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METHODOLOGY FOR ASSIGNING CREDIT RATINGS TO BANKS – FULL VERSION

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1. General definitions

1.1 Scope of Methodology

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

This methodology is not used for assigning ratings to other financial companies (such as: leasing, factoring, medical insurance organizations, microfinance organizations or insurance companies having a right to sign new contracts on the life and non-life insurance).

Bank creditworthiness is the ability of a bank to fulfill its financial obligations to creditors fully and in a timely manner¹.

Credit rating (rating of creditworthiness) of a bank represents the opinion of the Agency on the ability of the bank to fulfill its financial obligations fully and in a timely manner.

Stand alone credit rating (stand alone rating of creditworthiness) of the bank represents the opinion of the Agency on the ability of the bank to fulfill its financial obligations full amount and in a timely manner without taking into account external stress- and support-factors.

1.2 Default definition

Any of the following cases are considered as default by the Agency for bank:

- Non-fulfillment of financial liabilities on bonds after the end of the period of technical default (more than 10 business days), including: failure to pay interest (coupon) on bonds; non-redemption of the 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 are to be repaid (for more than 10 business days);
- Non-fulfillment of other financial liabilities formally not bearing interest, but which are overdue for more than two months and the rating committee considered that there is a high probability that the court can oblige the rated entity to pay penalties for non-fulfillment of such kind of liabilities (for instance, overdue debt on salaries payments);
- License withdrawal or non-prolongation of the license, issued for the term period, and the rated entity cannot provide its key service without such license. If the rated entity legally initiated the process of license revocation and the bank fulfilled all its financial liabilities on time and in a full amount, this case is not considered as default by the Agency;
- If the rated entity's debt liabilities were restructured within the last two months, and after this creditors have worse conditions comparing with the 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 the court recognized the bank as a bankrupt.

¹ Creditors here include any party who provide loan funds to the bank in any form (individuals or legal entities, including depositors and buyers of debt securities).

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

If the Agency did not state the default of the entity before the date of license withdrawal, the date of license withdrawal is to be considered as the date of default.

1.3 Key rating assumptions

There are following rating assumptions:

1. There is a stable cause-effect relationship between the level of creditworthiness (hereinafter referred to 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. Non-linear effect of factors is shown by using stress- and support-factors, that have a strong effect on the rating (see Section 5. System of indicators);
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 the indicators having positive correlation with the creditworthiness), 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 the indicators having negative correlation with the creditworthiness), 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 the indicators having positive correlation with the creditworthiness), it does not have an additional negative effect on the rating score (with the exception for the indicators having stress-factors). If the value of indicator is higher than the benchmark of minimum score (for the indicators having negative correlation with the creditworthiness), it does not have an additional negative effect on the rating score (with exception for the indicators having stress-factors);
5. All macro risks are covered by the Banking Sector Risk (BSR) 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) Rating-Agentur Expert RA GmbH strictly follows the requirements regarding the maintenance of its methodologies:

- The Agency uses the 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 the on ratings and indicating the need to review issued ratings. If errors have an impact on 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 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;
- Articles of Association of the bank in their current version;
- Documents regulating risk management of the bank;
- Documents determining development strategy of the bank;
- Documents regulating corporate governance of the bank;
- Data obtained during interviews with management of the bank;
- Information from the mass media and other public sources.

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 assignment / maintaining current credit rating. If the rated entity has existing 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. System of indicators);
- 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 a right to assign rating taking into account adjustments for the score of some factors, which are approved by the rating committee. As a general rule, such adjustments are conservative (have negative influence). Absence of information is considered as negative information by the Agency.

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 refuses the assignment / maintenance of the current rating. If the company has the current 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 “other” stress-factor.

If two or more sources of information contradict each other and the company does not provide 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 refuses the assignment / maintenance of the current rating. If the company has current rating in this situation, this rating is withdrawn without confirmation.

This methodology is used to assign credit ratings and stand alone credit ratings to banks.

3. Rating classes

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

International scale

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

Class AAA: The highest level of creditworthiness.

In the short-run the bank will ensure timely fulfillment of all its financial liabilities, both current and contingent², 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.

Class 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.

Class 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.

Class 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.

Class BB: Sufficient level of creditworthiness.

² For the definitions of the rating classes, contingent liabilities are the new liabilities arising during the rating validity period.

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.

Class 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.

Class 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.

Class 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.

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

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

Class D: Bankruptcy.

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

Class 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.

4. Rating assignment process (credit ratings and stand alone credit ratings³)

4.1 Structure and order of analysis

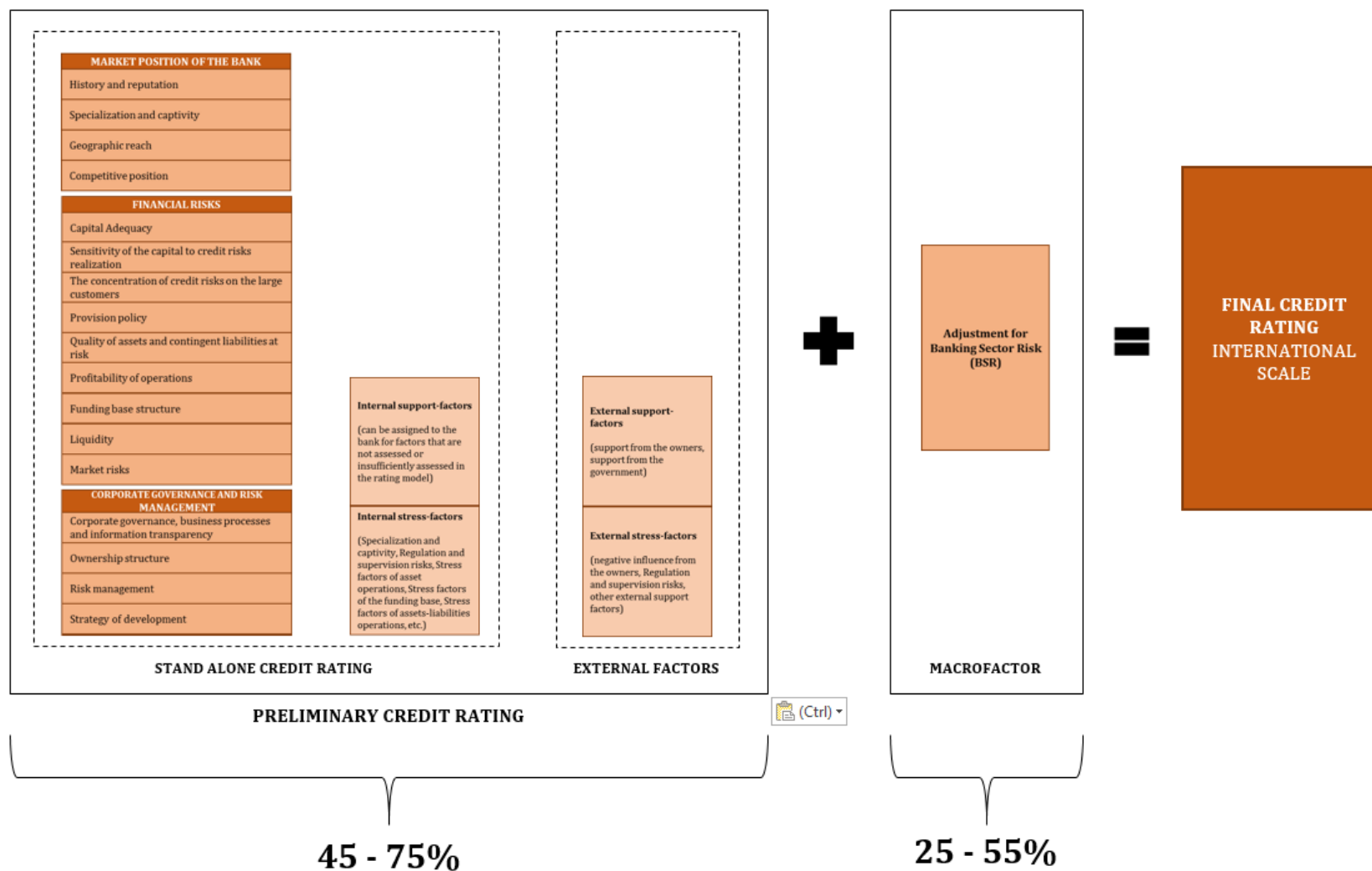
4.1.1 The creditworthiness analysis of the bank has several levels. During the process of the rating assignment, the Rating Agency calculates a **preliminary credit rating** (only for internal purposes) and, after adjusting for the Banking Sector Risk (BSR) (see graph 1 below), obtains the **final international 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 two types of factors and the industry adjustment:

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

³ Without taking into account external stress- and support-factors.

Graph 1. Main integral factors of the rating analysis



*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

4.1.2 The analysis of bank's **financial stability** includes the analysis of three sections: *market position of the bank (1); financial risks (2); corporate governance and risk management (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 reliability level
0,5	Factor (indicator) has moderately positive influence on reliability level
0	Factor (indicator) has neutral influence on reliability level
-0,5	Factor (indicator) has moderately negative influence on reliability level
-1	Factor (indicator) has negative influence on reliability 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. “System of indicators”), describing integral factors.

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

4.1.2.3 The rating score for the bank's financial stability is determined as a weighted sum of scores for all integral factors, weighted in a certain manner depending on the type of company (see Section 4.2).

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

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.

Internal stress-factors (moderate or strong) include risks of specialization and captivity, geographical reach, regulation and supervision⁴, asset operations, funding base, asset-liability operations and others. They 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. The purpose of detecting stress

⁴ 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.

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, license revocation), 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 credit rating** of the bank, the rating score for stand alone credit rating 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 bank, and which can be used in case of deteriorating financial condition, as well as factors which are not assessed or insufficiently assessed in the rating model because of specific characteristics of the rated bank or temporary influence of such factors.

External stress-factors include the risk of negative influence from the owners, regulation and supervision⁵, taking part in the procedure of financial recovery as an investor bank and other. 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 bank 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 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 opinion of the Agency).

4.1.5 The **preliminary credit rating** is then adjusted by the **BSR score** in order to obtain the **final credit rating** according to the international scale (see graph 1 above). Rating-Agentur Expert RA GmbH publishes **only final ratings in accordance with the international scale**.

4.2 Types of companies

The range of benchmarks for some indicators differs depending on the type of rated banks. There are two types of banks depending on their systemic importance classified in this methodology:

- **A bank having signs of systematic importance:** the bank meets the local criteria of systematic importance or was classified as systematically important according to the professional judgment of the rating agency;
- **A bank having no signs of systematic importance:** the bank does not meet the local criteria of systematic importance or was not classified as systematically important according to the professional judgment of the rating agency.

4.3 Range of weights

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

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.

