assets.

- 1) Indicator of **Balance Sheet currency risk** (CR of balance sheet) - sum of absolute values of differences between current assets and current liabilities in each currency, expressed in the functioning currency of the company;
- 2) Indicator of **Income Statement currency risk** (CR of Income Statement) - sum of absolute values of differences between revenues and expenditures (including debt servicing expenditures) generated in each currency, expressed in the functioning currency of the company;

Score	Condition
1,0	Both indicators are less than 10% of equity
0,5	At least one indicator exceeds 10% of equity
0,0	At least one indicator exceeds 20% of equity
-0,5	At least one indicator exceeds 30% of equity
-1,0	At least one indicator exceeds 40% of equity

Examples of the calculation of currency risks for the companies are provided in the tables below:

Balance sheet currency risk as of the last reported date			
Foreign currency	Amount of assets expressed in the reporting currency	Amount of liabilities expressed in the reporting currency	The difference in absolute terms expressed in the reporting currency
A	B	C	D = B - C
USD	1 000	800	200
EUR	500	600	100
GBR	200	150	50
Total	1 700	1 550	350
Total amount of equity as of the reported date			150
CR of the balance sheet			233,3%

E

F

G=E/F

Income Statement currency risk for the last four completed quarters			
Foreign currency	Amount of revenues expressed in the reporting currency	Amount of debt servicing costs and operating costs expressed in the reporting currency	The difference in absolute terms expressed in the reporting currency
A	B	C	D = B - C

USD	1 200	120	1 080	
EUR	300	900	600	
GBR	250	350	100	
Total	1 750	1 370	1 780	E
Total amount of equity as of the reported date			150	F
CR of the Income Statement			1186,6%	G=E/F

If the use of hedging instruments, including natural hedges, can significantly minimize the currency risks, the score for the exposure to currency risks can be upgraded by 1. An additional upgrade is possible only if the Agency considers the reliability of the counterparty of the hedging contract as high.

5.3 Corporate risks analysis

Factor	Weight
Owners	6
Current decision making practice	2
Efficiency of relations with subsidiaries and affiliates (S&A)	1
Degree of information disclosure	4
Quality of strategic business planning	3
Risk management organization	1
Insurance coverage	4

5.3.1 Owners

The purpose of this analysis is to assess the transparency regarding the ownership as well its structure. The inability of the company to disclose the structure of the final beneficiaries is negative for the credit rating as it might indicate a hidden and complicated ownership structure. Moreover, we want to evaluate the likelihood of conflicts between owners, which can lead to deterioration of the creditworthiness of the company as well as to identify indirect signs of interest (lack of interest) of the owners in supporting the company. The lack of a controlling owner is generally assessed negatively, as it increases the risks of joint-stock conflicts. Finally, we also assess the risks associated with unreliable information about the owners or nontransparent ownership structure.

5.3.1.1 Information about the ultimate beneficiaries

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Explanatory notes to the financial statements according to IFRS;
- 3) Materials from the rating interview.

Score	Condition
1	The company disclosed ultimate beneficiaries of 100% of its equity

0,5	The company disclosed ultimate beneficiaries of more than 75% of its equity
0	The company disclosed ultimate beneficiaries of more than 50% of its equity
-0,5	The company disclosed ultimate beneficiaries of less than 50% of its equity
-1	The company didn't disclose any information about the ultimate beneficiaries OR There is a reason to consider that beneficiaries provided by the company are not the real ultimate beneficiaries

5.3.1.2 Structure of the share capital

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Explanatory notes to the financial statements according to IFRS;
- 3) Materials from the rating interview.

Score	Condition
1	The largest owner owns more than 75% of company
0,5	The largest owner owns 50-75% of company
0	The largest owner owns 25-50% of company
-0,5	The largest owner owns less than 25% of company
-1	Insufficient amount of information for the assessment of the largest owner share

5.3.1.3 Quality of information disclosure about the owners

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Explanatory notes to the financial statements according to IFRS;
- 3) Materials from the rating interview.

