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METHODOLOGY FOR ASSIGNING CREDIT RATINGS TO BANKS – SHORT PUBLIC VERSION

The Methodology presented is a short public version.

1. General definitions

This methodology describes a system of factors and weights used in the process of assigning credit ratings to banks.

Final international credit rating of a bank represents the opinion of the Rating Agency on the ability of the bank to fulfill its financial obligations in full amount and in a timely manner.

Stand alone credit rating of a bank represents the opinion of the Rating Agency on the ability of the bank to fulfill its financial obligations in full amount and in a timely manner without taking into account external factors (support from the owners or government, planned future changes in the regulation, adjustments for industry risks etc.).

The main users of the rating are creditors. Other users are investors and counterparties of the bank whose interest is focused on the possibility of full and timely fulfilment of the bank's liabilities, as well as the bank's prospects for fulfilment of new liabilities (taking into account possible changes in the economic environment).

The rating assessment of the bank can be used for organizing and conducting tenders.

The rating is also useful for managers of the bank and its founders as an indicator of the management performance.

2. Sources of information

2.1 While assigning a rating score, the following sources of information are used:

- Questionnaire filled by the bank 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;
- Articles of Association of the bank in their current version;
- Documents regulating risk management of the bank;
- Documents determining development plans of the bank;

- Documents regulating corporate governance of the bank;
- Data obtained during interviews with managers of the bank;
- Information from the mass media and other public sources.

2.2 The Agency is neither responsible for controlling the accuracy of the accounting procedures, statistical forms, and forms provided by the bank to the supervisory authorities, nor for the authenticity of the information included in these forms.

2.3 The Agency shall contact the bank for an explanation of the indicators provided in the financial statements and questionnaire. If differences between internal statements and official reporting forms are found, the Agency shall prioritize the analysis of the internal statements. The presence of these differences is considered as an additional risk factor.

2.4 The Agency has the right to use other sources of information in case of data incompleteness.

3. Structure of the rating analysis

3.1 The creditworthiness analysis of the bank has several levels. During the process of the rating assignment, the Rating Agency calculates a **preliminary credit rating** (only for internal purposes) and, after adjusting for the Banking Sector Risk (BSR) (see logic scheme), obtains the **final international credit rating**. The **preliminary credit rating** is the assessment of the bank's creditworthiness taking into account support- and stress-factors, which have external nature. The **stand alone credit rating** is based on the analysis of bank's **financial stability** taking into account only support- and stress-factors, which have internal nature.

Thus, the bank's rating is based on the analysis of three types of factors and the industry adjustment:

- ***Stand alone creditworthiness;***
- ***Significance of internal support-factors and exposure to internal stress-factors;***
- ***Significance of external support-factors and exposure to external stress-factors;***
- ***Adjustment for the BSR.***

3.2 The stand alone bank's creditworthiness is defined as the weighted sum of the assessment of three sections: market position of the bank (1); financial risks (2); corporate governance and risk management (3).

3.3 The section "***Market position of the bank***" includes the analysis of the following integral factors: *history and reputation of the bank; specialization and captivity; geographic reach; competitive position of the bank*.

3.4 The section ***"Financial risks"*** includes analysis of the following integral factors: *capital adequacy, sensitivity of the capital to credit risks realization; concentration of credit risks on large customers; provision policy; quality of assets and contingent liabilities at risk; profitability of operations; funding base structure*[1]*; liquidity; market risks.*