Factor	Algorithm for the weight calculation ⁶	Weight ⁷	Long-tail/ short-tail / continuous short-tail
Section 5.1. Market position (17%)			
History and reputation	4,00%		
Specialization and captivity	3,00%		
Geographic reach	4,00%		
Competitive position	6,00%		
Section 5.2. Financial risks (71%)			
Capital adequacy	8%		
<i>including capital adequacy ratio</i>	40%*8%	3,2%	Long-tail
<i>including common equity tier 1 (CET1) ratio</i>	20%*8%	1,6%	Long-tail
<i>including tier 1 capital ratio</i>	40%*8%	3,2%	Long-tail
Sensitivity of the capital to credit risks realization	5%	5%	
<i>share of the loan portfolio which, if fully impaired, would either lead to a violation of any of the capital adequacy ratios, or to a decrease in capital levels below the regulatory minimum.</i>	Minimum from two scores *5%	5%	As of the last reported date
<i>if the default of one of the top ten credit risk objects (except for credit risk objects having a credit rating not lower BBB- according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation) leads to a violation of any of the capital adequacy ratios or to a decrease in capital levels below the regulatory minimum (number of credit risk objects).</i>			
Concentration of credit risks on large customers	5%		
<i>including the share of the maximum credit risk per one object of credit risk in total assets</i>	50%*5%* minimum of two scores	2,5%	Long-tail
<i>including the share of the maximum credit risk per one object of credit risk in total capital</i>			
<i>including large credit risks in</i>	50%*5%	2,5%	Long-tail

⁶ Indicates the weight or approximate range of variation.

⁷ The weights provided in this table for the Section "Quality of assets and contingent" liabilities are based on example of the bank having the structure of assets typical in emerging market.

<i>total assets</i>			
Provision policy	3%	3%	
including loan portfolio			<i>Long-tail</i>
<i>including the difference between calculated and minimum required ratios</i>	3%	-	<i>Long-tail</i>
Quality of assets and contingent liabilities at risk⁸	16%		
<i>including the assessment of reliability of funds allocated to correspondent accounts</i>	16%*the share of funds placed on correspondent accounts in the sum of assets and contingent liabilities	0,7%	<i>As of the last reported date</i>
<i>including the static coefficient of assessment (assessment of balances)</i>	80%*16%* the share of funds placed on correspondent accounts in the sum of assets and contingent liabilities	0,56%	<i>As of the last reported date</i>
<i>including the dynamic coefficient of assessment (assessment of debit turnovers)</i>	20%*16%* the share of funds placed on correspondent accounts in the sum of assets and contingent liabilities	0,14%	<i>For the last reported date</i>
<i>including the assessment of reliability of funds allocated to interbank deposits and loans</i>	16%*the share of issued interbank loans in the sum of assets and contingent liabilities	0,4%	<i>As of the last reported date</i>
<i>including the static coefficient of assessment (assessment of balances)</i>	60%*16%* the share of issued interbank loans in the sum of assets and contingent liabilities	0,24%	<i>As of the last reported date</i>
<i>including the dynamic coefficient of assessment (assessment of debit turnovers)</i>	40%*16%* the share of issued interbank loans in the sum of assets and contingent liabilities	0,16%	<i>For the last reported date</i>
<i>including quality of the loan portfolio (excluding issued interbank loans)</i>	16%* the share of loans in the sum of assets and contingent liabilities	11,5%	
<i>including collateral</i>	40% * 16%* the share of loans in the sum of assets and contingent liabilities	4,6%	<i>Short-tail</i>
<i>including collateral of securities, sureties and guarantees to total loan portfolio (excluding interbank loans)</i>	50%* 40% * 16%* the share of loans in the sum of assets and contingent liabilities	2,3%	<i>Short-tail</i>

⁸ Only the quality of issued guarantees and sureties is estimated as part of the contingent liabilities. Quality of credit lines is not estimated because the credit lines usually can be closed by the bank unilaterally based on formal grounds.

<i>excluding collateral of securities, sureties and guarantees to total loan portfolio (excluding interbank loans)</i>	<i>20% * 40% * 16% * the share of loans in the sum of assets and contingent liabilities</i>	<i>0,92%</i>	<i>Short-tail</i>
<i>the share of collateralized loans to total amount of loans to legal entities, individuals and individual entrepreneurs</i>	<i>30% * minimum of two scores * 40% * 16% * the share of loans in the sum of assets and contingent liabilities</i>	<i>1,38%</i>	<i>Short-tail</i>
<i>the share of loans with "good" collateral in total amount of loans to legal entities, individuals and individual entrepreneurs</i>			
<i>including the industry concentration and concentration on segments</i>	<i>20% * 16% * the share of loans in the sum of assets and contingent liabilities</i>	<i>2,3%</i>	<i>Short-tail</i>
<i>including the share of the 3 largest industries in the loan portfolio to legal entities and individual entrepreneurs</i>	<i>Share of loans to legal entities and individual entrepreneurs in loan portfolio * minimum of two scores * 20% * 16% * the share of loans in the sum of assets and contingent liabilities</i>	<i>1,7%</i>	<i>Short-tail</i>
<i>including the share of the largest industry in the loan portfolio to legal entities and individual entrepreneurs</i>			
<i>including the share of the largest segment in the loan portfolio to individuals</i>	<i>Share of loans to individuals in loan portfolio * 20% * 16% * the share of loans in the sum of assets and contingent liabilities</i>	<i>0,6%</i>	<i>Short-tail</i>
<i>including the level of "troubled" loans⁹</i>	<i>40% * 16% * the share of loans in the sum of assets and contingent liabilities</i>	<i>4,6%</i>	<i>Long-tail</i>
<i>including the share of overdue debt of legal entities and individual entrepreneurs in total outstanding loans to legal entities and individual entrepreneurs</i>	<i>30% * the share of loans to legal entities and individual entrepreneurs in loan portfolio * 40% * 16% * the share of loans in the sum of assets and contingent liabilities</i>	<i>0,98%</i>	<i>Long-tail</i>
<i>including the share of overdue debt of individuals in total outstanding loans to individuals</i>	<i>30% * the share of loans to individuals * 40% * 16% * the share of loans in the sum of assets and contingent liabilities</i>	<i>0,40%</i>	<i>Long-tail</i>
<i>including the share of overdue debt on bills of exchange, loans</i>	<i>30% * the share of loans to authorities and treasury,</i>	<i>0,0%</i>	<i>Long-tail</i>

⁹ "Troubled loans" (for this methodology) is a general definition of loans which show any kind of overdue payments or "signs" of potential overdue payments. The exact meaning of this term depends on context, see description of the formula in the corresponding parts of the methodology.

<i>to government authorities and treasury in total respective assets</i>	<i>bills of exchange* 40% * 16%* the share of loans in the sum of assets and contingent liabilities</i>		
<i>including the theoretical tendency to loan portfolio default</i>	<i>30%*40% * 16%* the share of loans in the sum of assets and contingent liabilities</i>	<i>1,38%</i>	<i>Long-tail</i>
<i>including the ratio of "distressed loans"¹⁰ to capital</i>	<i>40%* 40% * 16%* the share of loans in the sum of assets and contingent liabilities</i>	<i>1,84%</i>	<i>Long-tail</i>
<i>including securities portfolio quality</i>	<i>16%* the share of securities in the sum of assets and contingent liabilities</i>	<i>2,4%</i>	<i>Short-tail</i>
<i>including exposure to financial instruments' risks</i>	<i>50%/60%¹¹ *16%* the share of securities in the sum of assets and contingent liabilities</i>	<i>1,68%</i>	<i>Short-tail</i>
<i>including the share of the securities rated at minimum of BB/Ba2 (according to S&P, Fitch/ Moody's) for financial companies and at minimum of B-/B3 for non-financial companies and the securities of the issuers having credit ratings equal to or higher than the sovereign rating of the country</i>	<i>Maximum of two scores * 70% * 16%* the share of securities in the sum of assets and contingent liabilities</i>	<i>1,68%</i>	<i>Short-tail</i>
<i>including the calculated level of impairment for securities portfolio (sum of multiplications of haircuts of securities corresponding to ratings of issuers, and volumes of investments)</i>			
<i>including liquidity of the securities portfolio: share of liquid securities in the securities portfolio.</i>	<i>30%/40%¹²*16%* the share of securities in the sum of assets and contingent liabilities</i>	<i>0,36%</i>	<i>Short-tail</i>
<i>including diversification of the securities portfolio (sector concentration)¹³: the share of the issuers from the same industry (excluding issuers whose rating is</i>	<i>20% *16%* the share of securities in the sum of assets and contingent liabilities</i>	<i>0,36%</i>	<i>Short-tail</i>

¹⁰ See definition in the Section 5.2.5.2.3 Level of "troubled" loans".

¹¹ 50% - if the factor "diversification of securities portfolio" is assessed; 60% - if the factor "diversification of securities portfolio" is not assessed.

¹² 30% - if the factor "diversification of securities portfolio" is assessed; 40% - if the factor "diversification of securities portfolio" is not assessed.

¹³ The indicator is assessed only in case of high concentrations of the security portfolio on individual sectors (more than 80%).

<i>equal to or higher than BBB- according to S&P's scale or equivalent level from other rating agencies).</i>			
<i>including property and other assets at risk¹⁴</i>	<i>16%* share of property and other assets at risk in the sum of assets and contingent liabilities</i>	<i>0,7%</i>	<i>Short-tail</i>
<i>including quality of issued sureties and guarantees</i>	<i>16%* share of sureties and guarantees in the sum of assets and contingent liabilities</i>	<i>0,3%</i>	<i>Long-tail</i>
Profitability of operations	8%		
<i>including profitability according to IFRS (or national GAAP if no IFRS available)</i>	<i>6%</i>	<i>6%</i>	<i>Long-tail</i>
<i>including return on average equity excluding volatile components</i>	<i>20%*6%</i>	<i>1,2%</i>	<i>Long-tail</i>
<i>including return on average equity</i>	<i>80%*6%</i>	<i>4,8%</i>	<i>Long-tail</i>
<i>including structural indicators of financial result</i>	<i>2%</i>	<i>2%</i>	<i>Long-tail</i>
<i>including the ratio of operating expenses to average assets</i>	<i>30%* 2%</i>	<i>0,6%</i>	<i>Long-tail</i>
<i>including the ratio of net interest and commission income to operating expenses</i>	<i>70%* 2%</i>	<i>1,4%</i>	<i>Long-tail</i>
Funding base structure	11%		
<i>including diversification of the funding base</i>	<i>3,5%</i>	<i>3,5%</i>	<i>Long-tail</i>
<i>including diversification of the funding base by clients</i>	<i>1,5%</i>	<i>1,5%</i>	<i>Long-tail</i>
<i>including the share of the 10 largest depositors in liabilities and equity</i>	<i>Minimum of two scores *1,5%</i>	<i>-</i>	<i>Long-tail</i>
<i>including the share of the largest depositor in liabilities and equity</i>			<i>Long-tail</i>
<i>including diversification of the funding base by sources</i>	<i>2%</i>	<i>2%</i>	<i>Long-tail</i>
<i>including the share of the largest funding source in liabilities and equity</i>	<i>Minimum of two scores *2%</i>	<i>-</i>	<i>Long-tail</i>
<i>including the share of issued securities (including assets reflected</i>			<i>Long-tail</i>