Score	Condition
1	The total share of ultimate beneficiaries (for which all "intermediate" companies are disclosed ⁵) exceeds 75%. The company has disclosed in written form the shares of all ultimate beneficiaries, which account for more than 1% of the company's equity.
0,5	The total share of ultimate beneficiaries (for which all "intermediate" companies are disclosed) is between 50% and 75%. The company has disclosed in written form the

⁵ Here "intermediate companies" means the companies, which are parent companies of the rated company (the company is owned by company X, company X is owned by company Y, company Y is owned by person X, who is the ultimate beneficiary of the rated company).

	shares of all ultimate beneficiaries, which own account for than 1% of the company's equity.
0	The total share of ultimate beneficiaries (for which all "intermediate" companies are disclosed) is less than 50%. The company has disclosed in written form the shares of all ultimate beneficiaries, which account for more than 1% of the company's equity.
-0,5	The representatives of the company have disclosed in verbal form the shares of all ultimate beneficiaries, which account for more than 1% of the company's equity.
-1	The company doesn't disclose ultimate beneficiaries. OR There is a reason to consider that beneficiaries provided by the company are not the real ultimate beneficiaries.

5.3.2 Current decision-making practice

It is of key importance for a company to have regulations keeping in check the activities of the directors, management and members of the board of a company in order to affect the credit rating in a positive way. The lack of these rules and procedures could open the door for the company to incur in corruption practices, deviation in the strategy, flaws in management practices, among other things.

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Materials from the rating interview;
- 3) Internal documents of the company.

- Presence of a document regulating the activities of the General Director (other than the statute) (weight = 0,5)

1	The document was created and its provisions are implemented in practice.
-1	There is no such kind of document in the company OR the provisions of this document are not implemented in practice.

- Presence of a document regulating the activities of the Board of Directors (other than the statute) (weight = 0,5)

1	The document was created and its provisions are implemented in practice.
-1	There is no such kind of document in company OR the provisions of this document are not implemented in practice.

- **Documenting key decisions⁶ (weight = 1)**

1	<u>All decisions</u> of the shareholders, the Board of directors and the General Director are documented.
0	<u>Only key decisions</u> of the shareholders, the Board of directors and the General Director are documented.
-1	There is no practice of documenting the key decisions in the company.

If the rated company does not have an operational control over its business (operational controls are provided by the parent company, etc.), the assessment of this factor shall be carried out for the entity which has the real operational control.

5.3.3 Efficiency of relations with subsidiaries and affiliates (S&A)

The company's level of exposure connected to developments in S&As reduces the ability of the firm to control its own financial risks since it depends on external developments to determine its financial health. If the company is highly exposed to an S&As and the S&As suffer substantial losses, then this directly affects the position of the rated subject. Moreover, we also assess the influence the rated company has on S&As by analyzing the level of involvement of management in these entities.

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Explanatory notes to the financial statements according to IFRS;
- 3) Materials from the rating interview.

- **The aggregate amount of S&A's losses for the prior reporting period (weight = 0,5)**

1	There are no loss making S&A
0	Losses do not exceed 35% of the company's assets
-1	Losses exceed 35% of the company's assets

- **Are representatives of the rated company included in the management bodies of subsidiaries and affiliates? (weight = 0,5)**

1	Representatives are included in all S&A
0	Representatives are included not in all S&A (but included in at least one of them)
-1	Representatives are not included in any S&A

⁶ Key decisions are decisions which significantly affect the current business and financial condition of the company (e.g., payment of dividends, equity increase, appointment of the CEO, etc.).

5.3.4 Degree of information disclosure

The purpose of the analysis is to determine the risks of the company related to the level of its transparency and disclosure of information. A high level of information transparency, especially in terms of disclosure of financial information, allows counterparties (for example, creditors and customers) to better assess its risks, which has a positive impact on the rating level.

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Corporate web-site;
- 3) Materials from the rating interview.

5.3.4.1 Disclosure of general information

- **the company has its own web-site (weight = 0,5)**

1	Yes
0	The company doesn't have its own web-site, but the information about the rated company is provided on the web-site of the parent company or a subsidiary.
-1	No

Key information about the company is published on its web-site / or on the web-site of the parent company or subsidiary:

- **The information about key segments of the company's business is published on the web-site (weight = 0,125)**

1	Yes
-1	No

- **The contact information is published on the web-site (weight = 0,125)**

1	Yes
-1	No

- **The information about the company's management is published on the web-site (weight = 0,125)**

1	Yes
-1	No

- **Current news about the company are published on the web-site (weight = 0,125)**