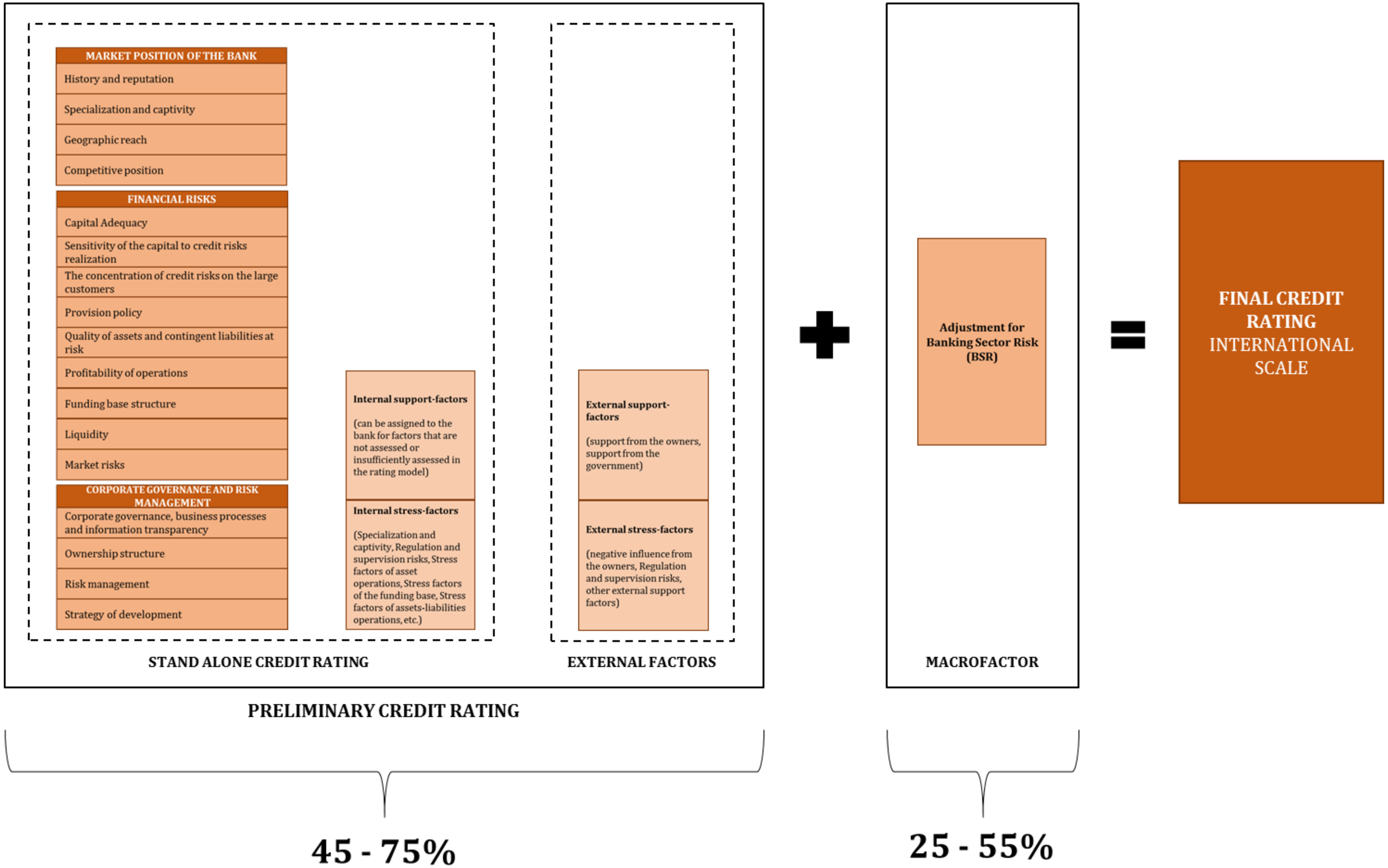
3.5 The section "***Corporate governance and risk management***" includes the analysis of the following integral factors: *the quality of corporate governance, business processes and information transparency of the bank; ownership structure; risk management; the strategy of development*.

3.6 After assessing the factors of the bank's stand alone creditworthiness, the responsible expert shall assess internal support- and stress-factors. Depending on the value of these factors, a "penalty" or a "bonus" shall be subtracted or added to the rating score of the stand alone creditworthiness. If a moderate stress-(support-) factor is detected, the responsible expert shall deduct (add) 0,1 from (to) the rating score. If a strong stress-(support-) factor is detected, the responsible expert shall deduct (add) 0,2 from (to) the rating score. If a very strong stress (support) factor is detected, the responsible expert shall deduct (add) 0,3 from (to) the rating score. If a maximum stress (support) factor is detected, the responsible expert shall deduct (add) 0,4 from (to) the rating score. If several stress (support) factors are detected, "penalties" and "bonuses" shall be summed up (except when the factors are of the same type). Then, the responsible expert shall adjust the rating score for the stand alone creditworthiness (already including internal stress- and support-factors) for external stress- and support-factors. The result of this is the preliminary credit rating score.