¹⁴ Other assets at risk include precious metals and assets transferred in trusts.

as deposits from SPV) in liabilities and equity			
including the funding base stability ¹⁵	2,5%	2,5%	Long-tail
including growth of raised funds for the last 12 months	2%* Minimum of two scores	2%	Long-tail
weighted average from: (1) Dynamic of raised funds from legal entities over the last 12 months (2) Minimum from two scores: (2.1) Dynamic of raised funds from individuals, including individual entrepreneurs, over the last 12 months (2.2) The maximum over the last 12 months, quarterly change of funds from individuals, including individual entrepreneurs			Long-tail
including effect of large payments	3%	2%	As of the last reported date
including the availability of sources of additional liquidity	3%	3%	As of the last reported date
Liquidity	12%		
including balance of assets and liabilities in the short run	8%	8%	Continuous short-tail
including instant liquidity ratio	Minimum of two scores *2%	2%	Continuous short-tail
including stability of the liquidity to early withdrawal of funds (the share of raised funds with the maturity of more than 1 day, early withdrawal of which in 1 day will lead to violation of the respective normative ratio)			
including the ratio of highly liquid assets to raised funds	2%	2%	
including current liquidity ratio	Minimum of two/three scores *4%	4%	Continuous short-tail
including stability of the liquidity to early withdrawal of funds (the share of raised funds with the maturity of more than 30 days, early withdrawal of which in 1 day will lead to a violation of the respective normative ratio)			
short-term liquidity ratio (LCR) (only for systematically important banks)			
including balance of assets and	4%	4%	Short-tail

¹⁵ The funding base of the bank is its equity capital and funds raised from legal entities and individuals, on a repayable basis. This section of the methodology includes only analysis of raised funds.

<i>liabilities in the long run</i>			
<i>including long-term liquidity ratio</i>	4%	4%	<i>Short-tail</i>
Market risks	3%		
Currency risks <i>including balancing open currency position in local currency, % of capital</i> <i>including open currency position in all currencies, % of capital</i> <i>including maximum open currency position in one currency, % of capital</i>	Minimum of five scores (minimum of three scores for the assessment of currency risks)	3%	<i>Long-tail</i>
Stock market risks <i>The share of pledged securities and bills of exchange in gross assets</i>			<i>Long-tail</i>
Interest risks <i>Difference between the share of assets and liabilities with floating rates</i>			<i>As of the last reported date</i>
Section 5.3 Corporate governance and risk management (12%)			
Corporate governance, business processes and information transparency	4%		
<i>assessment of activities of the board of directors and the management board</i>	0,36%	0,36%	
<i>assessment of the internal control system and risk management</i>	0,57%	0,57%	
<i>assessment of the organizational structure of the bank</i>	0,36%	0,36%	
<i>assessment of the IT Support of the bank</i>	1,28%	1,28%	
<i>assessment of the information transparency of the bank</i>	1,43%	1,43%	
Ownership structure	2%		
Risk management	4%		
<i>including credit risk management</i>	<i>(25% + 20%* the share of loans in the sum of loans and securities)*4%</i>	1,9%	
<i>including credit risk of legal entities and individual</i>	<i>[25%+20%* the share of loans in the sum of loans</i>	0,9%	

<i>entrepreneurs</i>	<i>and securities]*[linear function of the proportion of loans to legal entities and individual entrepreneurs in loan portfolio of legal entities, individual entrepreneurs and individuals]*4%</i>		
<i>including credit risk of individuals</i>	<i>[25%+20%* the share of loans in the sum of loans, accounting entry 202 and securities]*[linear function of the proportion of loans to individuals in loan portfolio of legal entities, individual entrepreneurs and individuals]*4%</i>	<i>0,9%</i>	
<i>including market risk management</i>	<i>(10% + 25%* the share of securities in the sum of loans and securities)*4%</i>	<i>1%</i>	
<i>stock exchange risk</i>	<i>Share of the market risk * linear function (score for the exposure to financial instruments' risks)</i>	<i>0,37%</i>	
<i>currency risk</i>	<i>Share of the market risk * linear function (the score for currency risk)</i>	<i>0,18%</i>	
<i>interest-rate risk</i>	<i>Residual share of market risk (after deduction of shares mentioned above)</i>	<i>0,45%</i>	
<i>including liquidity risk management</i>	<i>[From 5% to 15% depending on the average score for current and instant liquidity]*4%</i>	<i>0,5%</i>	
<i>including operating and reputation risk</i>	<i>Residual share*4%</i>		
<i>including operating risks related to physical cash-turnover</i>	<i>Minimum from two scores *Residual share *4%</i>		
<i>including other operating risks</i>			
Strategy of development	2%		

4.4 Rating Scale

The **final credit rating** class according to the international scale is derived from the combination of the BSR 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 BSR score and the Preliminary Credit Rating score:

		BSR				
		13-15	10-12	7-9	4-6	1-3
PRELIMINARY CREDIT RATING	1	AAA / AA	AA / A+	A+ / A-	BBB+ / BB+	BB+ / B+
	1 - 0,95	AAA / AA	AA / A+	A / BBB+	BBB / BB+	BB / B
	0,95 - 0,9	AAA / AA	AA- / A+	A / BBB+	BBB / BB	BB / B
	0,9 - 0,85	AA+ / AA-	AA- / A	A / BBB+	BBB- / BB	BB- / B
	0,85 - 0,8	AA+ / AA-	AA- / A	A- / BBB	BBB- / BB-	BB- / B
	0,8 - 0,75	AA / A+	A+ / A-	A- / BBB-	BB+ / B+	B+ / B-
	0,75 - 0,7	AA / A	A / BBB+	BBB+ / BBB-	BB+ / B+	B+ / B-
	0,7 - 0,65	AA- / A	A / BBB+	BBB+ / BB+	BB / B	B / B-
	0,65 - 0,6	A+ / A-	A- / BBB	BBB / BB+	BB / B	B / B-
	0,6 - 0,55	A+ / A-	A- / BBB	BBB / BB	BB- / B	B / B-
	0,55 - 0,5	A / A-	BBB+ / BBB	BBB- / BB	BB- / B	B / B-
	0,5 - 0,45	A / BBB+	BBB+ / BBB-	BBB- / BB	BB- / B	B- / CCC+
	0,45 - 0,4	A / BBB+	BBB+ / BBB-	BBB- / BB-	BB- / B-	B- / CCC+
	0,4 - 0,35	A- / BBB	BBB / BB+	BB+ / BB-	B+ / B-	B- / CCC+
	0,35 - 0,3	BBB+ / BBB-	BBB- / BB	BB / B+	B+ / CCC+	B- / CCC+
	0,3 - 0,25	BBB / BB	BB+ / BB-	BB- / B	B / CCC+	CCC+ / CCC
	0,25 - 0,2	BB+ / BB-	BB / B	B+ / B-	B- / CCC	CCC+ / CCC
	0,2 - 0,15	BB- / B	B+ / B-	B / CCC+	CCC+ / CCC	CCC / CCC
	0,15 - 0,1	B / CCC	B- / CCC	B- / CCC	CCC+ / CCC	CCC / CCC-
	0,1 - 0,05	CCC / CC	CCC / CC	CCC / CC	CCC / CC	CCC / CC
	0,05 - 0	C / C	C / C	C / C	C / C	C / C

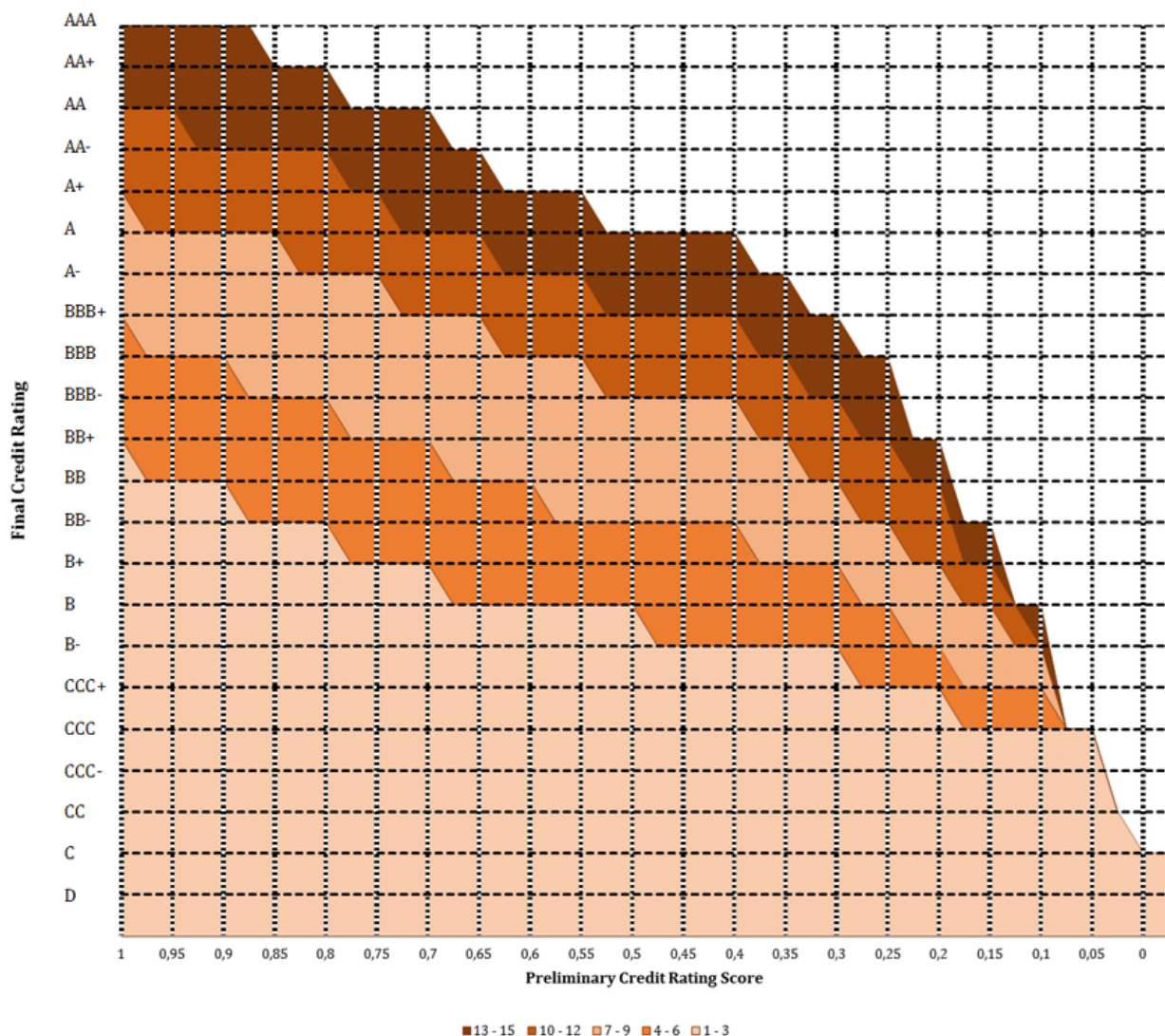
Then, the **final credit rating** of the bank according to the international scale depends on the score we just derived. Thus, the final rating is obtained from the following table:

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

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

“E” is assigned if the bank is going through the liquidation procedure or bank’s license was revoked

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



4.5 Order of the rating assignment process

4.5.1 During the process of assessing the factors of the bank'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 acquired serves only as an initial guidance. Each factor must be qualitatively assessed in order to acquire 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 bank'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 bank's **financial stability**, the internal support- and stress-factors are assessed. Depending on the result of the assessment, a "penalty" or a "bonus" is added to the rating score of the bank'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 resulted rating score is the **stand alone credit rating** of the bank. Then, the **stand alone credit rating** score (already including internal stress- and support-factors) is adjusted for external stress- and support-factors. The resulted rating score is the **preliminary credit rating score** (is on 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 adding 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 credit rating** is adjusted by the **Banking Sector Risk (BSR)** score in order to obtain the **final credit rating** in international scale. Rating-Agentur Expert RA 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	<p>If there is at least one indicator of high probability of default/bankruptcy/licence revocation, namely:</p> <ol style="list-style-type: none"> 1. Non-zero turnovers or balances on accounting entries, related to overdue on bank's liabilities payment, for more than 2 days in a row associated with the realization of liquidity risk, but not operational risk (the period under review - 1 month prior preceding to the last reporting date); 2. The bank is not ready to make large pay-outs in the upcoming 3 months (the ratio of the sum of LAM (highly liquid assets) and guaranteed additional liquidity that may be raised as of the date of payment to the large pay-out, is less than 150%). This basis remains, even if a forced prolongation of the bank's liabilities from its creditors is expected; 3. The bank's activity is associated with an extremely high risk of licence revocation within the framework of the supervision practice effective in the country, where the bank is located. This includes first of all a combination of the following factors: <ul style="list-style-type: none"> • The bank has been recently sold to other owners and (or) top management has changed significantly; • New top managers have worked in banks, involved in questionable activities (“scheme bank”), and (or) new owners have previously owned such bank; • Sharp changes on the deposit and (or) credit policy of the bank.
C	<p>If for the last reported date there are any of the grounds to start the licence revocation/ bankruptcy procedures by the supervisory body according to the local banking system regulation, and conditions for assignment the lower rating are not satisfied (otherwise the lower rating is assigned). There was a technical default for bonds.</p>
C	<p>The rated entity is under the supervision of the government authorities, that can prioritize fulfilment of the entity's financial liabilities. However, the entity did not default.</p>

D	The rated entity has defaulted.
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4.7 Weight distribution according to the term of an indicator

When assessing indicators, recordings as of the last reporting date and the previous dates are taken into account. Rules for weighting indicators for different terms are provided below.

4.7.1 Rules for weighting indicators for different terms

All indicators used in the methodology are divided into three groups:

- Indicators for which the final assessment is based on the analysis of dynamics for a long term period (usually data for 6 quarterly dates) or so called “long tail indicators”;
- Indicators for which the final assessment is based on the analysis of dynamics for a relatively short period (2 quarterly dates) or so called “short tail indicators”;
- Indicators for which the final assessment is based on the analysis of continuous dynamics for a relatively short period (5 monthly dates in a row) or so called “continuous short tail indicators”.

The “short tail indicators” usually include parameters which are characterized by a low level of volatility.

4.7.2 Standard weight distribution for the “long tail indicators”:

T means the latest quarterly date, T-1 means the previous quarterly date.

T-5	T-4	T-3	T-2	T-1	T
0,05	0,05	0,1	0,1	0,1	0,6

4.7.3 Reasons for deviations from the standard weight distribution mentioned above:

4.7.3.1 Specifics of the indicator. For example, the indicator is characterized by a high level of stability. Profitability indicators have separate weight distribution with lowered weight for the last reporting date. See below:

T-5	T-4	T-3	T-2	T-1	T
0,05	0,05	0,1	0,2	0,2	0,4

4.7.3.2 Necessity to take into account significant changes in the indicators that have occurred during the quarter, after the last quarterly date available. Particular case: the data as of the last quarterly date is distorted by seasonal (for example, pension funds inflow at the end of the year is typical for banks) or one-time events. In this case, the last monthly date is taken into account, the last quarterly date is taken into account with a weight of 20% and the monthly date is used with a weight of 40%.

4.7.3.3 The data as of certain quarterly dates does not reflect distinguishing features of the bank's current business model. Examples:

1. The bank has sold its total portfolio of loans to individuals and began to focus its

operations on securities or other assets;

2. The bank has merged with a credit institution of comparable size or larger.

In this case, the quarterly dates that do not reflect distinguishing features of the bank's current business model are excluded from the calculation. Weights of the excluded dates are redistributed in favour of the latest quarterly date.

Example:

The last quarterly date is 1st of July 2014. In this case, the standard weight distribution for "long tail indicators" is as follows:

April 01, 2013	July 01, 2013	October 01, 2013	January 01, 2014	April 01, 2014	July 01, 2014
0,05	0,05	0,1	0,1	0,1	0,6

On the 1st of November 2013 a merger with a larger credit institution was completed. In this case, the weight distribution for "long tail indicators" is as follows (1st of April 2013, 1st of July 2013, 1st of October 2013 are excluded as not typical dates for the merged bank).

April 01, 2013	July 01, 2013	October 01, 2013	January 01, 2014	April 01, 2014	July 01, 2014
0	0	0	0,1	0,1	0,8

The weights for the indicators of "balance of assets and liabilities in the short run" are distributed for the last five monthly dates in a row the following way (example):

October 01, 2014	November 01, 2014	December 01, 2014	January 01, 2015	February 01, 2015
0,1	0,1	0,2	0,2	0,4

5. System of indicators

5.1 Market position

5.1.1 History and reputation

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.

Purpose of the assessment:

To determine additional opportunities and risks related to the history of the bank and its reputation among customers and counterparties.

Sources of information:

1. Questionnaire filled in by the bank;
2. Bank's annual reports for the last 3 years;
3. The bank's financial statements according to local GAAP and to IFRS;
4. Other open sources of information.

Algorithm for assessment:

The bank is assessed according to each of the following criteria. The minimum of the scores obtained is selected:

Characteristic	Maximum possible score				
	1	0,5	0	-0,5	-1
1. The bank has a history of more than 10 years; 2. The bank is owned by a powerful organisation with good reputation ¹⁶ .	Yes/Yes OR No/Yes OR Yes/no		No/No		
1. The controlling shareholder (who owns more than 25% of shares) has been changed during the last 3 years; 2. All owners of the bank have a good reputation ¹⁷ .	Not more than once/Yes	Twice/Yes	More than twice/Yes	-/No	
There is a public credit history (bonds	Yes	No			

¹⁶ Financial statements of such organization must be publicly available and updated on a regular basis. It is preferable that such organization has a rating of BBB- according to the international scale of S&P/Fitch (or a comparable rating from another agency having a good reputation). "Good reputation" of the organization in this case means the absence of information about large public scandals in media or in the sources provided in this section.

¹⁷ "Good reputation" in this case means that the current owners of this bank weren't included in the management bodies or didn't own any banks in the period when the license of such banks was revoked, or such banks were restructured (part of the assets were withdrawn before). Plus, there is no information about large public scandals in media or in the sources of information provided in this section.

issues, public syndicated lending transactions), 1 and more issues of securities/transactions.					
The public credit history is satisfactory (including no technical defaults on bonds and no data on non-payment of liabilities).	Yes			No	
1. There are reputational scandals ¹⁸ ; 2. Reputational scandals have had a significant effect on the bank's current activities; 3. There was a big reputational scandal, which had significant effect on the bank's current activities, registered during the last 12 months.	No/-/-	Yes/No /No	Yes/Yes /No		Yes/ Yes/ Yes

Adjustments of the score:

The score set in accordance with the abovementioned algorithm **must** be reduced (but not more than by 3 levels), after considering the following additional information:

1. Bad public reputation of the owners or their relatives;
2. Unsuccessful attempts to join a Deposit Insurance System or a bank is not included in the Deposit Insurance System (or its analogue), related to refusal of the supervisory body (if the bank voluntarily surrendered its license to the supervisory body, this adjustment is not applicable);
3. Unsuccessful attempts to obtain licenses allowing operation (for example, license for operations with foreign currency);
4. Auditor's report for the latest audited financial statements of the rated entity (IFRS or local GAAP (Generally Accepted Accounting Principles) was modified, and this has a significant negative influence on the business reputation of the rated entity;
5. The score can be reduced if the bank shows an aggressive policy of fundraising (for example, if the interest rate on raised deposits from individuals exceeds the market average deposit rate by more than 1,5 p.p.).

The score set in accordance with the algorithm mentioned above **can** be reduced (but not more than by 3 levels), after considering the following additional information:

1. In case there is any publicly known event of default (traced through the publications in the mass-media) during the last 5 years;
2. Financial statements according to IFRS or local GAAP are audited by a company that audited the financial statements of a bank with revoked licence (if there are reasons to consider that the financial statements of such bank were distorted, however the auditor's report was not modified);
3. Abnormally high yields on a bank's debt instruments;

¹⁸ Incident (widely known) connected with the violation of law or prescriptions from the authorities, violation of business ethics.

4. Significant amount of transactions not having clear economic meaning;
5. News about resolutions issued by the supervisory body on bringing the credit institution and (or) managers (being the sole executive bodies) for administrative liability for the violation of the anti-money laundering regulation applicable for this entity for the last year. This news may appear because of inconsistency with formal requirements. Thus, the score is reduced if the frequency of these news is high or if an additional justification exists;
6. Previous convictions of top managers.

5.1.2 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.

Purpose of assessment:

To determine the risks related to insufficient diversification of the business by lending market segments or risks related to high concentration on transactions with related parties.

Sources of information:

1. Questionnaire filled in by the bank (data on the customer base, loans to related parties);
2. The bank's financial statements according to local GAAP and to IFRS;
3. Other open sources of information.

Algorithm for assessment:

The bank is assessed according to each of the following criteria. The minimum of the scores obtained is selected:

Characteristic	1	0,5	0	-0,5	-1
The bank offers a basic range of universal bank products (loans to individuals, loans to small and medium-sized enterprises, loans to large enterprises)	Yes	No			
Investments in securities traded on regulated markets exceed 2% of the bank's assets	Yes	No			
The bank has a minimum customer base for a universal bank in segments of lending to individuals, small and medium-sized enterprises, large enterprises (more than 200 individuals, 50 small and medium-sized enterprises, 10 large enterprises)	Yes	No			

Share of assets linked to related parties ¹⁹	Less than 2%	2-7 ²⁰ %	7-12%	12-17%	More than 17%
Share of income from related parties in the amount of interest and commission income (according to IFRS)	Less than 2%	2-7%	7-12%	12-17%	More than 17%

Adjustments of the score:

The automatic scores for indicators “share of the assets linked to related parties”, “share of the income from related parties in the amount of interest and commission income (according to IFRS)” can be adjusted, if the data as of the reporting date is not typical for the bank's business model. In this case, the score corresponding to the typical level for the bank's business model may be set.