1	Yes
-1	No

5.3.4.2 Disclosure of financial information

- The company publishes the Income Statement and Balance Sheet according to the local GAAP on its web-site (weight = 0,6)

1	Yes
-1	No

- The company publishes other accounting statements according to the local GAAP on its web-site (weight = 0,4)

1	Yes
-1	No

- The company publishes the auditors' report to the financial statements on its web-site (weight = 0,4)

1	Yes
-1	No

- The company publishes the annual report on its web-site (weight = 0,2)

1	Yes
-1	No

- The company publishes the financial statements according to IFRS on its web-site (weight = 0,3)

1	Yes
-1	No

- The company publishes P&L and Balance Sheet of S&A according to the national GAAP on its web-site (weight = 0,1)

1	Yes
-1	No

5.3.4.3 Assessment of the company's auditor

- If the company's auditor is included in the "Big four" (PwC, KPMG, Ernst & Young or Deloitte) the score for this factor will be equal to "1".
- If the company was not audited, the score for this factor will be equal to "-1".

- If the company's auditor is NOT included in the Big four", the score for this factor shall be determined in accordance with the following algorithm:

- The auditor has its own web-site (weight = 0,1)

1	Yes
-1	No

- The auditor publishes a list of its current clients (only for audit service) on its own web-site (weight = 0,1)

1	Current list of clients is published
-1	There is no current list of clients on its own web-site OR the auditor doesn't have its own web-site

- The auditor publishes information about managers and employees responsible for the audit service on its web-site (weight = 0,1)

1	The information is published
-1	The information is not published OR the auditor doesn't have its own web-site

- The auditor has experience of auditing companies similar (in terms of business type) to the rated entity (weight = 0,1)

1	The auditor has experience
-1	The auditor has no experience

- The auditor participates in self-regulatory organizations⁷, professional associations or unions (weight = 0,1)

1	The auditor participates in self-regulatory organizations, professional associations or unions
-1	The auditor doesn't participate in any self-regulatory organizations, professional associations or unions

- The auditor provides additional services to the rated company besides audit services (weight = 0,1)

1	The auditor doesn't provide services other than audit to the rated company
---	--

⁷ A non-governmental organization that has the power to create and enforce industry regulations and standards. The priority is to protect investors through the establishment of rules promoting ethics and equality.

-1	The auditor provides services other than audit to the rated company
----	---

- **There are no significant complaints from the regulators regarding the auditor (weight = 0,1)**

1	There are no significant complaints
-1	There are significant complaints

- **There is no information about scandals in which the auditor was involved (in the media or other sources) (weight = 0,1)**

1	There is no information about scandals
-1	There is information about scandals

- **The auditor is included in the “Grey list” of auditors prepared by RAEX-Europe⁸ (weight = 0,1)**

1	The auditor is not included in the “Grey list” of auditors
-1	The auditor is included in the “Grey list” of auditors

- **The auditor is included in the largest audit companies of the country according to reliable market research (the auditor was included in the list at least once during the last two years) (weight = 0,1)**

1	The auditor is included in the ranking
-1	The auditor is not included in the ranking

5.3.5 Quality of strategic business planning

We do a complete assessment of the strategy of the company in order to determine whether the company has a complete strategic approach, that is, whether it is subject to strategic goals (medium and long term), and how the process of defining these goals is organized. The absence of relevant strategic documents does not allow the credit rating agency to assess the opportunities to achieve the goals set and their impact on the company's competitiveness as well as the prospects for its development in the medium and long term. In addition to the availability of formal strategy documents, the credit rating agency seeks to assess the management's understanding of the development strategy, which is important for forecasting financial indicators that affect the creditworthiness of the company. An important indicator of assessing the effectiveness of strategic planning is the results achieved. The degree of strategic planning is evaluated positively if the strategy documents indicate key financial and operational

⁸ The “Grey list” of auditors is an internal document created by the Agency where certain audit firms are red-flagged based on our own research and experience.

goals as well as objectives of the company; also, it should include clear and understandable criteria for achieving these.

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Strategy for the next years and for the previous periods;
- 3) Cash flow forecast;
- 4) Materials from the rating interview.