3.7 The preliminary credit rating is then adjusted by the BSR score in order to obtain the final credit rating in international scale (see logic scheme). Rating-Agentur Expert RA GmbH publishes **only final ratings in accordance with the international scale**.

[1] The funding base of a bank shall mean its equity capital and monetary funds raised from legal entities and individuals, on a repayable basis. These funds are raised by the bank as a result of operations with liabilities, which are used for the execution of asset operations. **This section of the methodology includes only the analysis of raised funds.**

Logic scheme:



*the weights which **preliminary credit rating** and **macrofactor** carry towards the **final credit rating in international scale** range depending on the value of the **macrofactor**

4. System of indicators for the preliminary credit rating

4.1 Section *"Market position"*

- History and reputation of the bank

  A long history of operations in the banking sector has a positive impact on the assessment of the bank's creditworthiness. Strong brand, absence of scandals that would potentially damage the bank's position and good reputation of the management are positively evaluated. Negative public information about the bank or about its involvement in semi-legal schemes (money laundering, corporate raiding, asset stripping, etc.), bad reputation of the management (previous involvement in the management of banks with revoked license and/or criminal records), as well as presence of numerous complaints from the supervisory bodies are assessed as risk-factors.

- Specialization and captivity

  The bank's diversification in the credit market has a positive influence on its creditworthiness as it decreases its exposure to individual segments of the financial market. A high proportion of assets attributed to related parties, as well as a high share of revenues (in the amount of interest and commission revenues) associated with related parties can have a negative impact on the bank's rating level. Important parameters of a "captive" bank's creditworthiness are the financial stability of the main client and the intrinsic value of the bank to the client.

- Geographic reach

  A high level of geographical diversification increases the bank's potential to increase the volume of lending and funding activities. A narrow geographical diversification hinders the bank's opportunities to reach an acceptable level of diversification by industries and redistribute resources in the case of a domestic stress situation of individual depositors (e.g. after the emergence of negative information about the bank or the financial system in the country). The country credit environment (CCE) rating of the countries where the bank operates, the effectiveness of the network of branches and consistency of the geographical reach to the strategic goals are also considered.

- Competitive position

  A strong position within the banking sector positively affects the bank's creditworthiness as it increases the possibility to generate enough revenues to cover current and future obligations. Strong branding and a unique competitive advantage (e.g. great diversity of sales channels and a full range of required licenses) are positively evaluated. In addition, the compliance of the bank's equity and capital requirements in accordance with the current regulatory standards are assessed in order to determine the prospects of the bank to reach individual client groups. Limitation of the bank's activities to a particular narrow niche and high probability of key segment's tightening are considered to be risk factors.

4.2 Section ***"Financial risks"***

- <u>Capital adequacy</u>

  A high level of capital adequacy allows the bank to absorb (without violating mandatory regulatory ratios) a significant amount of unexpected and, hence, not incorporated into the amount of created reserves, losses. Particular attention is drawn to the structure of capital. For instance, subordinated loans, residual maturity of which is less than five years and capital gains due to property revaluation are characterized by the Agency as unstable components of the capital structure. "Capital overestimation" schemes are considered to be risk factors. Depending on the systemic importance of each bank, different requirements are applied to assess the capital adequacy.

- <u>Sensitivity of the capital to credit risks realization</u>

  The level of capital and capital adequacy are tested for materialization of credit risks with different scenarios considering the credit risk concentration and credit quality of counterparties. As the basis of the stress test, the Agency considers the most likely level of impairment of granted loans and other assets of credit nature, realization of which is possible in the short-run for banks with similar specialization and risk profiles.

- <u>The concentration of credit risks on large customers</u>

  A high level of diversification of the bank's assets by credit risk objects is positively assessed as it allows to decrease the degree of the bank's dependency on certain borrowers/issuers.