The automatic score for the indicators “Share of the assets falling on the related parties”, “Share of income from related parties in the amount of interest and commission income (according to IFRS)”, **can** be adjusted if:

1. The bank's auditor confirmed the financial statements according to IFRS with the underestimated volume of lending to related parties, in accordance with the Agency's opinion ;
2. Entities as limited liability companies having vague business activities (e.g., finance and investments, consulting, trade, and the bank's management cannot provide explanations regarding these companies), weak financial results (e.g., the amount of debt of the company is substantially higher than the amount of its shareholders' equity) prevail among the borrowers of the bank. Limited liability company structure as opposed to the joint stock company is more convenient for companies due to the fact that the first one is not required to disclose financial statements;
3. Final beneficiaries of the bank are not clearly disclosed in the current description of the bank's ownership structure (for instance, the bank has a “circular” ownership structure or the bank's owners are “intermediate” (e.g., offshore residents or citizens related to the ultimate beneficiaries via strict agreements, being sometimes informal, more often related to the ultimate beneficiaries by debt obligations). Signs of prevailing “intermediate” owners are the following: absence of a shareholder or its representative in the Board of Directors and the Management Board; rare meetings of the Board of Directors; inconsistencies between the formally disclosed ownership structure and mass-media information; there are no shareholders having more than 10% of the bank's equity.
4. The bank has a high share of loans (more than 20%), to the borrowers having “signs

¹⁹ To calculate this ratio the maximum value from the following calculations is taken: the share calculated by the agency on the basis of bank's financial statements as well as open sources; the share provided in the questionnaire; the share provided in the IFRS financial statements. Bank's assets net of reserves are used to calculate the ratio. The volume of these assets can be reduced by the volume of liabilities having rating class not lower than BBB- according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation. The volume of these assets can be increased by the volume of liabilities, for which the credit risk is reduced in the financial statements due to reduction of the calculated loss reserves by the amount of collateral, which quality is not satisfied with the criterion described above.

²⁰ At the average, approximately 7% of the assets corresponds to 10% of the credit portfolio.

of lack of real activity”; OR the bank has a high share of loans issued to borrowers having “signs of lack of real activity” with calculated reserve ratio at 50%, due to the fact that usually related parties of the bank are “hidden” by “intermediate” entities. Additionally, the score for “specialization and captivity” can be adjusted downwards, because the companies with signs of lack of real activity are usually related parties of the bank.

NOTE: an additional effort is be made to identify related parties (and related parties transactions) of the bank that are not declared as such in the bank’s reports and the information provided by the bank by considering publically available data sources.

The “signs of lack of real activity” are listed below:

1. The book value of loan is more than 10 times higher than borrower’s revenues for the last 12 months;
2. The borrower does not have it’s own fixed assets or does not have leased property or equipment necessary for the activity;
3. The large share of receivables/ issued loans/ securities/ other financial investments in the assets (over 70%);
4. The borrower did not provide the statements on the bank accounts opened in other credit institutions to the bank;
5. The borrower makes suspicions transactions through the bank (transactions without clear economic meaning);
6. Changes of the sole executive body of the borrower, more than two times during the last calendar year;
7. The borrower is not located in the legal address (mentioned in the Statute) or in the address mentioned as an actual address in official documents;
8. The borrower lost main documents, agreements many times over the last three years;
9. The borrower is registered in a “mass” address (hundreds of other companies are registered for the same address).
10. The borrower’s tax address was changed more than two times during the last calendar year.
11. The general director of the borrower is the same general director in many other companies;
12. The absence of chief accountant / accounting department in borrower's list of employees / organization structure;
13. The borrower does not have other employees apart from general director and chief accountant;
14. The borrower has not been paying wages to it’s employees for more than 3 months / The borrower pays wages lower than the minimum required level.
15. The borrower has not been paying wages to it’s employees for more than 3 months / The borrower pays wages lower than the minimum required level.

Above mentioned conditions are not applicable to small and medium enterprises (SMEs).

5.1.3 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.

Purpose of assessment:

To determine to what extent the current geographic reach of the bank complies with the structure of its current transactions, ensures implementation of its potential for development and contributes to implementation of strategic targets.

Sources of information:

1. Questionnaire filled in by the bank;
2. The bank's annual reports for the last 3 years;
3. The bank's financial statements according to local GAAP and to IFRS;
4. Other open sources of information.

Algorithm for assessment:

The bank is assessed according to each of the following criteria. The minimum of the scores obtained is selected and then additional adjustments are made, if necessary:

	Characteristic	Weight	-1	-0,5	0	0,5	1
1	Investment risk in the main regions of presence (CCE scores of the regions (countries), where the bank has its credit portfolio weighted with respective shares of the regions in the credit portfolio of the bank)	60%	Continuous				
2	Number of separate business units (bank's branches) ²¹	40%	1	8	15	22	>=29

The score for Geographical reach can be manually adjusted, in the case if country (-ies) where the bank is present is (are) large federal country (-ies) (and the bank is present in more than one federal unit of the country (-ies)), federal units of which are at a different stage of development and/or economic cycle (e.g. the USA, Russia).

Adjustments of the score:

In case of very broad geographic reach regardless of other parameters specified above, the factor must be assessed as "1". Geographic reach of the bank is considered to be broad, if at least one of the following conditions is satisfied:

- The bank has more than 250 separate structural business units in more than 4 countries;
- Share of the region having the largest share in the credit portfolio structure does not exceed 20%.

If **any** of the following conditions is satisfied "0,5" are added to the score obtained:

1. There is no region which accounts for more than 35% of the portfolio of loans to legal

²¹ Out-of-the-office cash counter (generally currency exchange offices) and representative offices are not considered as separate business units as they cannot serve as sales points of the core banking products (deposits, payments).

entities, individual entrepreneurs and individuals (in accordance with the loan portfolio structure);

2. There is no region which accounts for more than 35% of the total raised funds (in accordance with the concentration of raised funds).

If **all the above conditions** are satisfied “1” is added to the obtained score.

If **at least one** of the following conditions is fulfilled “0,5” is deducted from the obtained score:

1. The share of unprofitable business units is more than 20% of separate business units operating for more than 1 year (it is possible in 1-1,5 years after dynamic business expansion);
2. One of the regions of operations accounts for more than 75% of the total credit portfolio of the bank (except for the large and well-diversified regions);
3. Geographic reach does not correspond to the structure of current transactions (i.e. more than 10% of the credit portfolio is accounted for regions where there are no separate business units of the bank according to the data as of the last reporting date).

If conditions №2 or №3 are fulfilled simultaneously, “0,5” or “1” is deducted from the score obtained.

5.1.4 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.

Purpose of assessment:

To determine how strong the competitive position of the bank is in the key market segments, as well as to identify to what extent the current competitive position allows the bank to generate enough profits in order to cover current and future liabilities.

Sources of information:

1. Questionnaire filled in by the bank;
2. Rankings of banks from reliable sources;
3. The bank's annual reports for the last 3 years;
4. Strategic documents sent by the bank;
5. The bank's financial statements according to local GAAP and to IFRS;
6. Other open sources of information.

Algorithm for assessment:

Indicator	Weight	-1	1
Growth rates of the loan portfolio	25%	0%	25%

Number of borrowers - legal entities and individual entrepreneurs	25% proportionally to the shares of the corresponding portfolios;	40	100
Number of borrowers - individuals		200	350
Equity as of the last reported date	50%	Linear dependence from -1 to 1 (where -1 is assigned if equity is at minimum allowed level by the regulator and 1 is assigned if equity level equals the one from the largest bank in the market).	

Adjustments of the score:

The score automatically obtained is adjusted according to the parameters in the table below. The bank is assessed according to each of the following criteria. The minimum of the scores obtained is selected. If the answer is not provided in one or more segments, it **may** not be taken into account to obtain the minimum score.

Characteristic	1	0,5	0	-0,5	-1
The bank has a licence for the provision of all banking operations from the local supervisory body; OR SIMULTANEOUSLY: licence which allows the bank to perform transactions with deposits of individuals + licence which allows to perform transactions with precious metals ("golden" licence), transactions in foreign currency ("currency" licence) + licence of professional participant of the securities market (dealer, depository, broker).	Yes	No	-	-	-
There is a significant reduction in the bank's key market segment*	-	-	Yes	-	-
During a period of 15 months a significant reduction in the bank's key market segment* is forecasted, AND The bank does not develop other businesses.	-	-	Yes	-	-
During a period of 15 months a significant reduction in the bank's key market segment* is forecasted, AND The bank develops other businesses.	-	Yes	-	-	-
1. The bank is regularly in the Top-50 companies of the country for at least one of the key market segments* (among others, lending to large enterprises in one of the key economic sectors of the country, lending to small enterprises, mortgage lending, plastic cards, car loans);	Yes /-	No/ Yes	No/No	No /No	-

2. The bank is regularly in the Top-100 companies of the country for at least one of the key market segments*;					
It is seen to be a negative characteristic, if the bank is not included into the Deposit Insurance System (DIS) (or its analogue). If this can be explained by the bank's business model (for example, it is a non-banking credit institution or a bank, specialised on factoring transactions) or by the mission of the bank (for example, it is a development bank or a credit institution established for export support), then this is not considered to be a negative characteristic to the bank. (No – score “1”; Yes – score “-1”).	Yes	-	-	-	No
The bank is specialised on the lending to legal entities and individual entrepreneurs (more than 50% of assets as of the last reporting date) and at the same time it has less than 40 borrowers – legal entities and individual entrepreneurs as of the last reporting date	No	-	-	Yes	-

*Market segment is considered as significant for a bank if it amounts to more than 10% of the bank's average assets for the last six months.

The score set in accordance with the above mentioned algorithm can be changed (but not more than by “1”), taking into account the following additional information:

1. **Personal relations and (or) status** of the owners and (or) top managers provide a good **bargaining position** of the bank and provide potential for strengthening the competitive position of the bank;
2. The bank's **brand** provides **high brand awareness** and **loyalty** from retail customers;
3. The bank has **unique competitive advantages** (e.g., a set of required licences of the Federal Security Service, etc.);
4. A **variety of sales channels** is an additional factor ensuring the stability and (or) strengthening of the competitive position.

5.2 Financial risks

5.2.1 Capital adequacy

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.

Purpose of assessment:

To determine to what extent the amount and quality of capital allows the bank to cover undertaken risks and to increase the volume of operations.

Sources of information:

1. The bank's financial statements according to local GAAP and to IFRS;

Algorithm for assessment:

The assessment of this factor depends on the type of bank being rated. For each type of the bank, different benchmarks have been proposed. Between the lower and upper bound, the assessment of each indicator is continuous.