- The company has provided the development strategy to the Agency (weight = 0,5)

1	Yes
0	No, but the company has provided excerpts for the main indicators
-1	No

- The level of detail in the strategy (weight = 0,25)

1	High
0	Moderate
-1	Low

- The company's strategy for the past periods (set goals and targets) was realized (weight = 0,25)

1	Fully
0	Partially
-1	Targets were not achieved OR There was no strategy in the past

- The company has provided the cash flow forecast to the Agency (weight = 1)

1	Yes
-1	No

- The level of detail in the cash flow forecast (weight = 0,5)

1	High
0	Moderate

-1	Low
----	-----

- **Accuracy of the information for the company's development strategy and for the financial model (weight = 0,5)**

1	The company has provided market reports, consumer surveys, analysis of market trends and competitors' activity (materials prepared by the external analysts OR by analysts of the company) and other relevant documents
0	All other cases
-1	The company has not provided a reasoned response on how the strategy and financial model were created OR provided information which doesn't correspond with the strategy and financial model

- **The strategy is appropriate for the current economic and market conditions (for example: it takes into account a potential financial instability) (weight = 1)**

1	Plans for significant increase of the company's business are included in the strategic documents (cash flow forecast and strategy). Market conditions and resources of the company correspond to these plans. OR Significant increase of the company's business is not required within the existing market dynamics. Company's resources allow, if necessary, to increase the volume of business significantly in the short term.
0	Significant increase of the company's business is not required within the existing market dynamics. Company resources DO NOT allow, if necessary, to increase the volume of business significantly in the short term.
-1	The dynamics of the market demonstrate the need to increase the volume of business. The company has the opportunity to solve this problem only in the medium term.

5.3.6 Risk management organization

The purpose of the analysis is to determine how the current risk management infrastructure of the company corresponds to the profile of risks assumed by the rated entity. In the framework of assessing the quality of risk management, the Agency analyzes not only the formal availability of regulations on risk management and their detail, but also the sequence of their implementation as well as the compliance of the rating object with the declared risk management standards. The use of a set of risk management tools that is adequate to the company's risk profile usually limits the level of accepted risks or reduces their negative impact on the company's activities. We also use indirect indicators, which might show an increased sensitivity to certain types of risks. For example, a high level of staff turnover at the top management level can indicate conflicts within the team, which can lead to an increase in the company's operational risks. The rating is negatively affected by a weak risk management regulation, which can lead to unpredictable losses. Positively affecting the creditworthiness assessment is a detected high effectiveness of risk management, a wide range of risk management tools, and compliance of risk management with the best international practices.

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Corporate documents regulating the risk management;
- 3) Materials from the rating interview;

- **The company has a separate division responsible for the risk management (weight = 0,5)**

1	Yes
0	No, but risk management is controlled by some other division
-1	No

- **Level of development of the documents regulating risk management (weight = 0,5)**

1	High
0	Moderate
-1	Low OR Absence of documents

5.3.7 Insurance coverage

With this factor we assess the volume and quality of insurance coverage protecting the company against property, financial and other risks. High exposure of the company to uninsured risk could create immediate operational, liquidity and other issues, which will negatively affect creditworthiness in case of an event. Moreover, if the risks are indeed insured but the insurers have low reliability, the company's claim may not be honored and/or the company can have substantial legal expenses eroding assets from the entity.

Sources of information:

- 1) Questionnaire filled in by the company;
- 2) Explanatory notes to the financial statements according to IFRS;
- 3) Materials from the rating interview;

5.3.7.1 Level of insurance coverage

1	Largest risks of the company are insured OR The company does not need to insure its assets
0	The company has some uninsured assets (not all of them)
-1	The key company's assets are not insured

5.3.7.2 Quality of insurance coverage

1	More than 70% of the total sum is insured by an insurance company with a credit rating equivalent to at least BBB- in international scale.
0.5	50-70% of the total sum is insured by an the insurance company, which haswith a credit rating equivalent to at least at the BBB- level or above according to their international scale.
0	30-50% of the total sum is insured by an insurance company with a credit rating equivalent to at least BBB- in international scale.
-0.5	Less than 30% of the total sum is insured by an insurance company with a credit rating equivalent to at least BBB- in international scale.
-1	All other cases

5.4 Internal stress-factors and internal support-factors

In the case of identifying a moderate internal stress-factor (internal support-factor) the rating score can be reduced (increased) by 10 points. In case of a strong internal stress-factor (internal support-factor) the rating score can be reduced (increased) by 20 points.