- <u>Provision policy</u>

  A conservative provision policy is positively valued. The creation of excess reserves can be regarded as a positive factor in relation to creditworthiness due to the fact that in a period of asset quality deterioration, the bank would have a certain degree of credit strength. It can be positively evaluated if a bank does not decrease the actual reserves by using collateral when it is available.

- Quality of assets and contingent liabilities at risk

  The valuation of the quality of assets and contingent liabilities at risk is the quality analysis of the most important components of assets at risk: issued interbank loans and correspondent accounts, the loan and securities portfolios, property and other assets at risk and contingent liabilities. High quality of a credit portfolio (low level of overdue and rescheduled loans) has a positive impact on the bank's rating. High level of loan portfolio diversification by industries and high level of loans' collateralization are considered as positive factors. Quality evaluation of securities portfolio (is undertaken only if securities constitute more than 2% of assets as of latest quarter) is defined by the weighted sum of the following indicators: diversification of the securities portfolio (concentration on sectors), exposure to financial instruments' risks, and liquidity of the securities portfolio. Other assets at risk refer to precious metals, assets under management and others. The Agency assesses the extent impairment of property and other assets at risk in case the bank needs to divest these assets.

- Profitability of operations

  The ability of a bank to generate positive financial results and correspondence of these results to those required by the investors' rate of return on capital in the banking sector are assessed. Profitability indicators are calculated following IFRS standards (or, if not available, local GAAP standards). The Agency pays particular attention to the structure of the financial results. All components of the financial results are divided into two categories: stable (net interest and fee income) and unstable (one-off net income, income from operations with foreign exchange, revaluation of securities and assets denominated in foreign currency).

- Funding base structure

  Low concentration level of funds raised from large creditors allows the bank to decrease the sensitivity to specific risks associated with instability of financial flows from individual creditors. High diversification of clients' funds by maturity and stability of the funding base are positively assessed. The dependence of a bank on one source of funding (e.g. funds from individuals with an insufficient geographical diversification thereof) is considered to be a risk factor. A low probability of large payments during the period of the rating's validity has a positive impact on bank's rating.

- Liquidity

  Sufficient values of instant, current and long-term liquidity ratios are indicators of well-balanced assets and liabilities of a bank. When analyzing long-term liquidity particular attention is paid to the active usage of prolongations, which allows to book loans where the borrower uses funds for more than one year as loans with maturity of less than one year. The Agency also assesses the availability of sources of additional liquidity. Lack of access to such sources limits the bank's ability to obtain additional external liquidity in distressed situations (e.g. panic of depositors and unexpected large payments).

- Market risks

  Under this subsection it is determined to which extent is the bank inclined to take on market risks (stock market, interest rate and foreign exchange risks (volatility risk of foreign exchange rates)). The acceptance of an insignificant foreign exchange risk, possibility to change interest rates (as per credit agreements) on the loans granted, low proportion of encumbered securities and promissory notes in total assets and low mismatch between floating rate assets and liabilities have a positive influence on the bank's creditworthiness. The influence of foreign exchange risk to the creditworthiness of a bank depends on the liquidity of the currencies in question and the use of foreign exchange risk hedging instruments.

4.3 Section ***"Corporate governance and risk management"***

- Corporate governance, business processes and information transparency

  Organisational structure matching the core business of a bank and automatized business processes are considered to be positive factors. These allow the bank's management to make correct decisions. A bank is rated high for transparency if the bank provided all required information and answered all required questions, as well as if the bank publishes quarterly reports on its website and discloses information about ultimate owners and management. Bank's reports (with notes) in accordance with IFRS published on the official website of the bank have a positive influence. Information transparency, quality of business processes and corporate management grades can be adjusted due to information distortion, low quality of the interview, timing and completeness of information presented.

- Ownership structure

  The purpose of this subsection is to estimate the probability of conflicts between shareholders which can lead to a deterioration of the creditworthiness of the bank, as well as to identify indirect signs of the owners' interest in supporting the bank. Stable transparent ownership structure of a bank, absence of companies registered in "tax havens" and (or) in countries with relaxed information disclosure requirements in the chain of ownership and a small number of connected companies until the ultimate controlling shareholder are positively evaluated.