The score for the factor is calculated automatically on the basis of the following indicators:

Systemically Important Bank		-1	1
Indicator	Weight	Less than	Higher than
Capital adequacy ratio	40%	9,5%	14,5%
Common equity tier 1 (CET 1) ratio	20%	6,5%	10%
Tier 1 capital ratio	40%	7,5%	11%
Not a Systemically Important Bank		-1	1
Indicator	Weight	Less than	Higher than
Capital adequacy ratio	40%	10,2%	17%
Common equity tier 1 (CET 1) ratio	20%	6,5%	11,5%
Tier 1 capital ratio	40%	7,5%	13%

Adjustments of the score:

The score for capital adequacy can be downgraded, if there are valid reasons to assume that: (1) A part of the assets is non-repayable, and (2) reserves are not sufficiently formed, and therefore to recalculate all ratios for capital adequacy, the amount of capital can be reduced by the sum of materialized (de-facto, but not de-jure) credit risks, that are not disclosed in the financial statements of the bank.

Reflecting additional capitalization in the credit score:

If the following conditions are fulfilled simultaneously:

1. The funds for additional capitalization were already received by the bank, but not yet reflected in the financial statements as capital;

The capital adequacy ratios can be recalculated to their theoretical value, given the

recapitalization was completed. The score for “Capital adequacy” can be then reassessed taking into account the CARs theoretical assumptions. The score for “Capital adequacy” is then manually set as the average between the actual and theoretic score.

5.2.2 Sensitivity of the capital to credit risks realization

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.

Purpose of assessment:

To assess how “far” the bank’s “safety buffers” are from the benchmarks of the stress factor of assets-liabilities operations. The stress-testing of “safety buffers” on all kinds of capital is undertaken and based on different scenarios of assets’ impairment, considering credit risk concentration and credit quality of counterparties in order to test the sensitivity of capital adequacy against the credit risk.

Sources of information:

1. The bank's financial statements according to local GAAP and to IFRS;

Algorithm for assessment:

The final automatic score is calculated only for the last reported date.

The score for the factor is calculated automatically on the basis of the following indicators:

		-1	1
Indicator	Weight	Less than	Higher than
The share of loan portfolio, which, if fully impaired, would either lead to a violation of any of the capital adequacy normative ratios, or will lead to a decrease of the capital below the regulatory minimum.	<i>Minimum from two scores</i>	2%	10%
If the default of one of the borrowers among the top ten, except for credit risk objects having a credit rating not lower BBB- according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation, leads to the violation of any of the capital adequacy ratios or to a decrease of capital below the regulatory minimum.		10	0

5.2.3 Concentration of credit risks on large customers

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.

Purpose of assessment:

To determine how large are the risks of significant impairment of the assets (risk related to the concentration of credit operations (or equivalent) on a small number of lenders).

Sources of information:

1. The bank's financial statements according to local GAAP and to IFRS;

Algorithm for assessment:

The score for the factor is calculated automatically on the basis of the following indicators:

Indicator	Weight	-1	-0,5	0	0,5	1
The share of the maximum credit risk per one object of credit risk in total assets	50% * minimum from 2 scores	> 5%	3,7%- 5%	2,5%- 3,7%	1,5%- 2,5%	< 1,5%
Share of the maximum credit risk per one object of credit risk in total capital		>24%	Continuous			<18%
Large credit risks in total assets	50%	>70 %	Continuous			<25%

Adjustments of the score:

The score for the concentration of credit risks on large customers can be reduced by 1-2 levels, if related borrowers are not referred as one group in the financial statements.

If the maximum value of ratio of the maximum credit risk per one object of credit risk to total capital is related to the counterparty having credit rating not lower than BBB- according to the international scale of S&P/ Fitch or comparable level from other credit rating agencies having a good reputation, the indicator "Share of the maximum credit risk per one object of credit risk in total capital " can be assessed on the basis of the second largest object of credit risk.

Consequently, the total value of large credit risks is reduced by the value of large credit risks related to the counterparties having credit rating not lower than BBB- according to the international scale of S&P/ Fitch or comparable level from other credit rating agencies having a good reputation.

5.2.4 Provision policy

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.

Purpose of assessment:

To assess the risk policy of the bank in relation to creation of loan loss reserves (conservative policy of the bank shown by the excessive reserves is assessed positively).

Sources of information:

1. The bank's financial statements according to local GAAP and to IFRS;

Algorithm for assessment:

The assessment of this factor depends on the type of bank being rated. For each type of the bank, different benchmarks have been proposed. Between the lower and upper bound, the assessment of each indicator is continuous.

The score for the factor is calculated automatically on the basis of the following indicators:

Systemically Important Bank		-1	1
Indicator	Weight	Less than	Higher than
The difference between calculated and the minimum required reserve ratios	100%	0,4%	2,5%
Not a Systemically Important Bank		-1	1
Indicator	Weight	Less than	Higher than
The difference between calculated and the minimum required reserve ratios	100%	0,5%	3%

Adjustments of the score:

The score for “Provision policy” set automatically can be adjusted (not more than by 2 levels):

1. Downwards: an indirect sign of understatement of loan loss reserves is detected: substantial (or surging upward) volume of loans that were reclassified by the bank's management from a lower quality to a better quality;
2. Downwards: the bank has a large share of loans with overdue more than 30 days and these loans have Loan Loss Reserves (LLR) equal to 50% of the book value of loans; or the bank has a large share of loans with overdue up to 30 days and these loans have LLR equal to 20% of the book value of loans; i.e. these loans show “signs” of LLR forced by the supervisory body. The adjustment is applicable for the difference between calculated and the minimum required reserve ratios through the increase of the latter;
3. Upwards/downwards: significant gap (more than 3 percentage points between the reserve ratio on loans according to IFRS and national GAAP as of the same date). If no good reason of discrepancies between capital ratios under IFRS and local GAAP are found (e.g. different level of consolidation, different treatment of certain asset or liability classes in the two statements), the adjustment can be applied.
4. Upwards: the bank has a very high level of collateral for loans without overdue and loans with overdue up to 30 days (that is not used to reduce the volume of actual loss reserves);
5. Downwards: if there is a reliable information on insufficient reserves on loans / bonds. Reliable sources include the following: 1) a requirement of the supervisory body to other banks to increase the amount of reserves on a borrower, which took a loan from the rated bank, and the rated bank creates a smaller amount of reserves. 2) availability of information on overdue loans of a borrower in other banks, while there is no overdue loan in the rated bank due to a different payment schedule (example: the borrower has an overdue loan in another bank, while the rated bank has loan loss reserves equal to 1% of book value);
6. Downwards: if there is an active practice of transfers of overdue loans when accounts receivable that are poorly covered by reserves stay on balance. For example, the bank A expects the supervision from the supervisory body next month. Bank A has EUR 100 m of loans with overdue up to 30 days on the balance-sheet. Bank A expects that supervisory body will prescribe to reclassify these loans to lower quality category and create additional reserves. So, Bank A transfers EUR 100 m of loans to bank B (under the cession agreement (agreement of credit claims transfer)). After the

transferring, the Bank A has EUR 100 m of receivables not well covered by reserves;

7. Downwards (by 0,5): if the bank has a high share of loans (more than 20%), to the borrowers having “signs of lack of real activity”.

Methodological note:

According to its economic nature, the loan loss reserves reflect the loan impairment (difference between the fair value and book value of loans). The following three cases are possible in practice:

1. The loan loss reserves level is lower than the portfolio impairment level, calculated by the Agency. This case may be a result of insufficient amount of current profit for creation of reserves;
2. The loan loss reserves level corresponds approximately to the loan portfolio impairment level, calculated by the Agency;
3. The loan loss reserves level is significantly higher than the loan portfolio impairment level, calculated by the Agency. “Excess reserves” are possible, if the high provisioning level is driven by the factors not related to the asset quality; an indirect sign of an “excess” loan loss reserves is a higher level of loan loss reserves according to local GAAP than the level of loan loss reserves according to IFRS in the same reporting date.

Excess loss reserves (should not be confused with the contributions to the obligatory reserve fund²², which are part of the assets and calculated as a percentage of the raised funds) – are de-facto actual earnings of the bank which are not reflected as profit in the financial statements. Regarding the assessment of the creditworthiness, creation of excess reserves can be considered as a positive factor, as the bank spends less funds to pay taxes and dividends in the “years of prosperity”. In this case, tax risks are considered as acceptable as there are no penalties for the banks for understating profit through overstating of loan loss reserves.

This factor assesses the level of excess reserves, which are in fact coverage for future impairment of assets (and regarding this, they are similar to the capital component such as retained earnings). Asset impairment scenarios vary depending on the diversification of the assets; there are various benchmarks for systematically important banks and other banks.

Case 2 (the loan loss provision level corresponds approximately to the loan portfolio impairment level) is assessed as moderately negative, as it means that the bank is not ready for possible deterioration of the asset quality.

²² Obligatory reserves created by banks, part of these reserves is transferred to a current account in the Central Bank.

5.2.5 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.

Purpose of assessment:

To determine the quality of the assets at risk and contingent liabilities as well as their influence on the bank's creditworthiness.

Sources of information:

1. Questionnaire filled in by the bank;
2. The bank's financial statements according to local GAAP and to IFRS;

Algorithm for assessment:

The score is obtained as a linear combination of the quality assessment of the most important components of the assets at risk and contingent liabilities: loan portfolio, portfolio of securities, property and other assets at risk and contingent credit related liabilities (guarantees and sureties issued by the bank). When calculating the component "assets and contingent liabilities at risk" contingent liabilities are taken into account with a coefficient of 50% for issued guarantees and sureties. This reflects that these liabilities are likely to be on the balance sheet. Scores for components are weighted by their shares in the sum of gross (including loan loss reserves and other loss reserves) assets at risk and contingent liabilities).

Adjustments of the score:

The quality of one component of assets is assessed, if it accounts for more than 2% of gross assets and contingent liabilities as of the last quarterly date. Otherwise, it is not assessed.

Assets can be reclassified from one type to another. For instance, investments in shares of a closed-end fund, which actually present the bank's investments in real estate, may be assessed as the real estate taking into account the **relevant change in floating weights**.

5.2.5.1 Quality of correspondent accounts and issued interbank loans

The final score for this factor is based on the sum of scores for weighted static (assessment of balances on asset accounts) and dynamic coefficients (assessment of turnovers on asset accounts).

		-1	1
Indicator	Weight	Less than	Higher than
Assessment of reliability of funds allocated to correspondent accounts	100%	15%	90%

Assessment of reliability of funds allocated to interbank deposits and loans	100%	15%	90%
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Weights are the following:

- Weight of static preliminary score for correspondent accounts in other banks (assessment of balances) = 80%; weight of dynamic preliminary score for correspondent accounts (assessment of turnovers) = 20%;
- Weight of static preliminary score for issued interbank loans (assessment of balances) = 60%; weight of dynamic preliminary score for issued interbank loans (assessment of turnovers) = 40%;

For the assessment of reliability of funds placed on correspondent accounts the weight of the assessment of turnovers is lower than the same weight for the same preliminary score for interbank loans, because it is an instantaneous movement of funds within one business day. I.e. it means significantly lower probability of impairment of substantial amount of assets in case of potential default of a counterparty, in comparison with short-term interbank loans or static balances on correspondent accounts.