5.4.1 Internal stress factors

Factor	Moderate influence	Strong influence
Funds in "troubled" banks	The share of funds in "troubled" banks ⁹ is between 50% and 75% of the company's current liabilities. AND The company doesn't have any other assets to fulfill the whole amount of its current liabilities.	The share of funds in "troubled" banks exceeds 75% of the company's current liabilities. AND The company doesn't have any other assets to fulfill the whole amount of its current liabilities.
Effect of non-monetary transactions	The share of non-monetary transactions is between 20% and 40% of the company's revenue for the last 12 months.	The share of non-monetary transactions exceeds 40% of the company's revenue for the last 12 months.
Short period of the company's existence	The company is less than 1 year old.	-
Influence from debt burden	The ratio of payments on debt for the next 12 months, including interest payments and claims for early bond redemption, to EBITDA is between 5 and 7. The company has no agreements with creditors to refinance or restructure debt.	The ratio of payments on debt for the next 12 months, including interest payments and claims for early bond redemption, to EBITDA exceeds 7. The company has no agreements with creditors to refinance or restructure debt.
Poor asset quality	The book value of assets was reduced by 25-50% for calculation of stress liquidity.	The book value of assets was reduced by more than 50% for calculation of stress liquidity.
Other stress factors	According to the expert's opinion, there are some facts which are not considered in the methodology, but which can have a moderately negative effect on the company's stand alone creditworthiness.	According to the expert's opinion, there are some facts which are not considered in the methodology, but which can have a strong negative effect on the company's stand alone creditworthiness.

⁹ Banks which have a credit ratings of CCC+ or below according to the international scale from a rating agency with good reputation, or banks without rating.

5.4.2 Internal support factors

Factor	Moderate influence	Strong influence
Market position	<p>The company is included in the list of the largest companies of the country</p> <p>AND</p> <p>The company is a member of officially recognized strategically important enterprises for this market (for instance, it is included in some official lists of companies, that can receive financial support from the government in case of financial distress)</p>	-

5.5. External stress-factors and external support-factors

External stress-factor (external support-factor) is a factor which is not directly connected with the financial condition of the company, but it is able to have a significant negative (positive) impact on the level of company's creditworthiness.

In the case of identifying a moderate external stress-factor (external support-factor) the rating score can be reduced (increased) by 10 points. In case of an external strong stress-factor (external support-factor) the rating score can be reduced (increased) by 20 points.

5.5.1 External stress factors

Factor	Moderate influence	Strong influence
Influence by the owners	Moderate probability of assets withdrawal by the owner.	High probability of assets withdrawal by the owner.
Other stress factors	According to the expert's opinion, there are some facts which are not considered in the methodology, but which can have a moderately negative effect on the company's creditworthiness.	According to the expert's opinion, there are some facts which are not considered in the methodology, but which can have a strong negative effect on the company's creditworthiness.

5.5.2 External support factors

Factor	Moderate influence	Strong influence
--------	--------------------	------------------

<p>Support from the government</p>	<p>The company did NOT provide formalized plans of funding by government bodies (credit rating of government or government structure is at least B- according to the international scale) OR Company has NOT confirmed orders from government agencies (with specified amounts and timing).</p> <p>BUT at least one of the following conditions is satisfied:</p> <ul style="list-style-type: none"> • The government has a share in the company's equity of less than 50%; • The company participates in big government programs OR the company is a member of officially recognized strategically important enterprises for this market (for instance, it is included in some official lists of companies, that can receive financial support from the government in case of financial distress); • The government representatives are included in the management bodies of the company (boards, board of directors). <p>The presence of friendly relations between owners or management of the company and federal or regional authorities. The degree of the relations was assessed as moderate.</p>	<p>The government has a share in the company's equity of more than 50%;</p> <p>OR</p> <p>Presence of friendly relations between owners or management of company and federal or regional authorities. Degree of the relations was assessed as strong.</p> <p>OR</p> <p>The company has provided formalized plans of funding by government bodies (credit rating of government or government structure is at least B- according to the international scale) OR the company has confirmed orders from government agencies (with specified amounts and timing).</p> <p>AND</p> <p>at least one of the following conditions is satisfied:</p> <ul style="list-style-type: none"> • The government has a share in the company's equity which is less than 50%; • The company participates in big government programs OR the company is a member of officially recognized strategically important enterprises for this market (for instance, it is included in some official lists of companies, that can receive financial support from the government in case of financial distress); • Government representatives are included in the management bodies of the company (boards, board of directors). <p>The presence of friendly relations between the owners or management of the company and federal or regional authorities. Degree of friendliness was assessed as moderate.</p>
------------------------------------	---	---