- <u>Risk management</u>

  The Agency carries out an analysis of the current risk profile and risk management practices. In the end of the analysis it is concluded whether the prevailing practices meet the real needs of risk management. Risk management requirements can significantly vary depending on the size of a bank and its specialization. The composition of the bodies responsible for making decisions on granting loans is examined (inclusion of representatives from legal departments, risk managers and security service employees into the credit committee is positively evaluated).

- <u>Strategy of development</u>

  The Agency analyzes the strategy and objective determination activities. The analysis concludes if the bank's operation activities have sufficient strategic planning, i.e. the bank's activities are in line with mid- and long-term strategic goals. Presence of core segments in the strategy, analysis of the competitive environment and strengths and weaknesses of the bank relative to its competitors are positively evaluated.

5. Rating score adjustments

5.1 Rating score for stand alone creditworthiness

On the basis of the rating score obtained from the analysis of the market position, financial risks, corporate governance and risk management, the rating score for **stand alone creditworthiness** shall be determined using the following formula:

Rating score for stand alone creditworthiness = rating score plus the sum of bonuses for the detected internal support-factors minus the sum of penalties for the detected internal stress-factors.

Rating-Agentur Expert RA GmbH uses the following **internal stress-factors**[2]:

- Specialization and captivity;
- Geographic reach;
- Regulation and supervision risks[3];
- Stress factors of asset operations ;
- Stress factors of the funding base;
- Stress factors of assets-liabilities operations;
- Other internal stress factors.

An **internal support factor** (moderate or strong) can be assigned to the bank for factors that are not assessed or insufficiently assessed in the rating model because of specific characteristics of the rated bank or temporary influence of such factors. Temporary influence of the factor means that the rating score for the bank decreased temporary in accordance to opinion of the member of the rating committee, and significant increase of the rating score is expected for the next quarterly date. In other words, temporary influence of the factor means the high probability of absence of such influence in three months.

5.2 Preliminary credit rating

On the basis of the rating score for stand-alone creditworthiness obtained after adjustment for the effect of internal support-factors and internal stress-factors the preliminary credit rating is determined using the following formula:

[2] The purpose of detecting stress factors is to take into account the internal factors whose effect in the current external conditions is so destructive (it may result in closing up the business, default, licence revocation), that even the maximum penalty (“-1”) by the relevant component is insufficient (according to the expert opinion).
[3] Internal stress-factor of regulation and supervision risks includes “strong signs of the involvement of the bank in “suspicious operations” and compliance with the key normative ratios.

***Preliminary credit rating** = rating score for the stand alone creditworthiness plus the sum of bonuses for the external detected support-factors minus the sum of penalties for the detected external stress-factors.*

Rating-Agentur Expert RA GmbH uses the following **external stress-factors**[4]:

- Negative influence from the owners;
- Regulation and supervision risks[5];
- Stress-factor for banks involved in the "Official procedure of financial recovery as an investor bank";
- Other external stress factors.

Rating-Agentur Expert RA GmbH uses the following **external support-factors**:

- Support from the owners;
- Support by the government authorities;
- Other external support factors.

5.3 Final credit rating in international scale

The preliminary credit rating is adjusted by the BSR score in order to arrive at the final credit rating in international scale. The BSR score assessment is explained in detail in section 6.

[4] The purpose of detecting stress factors is to take into account the external factors, whose effect in the current external conditions is substantially harmful (it may result in closing up the business, default, licence revocation), that even the maximum penalty ("-1") by the relevant component is insufficient (according to the expert's opinion).

[5] External stress-factor of regulation and supervision risks includes planned changes in bank regulation (prescriptions, instructions by the Central Bank, etc.) will significantly deteriorate the financial position of the bank and the stability of its business model.

6. System of indicators for the Banking Sector Risk (BSR) score

6.1 Section *"Credit Conditions"*

The purpose of this section is to assess the state of the credit environment in the economy, by considering the level of banking sector development and risk as well as the leverage and debt capacity of the private sector.

6.2 Section *"Market Conditions"*

The factors considered under this section are intended to assess the state of the banking market in an economy, by considering concentration, loan structure, as well as deepness and reach parameters.

6.3 Section *"Funding Conditions"*

This group of factors captures the funding conditions in the sector, by examining the central bank's balance sheet structure as well as the banks' liquidity and default indicators.