The assessment of reliability of funds placed in interbank current accounts (correspondent accounts) and issued interbank loans is based on the credit ratings of the bank's counterparties.

Static and dynamic preliminary scores are in the range from "0" to "1".

The score for the quality of correspondent accounts and issued interbank loans is assessed only as of the last reported date (for static preliminary scores) / for the month preceding the last reported date (without retrospective assessment).

The formulas of assessment are the following:

- Static preliminary score = $\sum (\text{counterparty haircut} * (\text{balance on correspondent account} + \text{balance on issued interbank loans})) / (\text{total balances on correspondent accounts and issued interbank loans})$.
- Dynamic preliminary score = $\sum (\text{counterparty haircut} * (\text{debit turnover on correspondent account} + \text{debit turnover on issued interbank loans})) / (\text{total debit turnover on correspondent accounts and issued interbank loans})$.

Counterparty haircuts for balances / turnovers are determined on the basis of the following table:

Rating of the counterparty according to the international scale of S&P, Fitch (or comparable ratings from Moody's scale)	Counterparty haircuts
AAA, AA, A	1,00
BBB	0,90
BB	0,75
B	0,50
Below B- or not rated	0,00

Balances and debit turnovers on correspondent accounts in the Central Bank are included in the analysis with a coefficient haircut of "1".

Adjustments of the score:

The counterparty haircuts can be adjusted to "1" (the highest level of reliability), regardless of the credit ratings of the counterparty or identified by other means counterparty reliability, if the loan has a highly liquid collateral.

5.2.5.2 Quality of the loan portfolio

The quality of the loan portfolio is assessed by taking a weighted average of the respective credit scores of the following indicators:

Indicator	Weight
Collateral	40%
Industry concentration and concentration on segments	20%
Level of “troubled” loans ²³	40%

5.2.5.2.1 Collateral

The assessment of this factor depends on the type of bank being rated. For each type of the bank, different benchmarks have been proposed. Between the lower and upper bound, the assessment of each indicator is continuous.

The score for the factor is calculated automatically on the basis of the following indicators:

The score for the factors is calculated automatically on the basis of the following indicators:			
Systemically Important Bank		-1	1
Indicator	Weight	Less than	Higher than
Collateral including collateral of securities, sureties and guarantees to total loan portfolio (excluding interbank loans)	50%	60%	210%
Collateral excluding collateral of securities, sureties and guarantees to total loan portfolio (excluding interbank loans)	20%	45,0%	125,0%
The share of collateralized loans to total amount of loans to legal entities, individuals and individual entrepreneurs	30%* minimum from 2 scores	40,0%	90,0%
The share of loans with “good” collateral in total amount of loans to legal entities, individuals and individual entrepreneurs		20,0%	80,0%
Not a Systemically Important Bank		-1	1
Indicator	Weight	Less than	Higher than
Collateral including collateral of securities, sureties and guarantees to total loan portfolio (excluding interbank loans)	50%	70,0%	210,0%
Collateral excluding collateral of securities, sureties and guarantees to total loan portfolio (excluding interbank loans)	20%	50,0%	130,0%
The share of collateralized loans to total amount of loans to legal entities, individuals and individual entrepreneurs	30%* minimum from 2 scores	40,0%	90,0%
The share of loans with “good” collateral in total amount of loans to legal entities, individuals and individual entrepreneurs		20,0%	80,0%

Loans having “good” collateral include:

²³ For this methodology, “troubled” loans are any loans with overdue payments as well as prolonged and restructured loans.

Loans collateralized by cash and cash equivalents (including deposits in the bank) and the bank's debt securities

Loans collateralized by real estate (and rights to it)

Loans collateralized by guarantees or debt securities from companies, banks or government authorities rated BBB- or higher according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation

Adjustments of the score:

The score for collateral can be adjusted (but not by more than one level) manually, taking into account the following factors:

1. Upwards (or downwards): the average haircut which was used, when assets have been taken as collateral, is above (or below) the average market value of the assets;
2. Downwards: there is a high share of equity securities (shares (stocks), shares of mutual funds) and/or other assets, whose market value may fluctuate significantly or whose liquidity is not very clear;
3. Downwards: significant share of sureties in the total collateral, and there are reasons to consider that there is a large amount of "cross sureties" and "duplicative sureties";
4. Upwards: the goods for sale accepted as collateral have a long shelf life, an extended period of assortment renewal and are stored at a warehouse of a third party (but not a borrower), and relations with a warehouse are formalised as a custody agreement enabling the bank's control over the store of goods;
5. Downwards (or upwards): collateralisation of "troubled" (overdue or prolonged) loans is significantly worse (or better) than the aggregate indicators of loan collateralisation;

5.2.5.2.2 Industry concentration and concentration on segments

The score for the factor is calculated automatically on the basis of the following indicators:

			-1	1
Indicator		Weight	Higher than	Less than
Industry concentration of loans to legal entities and individual entrepreneurs	The share of the largest industry in the loan portfolio to legal entities and individual entrepreneurs	Minimum from 2 scores	50%	25%
	The share of the 3 largest industries in the loan portfolio to legal entities and individual entrepreneurs		75%	45%
Segment	the share of the	100%	80%	40%

diversification of loans to individuals	largest segment in the loan portfolio to individuals			
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Adjustments of the score:

If available information on *concentration of credit risks on individual products* (segment diversification of loans to individuals) is extremely generalised (dominated by “other loans”), there are two options:

1. If the share of loans to individuals is more than 40% of bank’s assets, a more detailed breakdown by product type is requested (“Other consumer loans” are divided into at least 2 types: collateralized and non-collateralized loans). The share of different segments in loans to individuals are requested from the bank. For instances the bank can be requested to provide shares of different segments in loans to individuals on the basis of the following breakdown: housing loans, mortgages, car loans, collateralized consumer loans, non-collateralized consumer loans and others.
2. The score for the segment concentration, which is set automatically, is adjusted (by not more than 0,5 upward), taking into account indirect information (e.g. procedures for assessing individual borrowers and collateral) about the shares of products having different levels of risk. The score for segment diversification is adjusted, taking into account availability of individuals among 20 largest borrowers outside the groups of related borrowers (2 and more individuals - not more than by 1 level) and the total value of credit risk available to insiders relative to bank’s own capital (if applicable for the rated bank) (more than 2,5% - by not more than 1 level). These adjustment allows to take into account availability of VIP-customers in the portfolio (lending to such clients usually includes enhanced risks).

If the available information on *concentration of credit risks on industries* (Industry concentration of loans to legal entities and individual entrepreneurs) is extremely generalised (for instance, trade industry is disclosed as a united sector but it is accounted for the largest share of loans), there are two options:

1. The score for the industry concentration, which is set automatically, can be adjusted (by not more than 2 levels upwards), taking into account indirect information (e.g., specialization of major borrowers) on availability of unrelated segments within the industries (e.g., trade in food products and trade in jewellery).
2. If the share of legal entities in the loan portfolio and in assets is high (more than 40% of total assets), a more detailed breakdown by industries (e.g., the trade sector is divided into 4 segments: wholesale trade of industrial goods, wholesale trade of consumer goods, retail trade of industrial goods, retail trade of consumer goods) is requested; the score for the industry concentration is set, taking into account such information.

Methodological note:

During the assessment of the industry concentration it is determined when different industries are combined into one single industry and when not. For example, construction industry and real estate lease are not combined into one. However, if a loan is issued to a company which is engaged in providing real estate leases but is a part of a holding company whose core business is development, the debt of such legal entities is included in one industry because the risks ultimately relate to the holding company which is engaged in

construction, not in real estate lease.

5.2.5.2.3 Level of “troubled” loans

The score for the factor is calculated automatically on the basis of the following indicators:

		-1	1
Indicator	Weight	Higher than	Less than
The share of overdue debt of legal entities and individual entrepreneurs in total outstanding loans to legal entities and individual entrepreneurs	30%*(share in loan portfolio)	7,5%	1,5%
The share of overdue debt of individuals in total outstanding loans to individuals	30%*(share in loan portfolio)	10%	2%
The share of overdue debt on bills of exchange, loans to government authorities and treasury in total respective assets	30%*(share in loan portfolio)	2%	0,5%
The theoretical tendency of the loan portfolio default	30%	15%	4%
The ratio of distressed loans to capital	40%	100%	20%

Methodological note:

The theoretical tendency to default should be distinguished from the level of distressed loans. The level of distressed loans is the assessment of the amount of “troubled loans” on the balance-sheet as of a certain date (those which are written off the balance-sheet are not taken into account). The theoretical tendency to default on the contrary takes into account those “troubled assets” that have been written off the balance-sheet (transferred), i.e. this is the level of “troubled loans”, which would be typical for the bank if there had been no writing off the balance-sheet.

Thus:

Theoretical tendency to default = (assessment of impairment on loans on the balance sheet + off-balance adjustments) / (not overdue debt according to the balance sheet + overdue debt according to the balance-sheet + off-balance adjustments).

Level of distressed loans (as compared to the loan portfolio) = (assessment of impairment on loans on the balance sheet) / (not overdue debt according to the balance-sheet + overdue debt according to the balance-sheet).

* * *

Assessment of impairment on loans on the balance sheet = min {max{assessment of “troubled loans” according to the national GAAP; assessment of the amount of “troubled loans”}; loan portfolio}.

Hence:

Level of distressed loans as compared to the capital = min {max {assessment of “troubled loans” according to the national GAAP; assessment of the amount of “troubled loans” loans}; credit portfolio}/capital.

Assessment of “troubled loans” loans according to the national GAAP:

Loan category	Discount
---------------	----------

Prolonged ²⁴ and rolled over loans ²⁵ in accordance with national GAAP, 1 st quality category (the best ²⁶) according to the national GAAP	3%
Prolonged and rolled over loans in accordance with national GAAP, II nd quality category, according to the national GAAP	3%
II nd quality category according to the national GAAP (except for prolonged and rolled over loans in accordance with national GAAP)	5%
III rd quality category according to the national GAAP (excluding loans collateralized by own bills of exchange by more than 100%)	25%
IV th quality category according to the national GAAP (excluding loans collateralized by own bills of exchange by more than 100%)	70%
V th quality category (the worst) according to the national GAAP (excluding loans collateralized by own bills of exchange by more than 100%)	100%

Assessment of the amount of “troubled loans” on the balance sheet = loans with overdue payments (the assessment based on the national GAAP) + adjustment for “hidden” defaults with regard to the prolonged loans + adjustment for understating as of the reporting dates + adjustment for understating “troubled loans” through the process of “rolling-over” + “troubled loans” not included to the previous components**discount (see description of these indicators below).*

- **Loans with overdue payments** = homogeneous loans with overdue payments adjusted for the overdue period + heterogeneous loans with overdue payments adjusted for the overdue period.