Support from the owners	<p>The company is important for the owner, whose share in equity is more than 25%.</p> <p>The company's owner is the Government (with credit rating "B-" or higher according to the international scale), company / bank partly owned by the Government (with credit rating "B-" or higher according to the international scale) or an organization included in the list of largest companies* (with credit rating "B-" or higher according to the international scale), the company does NOT need additional capitalization, "comfort letter" WAS NOT provided.</p> <p>OR</p> <p>The company is important for the owner (as asset). The owner has provided a letter confirming that he is ready to provide financial support equal to 15-30%** of the company's assets. AND the owner has sufficient volume of assets, which are documented.</p>	<p>The company is important for the owner, whose share in equity is more than 25%.</p> <p>The Company's owner is the Government (with credit rating "B-" or higher according to the international scale), company / state-owned bank (with credit rating "B-" or higher according to the international scale) or organization included in the list of largest companies* (with credit rating "B-" or higher according to the international scale), the company provided "comfort letter".</p> <p>OR</p> <p>The company is important for the owner (as asset). The owner has provided a letter confirming that he is ready to provide financial support which exceeds 30%** of the company's assets. AND the owner has sufficient volume of assets, which are documented.</p>
-------------------------	---	--

* - For foreign companies the volume of assets should be comparable to the largest national companies from the country, where the company is located

** - In case of negative company's equity, the score can be corrected by the expert.

Support can be expressed in two ways - financial and administrative. Financial support in terms of this methodology is provided by the company's owner, administrative support - by the Government.

The factor "Support from the owners" is assigned only if there is enough evidence of financial support from the owners.

The factor "Support from the government" is assigned only if there is enough evidence of administrative support, which can exist in the following cases:

- The company has high social and infrastructural importance for the government and country;
- The presence of informal relationships between the owners or management of the company and senior government officials;
- The government participates in the company's equity.

6. System of indicators for the Country and Industry Risk (CIR) score

The **stand alone rating score** and the **preliminary rating score** are adjusted by the **CIR score** in order to obtain the **stand alone credit rating** and the **final credit rating** respectively (see Section 4). The CIR score is assessed as a weighted average of the Country Risk and the Industry Risk scores. The weights for the Country and Industry Risk scores depend on the country risk assessment. The higher the country risk, the higher its weight on the CIR score, and vice versa (see table 1). The weights have been benchmarked following the best industry practices, deep macro analysis and calibration requirements.

6.1 Country Risk Score

The Country Risk Score is calculated as the simple average of the Credit Climate Environment (CCE) and Banking Sector Risk (BSR) scores. For a more detailed overview of CCE and BSR scores, please consult respective methodologies.

6.1.1 CCE

This indicator is important to assess the overall macroeconomic risk of the country or countries included in the CIR analysis. The CCE score captures any fiscal, monetary, inflationary, institutional or regulatory risks the company may be exposed to; plus some additional factors related to the private sector of the country (e.g. the level of real interest rates, private sector debt, history of bankruptcies, etc.).

6.1.2 BSR

The BSR is a key factor in order to assess the financial systematic risk of an economy given the fact most corporates are leveraged or have relations with the banking system, its exposure to the financial and banking system is substantial. The BSR captures the risk of the entire financial system, government risks and bank specific risks. For a more detailed overview the BSR scores, please consult the respective [BSR Methodology](#).

6.2 Industry Risk Score

The Industry Risk score is assessed as the weighted average of the associated risk scores from the cyclicity and barriers factors (see table 2).