6.4 Section *"Institutional Framework"*

Under this group of factors we analyse the regulatory environment in the country.

6.5 Section *"Economic Factors"*

Economics factors are designed to analyse the macroeconomic environment of the country by examining scale, policy and effectiveness factors.

6.6 *Adjustment Factors*

A number of qualitative factors are introduced in order to allow the banking sector risk to be manually adjusted for the effects that are not precisely captured by the quantitative analysis.

Annex 1. List of factors and corresponding weights for the assessment of the credit rating according to the international scale

Factor	Weight
I. Market position	**17,0%**
History and reputation	
Specialization and captivity	
Geographic reach	
Competitive position	
II. Financial risks	**71,0%**
Capital adequacy	
Sensitivity of the capital to credit risks realization	
The concentration of credit risks on large customers	
Provision policy	
Quality of assets and contingent liabilities at risk	
Profitability of operations	
Funding base structure	
Liquidity	
Market risks	
III. Corporate governance and risk management	**12,0%**
Corporate governance, business processes and information transparency	
Ownership structure	
Risk management	
Strategy of development	
IV. Internal Stress factors	
Specialization and captivity	
Geographic reach	
Regulation and supervision risks	
Stress factors of operations with assets	
Stress factors of the funding base	
Stress factors of assets-liabilities operations	
Other internal stress factors	
V. Internal Support factor	
TOTAL – STAND ALONE CREDIT RATING	
VI. External Stress factors	
Negative influence from the owners	
Regulation and supervision risks	
Stress-factor for banks involved in the “Official procedure of financial recovery as an investor bank”	
Other external stress factors	
VII. External Support factors	
Support by owners	
Support by the government authorities	
Other external support factors	
TOTAL – PRELIMINARY CREDIT RATING	
BSR score adjustment	
TOTAL – FINAL CREDIT RATING IN INTERNATIONAL SCALE	

Annex 2. List of factors for the assessment of the Banking Sector Risk (BSR)

Factor	Weight
Credit Conditions	25%
Market Conditions	26%
Funding Conditions	15%
Institutional Framework	15%
Economic Factors	13%
PRELIMINARY BSR SCORE	
Adjustment factors	6%*
FINAL BSR SCORE	

* The adjustment factors have an impact of at least 6%. However, the impact could be greater in many of these factors are identified.

Annex 3. List of rating classes

Credit rating assigned by Rating-Agentur Expert RA GmbH is defined on the basis of allocating the bank to one of 11 rating classes according to the international scale.

AAA - Highest level of creditworthiness

In the short-run the bank will ensure timely fulfillment of all its financial liabilities, both current and contingent[6], with exceptionally high probability. In the mid-run there is significant probability that the liabilities will be fulfilled even in case of significant unfavorable changes in the macroeconomic and market indicators.

AA - Very high level of creditworthiness

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

A - High level of creditworthiness

In the short-run the bank 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.

BBB - Moderately high level of creditworthiness

In the short-run the bank 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.

BB - Sufficient level of creditworthiness

In the short-run the bank 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.

B - Moderately low level of creditworthiness

In the short-run the bank 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.

CCC - Low level of creditworthiness

The bank is ensuring timely fulfillment of its current financial liabilities, however, in the short-run, the probability of not fulfilling contingent financial liabilities is very high. In the mid-run the probability of not fulfilling the liabilities is very high in case of negative changes in the macroeconomic and market indicators.

CC - Very low level of creditworthiness (close to default)

The bank is ensuring timely fulfillment of current financial liabilities, however, in the short-run, the probability of not fulfilling contingent financial liabilities is very high.

C - Lowest level of creditworthiness (partial default)

The bank is not ensuring timely fulfillment of some financial liabilities.

D - Default (Bankruptcy)

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

E - License revocation or liquidation

The bank is going through the liquidation procedure or the bank's license was revoked.

One of the above rating levels that can be assigned to the bank, excluding AAA and ratings below CCC, may be supplemented with (+) or (-) sign depending on the value of the rating score.

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[6] For this methodology, contingent liabilities are the new liabilities arising during the rating validity period.