6.2.1 Industry Cyclicity Score

Each industry is segregated into Defensive, Medium or Cyclical group of cyclicity, depending on the extent to which the industry is affected by the state of the economic cycle. Industries in each cyclicity group are assigned scores from 1(highest) to 6(lowest) with a step of 0,5 points. The rationale behind each industries' cyclicity score assignment is justified by a thorough qualitative analysis with consideration of multiple analytical sources including Morningstar Global Equity Classification Structure (Morningstar Research, 2011), as well as best practices from the financial industry.

6.2.2 Industry Barriers Score

Each industry is assigned a barriers score, depending on how easy or hard it is for the new entrants to cope with the patenting, tariff protection, industry's capital intensity, technological development, as well as presence of significant government ownership in the industry. The

rationale behind each industries' barriers score assignment is justified by a thorough qualitative analysis with consideration of multiple analytical sources.

6.2.3 Qualitative adjustment

Each industry's score can be additionally adjusted depending on the expert's opinion about dynamics in the industry.

List of factors for the assessment of the Country and Industry Risk (CIR) score

Factor	Weight
Industry Score	100%
<i>Industry Cyclical Score</i>	45%-50%
<i>Industry Barriers Score</i>	45%-50%
<i>Industry Barriers Score</i>	0%-5%*
Country Score	100%
<i>Country Credit Environment</i>	50%
<i>Banking Sector Risk</i>	50%

* The adjustment factors have an impact of at least 5%. However, the impact could be greater in many of these factors are identified.

Weights for the Country and Industry risk scores to obtain the final CIR score

Country Risk Score	Country Risk Weight	Industry Risk Weight
1;2	0%	100%
2;3	0%	100%
3;4	25%	75%
4;5	50%	50%
5;6	75%	25%

In cases where the company operates in different countries, the country risk score is calculated for all the countries and the final score is a weighted average of the percentage of revenues or assets. The decision to use revenues and/or assets depends on the type of company, the type industry and the analyst's criteria in order to decide which metric better reflects the risk exposure of the company to a certain economy.

7. The rules for the determination of the outlook on the credit rating of a non-financial corporate

According to this methodology, the Agency determines the outlook on the credit rating, which means the opinion of the Agency on the probability of changes of the credit rating in one-year perspective (if other is not mentioned). The credit rating of the rated entity can be assigned with one of the following outlooks:

1. Positive outlook (high probability of a credit rating upgrade within the following 12 months);
2. Negative outlook (high probability of a credit rating downgrade within the following 12 months);

- months);
3. Stable (high probability of maintaining the credit rating within the following 12 months);
 4. Developing outlook (probability of the following rating actions is equal within the following 12 months: upgrade, downgrade and maintaining the credit rating).

The outlook on the credit rating of the company is based on the Agency's expectations about the dynamics of the indicators used in this methodology, i.e. the outlook is affected by the same factors as the assigned credit rating, including the stress- and support-factors. The rating outlook is applicable only for the final credit rating (not for the stand alone credit rating).

When assigning the outlook, the Agency takes into account the historical data of the rated entity, data from the company's strategy and the Agency's own macroeconomic forecast.

When assessing the rated entity's perspectives the Agency uses the key rating assumptions for the possible scenarios of the entity's dynamics, as well as the probability of each scenario. Such scenarios are the subjective opinion of the members of the rating committee. These scenarios can be based on the official strategy of the rated entity and internal calculations of the Agency. The outlook is sensitive to the final decision of the rating committee in the most probable scenario of the entity's dynamics. The planned changes in the regulation are taken into account for the outlook determination if they can have a significant influence on the rating.

The rating committee can determine the criteria, satisfaction or non-satisfaction of which, can lead to the changes in the rating (rating sensitivity).

Rating "On Watch"

The Agency may place a credit rating under review (or "On Watch") when this credit rating is under consideration for a change in the short term.

Placing a credit rating "On Watch" is not considered as a rating action.

A rating is placed under review when a rating action is anticipated in the short term however further information or analysis is needed in order to make a rating action decision. As a result of the review the rating may be upgraded, downgraded, or confirmed without any change. In this situation, the reason why the rating is placed under review and the time when the final conclusion on the rating is expected to be made will be stipulated in the press release.

The period of time from publishing a rating review statement and its final decision may vary from 30 to 90 days depending on the reason for the review and the amount of time needed for receiving information and conducting the analysis.

For more specific and sophisticated cases, associated with a series of events which may influence a rating, the period of placing a rating "On Watch" can last longer than 90 days.