Adjustment for the overdue period = the book value of loans multiplied by the discounts (see discount table below):

Loan category	Discount
Loans with overdue payments from 1 to 30 days	30%
Loans with overdue payments from 31 to 90 days	70%
Loans with overdue payments from 91 to 180 days	90%
Loans with overdue payments for more than 180 days	100%

- **Balance adjustments** = adjustment for “hidden” defaults with regard to prolonged loans + adjustment for understating as of the reporting dates + adjustment for understating “troubled loans” through the process of “rolling-over” + “troubled loans” not included to the previous components**discount.*
- **Off-balance adjustments** = adjustment for writing-off the balance-sheet + adjustment for “troubled loans” transferred to other parties.

Adjustment for “hidden” defaults with regard to prolonged loans are based on a request of additional information from the bank regarding the reasons for prolongation²⁷. Such

²⁴ In this methodology are defined as loans for which the repayment period was extended.

²⁵ In this methodology are defined as loans to a borrower for which the bank provides new loans in order to repay the previous one.

²⁶ If there are no such classification in the financial statements of the bank, the following is used: 1st quality category = loans without overdue; 2nd quality category = loans with overdue up to 30 days; 3rd quality category = loans with overdue 30-90 days; 4th quality category = loans with overdue 90-180 days; 5th quality category = loans with overdue more than 180 days.

²⁷ Prolongation of loans to construction companies is rather widespread due to the difficulty to re-register a collateral (land plot) and uncertainty of the exact time of construction works completion. Such practice is considered acceptable.

information is requested, if overdue debt exceeds 5% of the portfolio of heterogeneous loans or its significant growth is observed during the last quarters. The information received on prolonged loans is checked for compliance with the data from the national GAAP.

Assessment of “hidden” defaults with regard to the prolonged loans is the maximum of two values:

1. Assessment of prolonged debt increase as compared to the typical level for the bank;
2. Assessment of the amount of prolonged loans that have at least two indicators of “hidden” defaults. The indicators of “hidden” defaults include:
 - Prolongation of agreements that did not include a prolongation clause initially;
 - Prolongation without determining an adequate principal repayment schedule (schedule is recognized as adequate if it stated that the repayment of at least 20% of the principal is due within 12 months from the date of prolongation);
 - Prolongation of non-collateralized or poorly collateralized (e.g. loans secured with illiquid or impaired shares) loans (sometimes, banks show only collateralized loans as overdue debt, and prolong non-collateralized loans);
 - Prolongation of loans to related parties;
 - Prolongation of loans to borrowers in poor financial condition or having poor payment discipline.

Adjustment for writing off the balance-sheet is based on adding the amount of written-off debt to the previous components (see formulas for off-balance adjustments). In case of significant balances, turnovers or changes in these values more detailed information about the borrowers is requested.

Adjustment for “troubled loans” transferred to other parties = the sum of “troubled debt”, which has been transferred by the bank to third parties within the last two years (information from the questionnaire filled in by the bank). The “troubled debt” in this case does not include debt, rights of claim to which has been transferred to special government agencies / development banks within the programmes of mortgages support and lending to small enterprises support, as well as similar relevant federal and regional programmes. In other cases, the transferred debt is considered as “troubled debt”, unless otherwise proven.

Adjustment for understating “troubled loans” through the process of “rolling-over”²⁸ is based on the analysis of the national GAAP (if necessary) and additionally requested information. Information on the dates of issue and the actual and planned repayment schedule regarding loans to “suspicious” or major clients is requested. Matching of the issued and repaid loans is traced back by dates and amounts. Such information is requested: if there are indicators of “rolling-over” – by default; otherwise – according to the Agency’s decision.

Factors indicating that the bank carries out “rolling-over”:

- there are many non-collateralized loans to related parties among the largest loans;
- the bank reports no overdue payments as of the reporting dates or in the turnovers for a long period;

²⁸ Here means issuing a new loan to repay the previous one on / before the maturity date of the previous loan, i.e. a “hidden” prolongation.

- loan loss reserves for the borrower risen sharply without any significant reasons, but there are no overdue payments on this loan.

“Troubled loans” not included to the previous components are the loans classified by the bank in overstated quality category. It can be detected according to the mass-media data and (or) financial statements of the bank's borrowers (losses, low level of equity, significant short-term debt). During the calculation, loans classified by the bank as overstated quality category, are included in the analysis with discounted values (depending on the scale of overstating the quality category).

Borrowers having poor financial performance are the following:

- Case 1. The borrower has a credit rating at B- or lower according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation.
- Case 2. Extremely low return on equity (less than -5% per annum) with no clear explanation (e.g., it is a trading company included in a holding company that has good consolidated figures).
- Case 3. Extremely low level of actual shareholders equity (the ratio of net assets to total assets is less than 10%) and there is no clear explanation.
- Case 4. A combination of factors:
 1. Low return on equity (from -5% to 1% per annum);
 2. Low level of actual own financing (the ratio of net assets to total assets amounts to 10-20%);
 3. There is no clear explanation of poor financial performance.

An addition adjustment for the banks specialized on lending to corporate clients: the score for level of “troubled loans” can be reduced:

1. By 0,5 or by 1 if there is an abnormally low ratio of credit turnovers to balances on accounting entries, showing lending transactions (less than 10% in a), which is an indicator for the troubled loans being rolled-over (as opposed to being written off);
2. If the share of interest receivable in gross assets is more than 2% - by 0,5; if the share of interest receivable in gross assets is more than 3,5% - by 1.

5.2.5.3 Security portfolio quality

Score for the security portfolio quality (is assessed only if securities account for more than 2% of the assets as of the last quarterly date) is determined as a weighted sum of the following indicators:

Indicator	Weight
including exposure to financial instruments' risks	50%/60% ²⁹
including liquidity of securities portfolio	30%/40% ³⁰
including diversification of securities portfolio	20%

²⁹ 50% - if the factor “diversification of securities portfolio” is assessed; 60% - if the factor “diversification of securities portfolio” is not assessed.

³⁰ 30% - if the factor “diversification of securities portfolio” is assessed; 40% - if the factor “diversification of securities portfolio” is not assessed.

5.2.5.3.1 Exposure to financial instruments' risks

Score for the “**exposure to financial instruments' risks**” is determined in accordance to the following algorithm:

		-1	1
Indicator	Weight		
The share of the securities rated at minimum of BB/Ba2 ³¹ (according to S&P, Fitch/ Moody's) for financial companies and at minimum of B-/B3 for non-financial companies and the securities of the issuers having credit ratings equal to or higher than the sovereign rating of the country	Maximum from 2 scores	<20%	>80%
Assessment of impairment probability of securities portfolio (\sum haircuts (relevant to the ratings of the securities issuers) \times investments in corresponding securities)		>25%	<5%

Adjustments of the score:

The score for “exposure to financial instruments' risks” can be adjusted in case the following is detected:

Financial stance of the issuer is alarming (e.g. there is no default yet, but the issuer is known to have excessive debt burden or to negotiate on debt restructuring; and in accordance to the Agency's opinion the current credit rating does not reflect enhanced risks)³² – securities from that issuer are then can be reclassified to a lower level of creditworthiness;

5.2.5.3.2 Liquidity of securities portfolio

Score for the “**Liquidity of securities portfolio**” is determined on the basis of the following indicator:

		-1	1
Indicator	Weight	Less than	Higher than
The share of liquid securities in the securities portfolio	100%	20%	80%

Liquid securities include:

1. Securities rated at minimum of BB/Ba2 (according to S&P, Fitch/Moody's) for financial companies and at minimum of B-/B3 for non-financial companies; if such securities are illiquid, the volume of investments in liquid securities is adjusted manually;
2. Equity securities not rated at minimum of BB/Ba2 (according to S&P, Fitch/Moody's) for financial companies and at minimum of B-/B3 for non-financial companies but included in the calculation of indexes of stock exchanges of the corresponding countries (or transnational stock exchanges),

³¹ Or an equivalent rating level from other reputable rating agency.

³² Opinion about financial standing of the issuers is based both on public information (mass-media, etc.), and using indirect information (e.g., high provisions for the securities portfolio created by the bank).

and the amount (weight) of such securities in these indexes is 1% or more; if such securities became illiquid, the volume of investments in liquid securities is adjusted manually.

5.2.5.3.3 Diversification of securities portfolio

Score for the “**Diversification of securities portfolio**” is determined based on the following indicator:

		-1	1
Indicator	Weight	Higher than	Less than
<i>The share of the issuers from the same industry (excluding issuers whose rating is equal to or higher than BBB- according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation)</i>	100%	60%	30%

The score for the securities portfolio diversification is taken into account only in the case of a very high concentration of the portfolio on one industry (over 80%). The score is determined on the basis of benchmarks for the indicator “share of the issuers from the same industry (excluding issuers whose rating is equal to or higher than BBB- according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation)”. The securities of the issuers whose rating is equal to or higher than BBB- according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation (this component does not require portfolio diversification) are scored “1” for diversification. If the share of the largest industry in securities portfolio is less than 80%, the score for the factor is equal to “1”.

Formula for calculation:

*The share of the issuers from the same industry (excluding issuers whose rating is equal to or higher than BBB- according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation) = a share of issuers from the same industry (excluding issuers whose rating is equal to or higher than BBB- according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation) * share of the issuers whose rating is lower than BBB- according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation + 1 * share of the issuers whose rating is equal to or higher than BBB- according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation .*

Methodological note:

The purpose of investments diversification is reducing the specific risks attributable to the individual issuers or industries. In case only issuers from one country are included in the portfolio, the level of diversification is not sufficient to reduce the risks below the sovereign level (sovereign government credit risk). For this reason, the securities from the issuers whose rating is approximately equal to or higher than the sovereign rating of the country, are taken into account when assessing the diversification.

5.2.5.4 Property and other assets at risk

Purpose of assessment:

The purpose of the assessment is to estimate the potential impairment level for property and

other assets at risk in case of a cyclical downturn in the economy.

Algorithm for assessment:

The score for the factor is calculated automatically on the basis of the following indicator:

		-1	1
Indicator	Weight	Higher than	Less than
Calculated level of impairment of property and other assets at risk	100%	30%	10%

Methodological note:

Other assets at risk in accordance with this methodology include the following:

- precious metals;
- property;
- assets related to transactions with suppliers, contractors and customers;
- interest receivable;
- assets transferred to trust management and other assets.

A maximum deviation downwards from the average prices for the last six months is taken into account for the assessment of impairment of **precious metals**.

For the assessment of impairment of **property** used in operating activity of the bank, the following is taken into account:

1. The latest date of the property's market price assessment (it is checked if the property's market price assessment was done in the period of high or low average market prices);
2. Reputation and experience of the appraiser that made an assessment (an appraiser's reputation is assessed as high, if it the appraiser is included in the pool of accredited appraisers for major universal banks);
3. Diversity and correct use of methods of assessment (usually, at least 2 methods are used (excerpts from the appraiser's report are requested)); if "comparative method"³³ was used, the information on similar transactions on which the appraiser has based the assessment is requested;
4. The appraiser's remarks (e.g. potential demand on the property from some companies can be provided as rationale for its high value);
5. Property location and other factors affecting the property liquidity.

For the property's market price the potential level of impairment is from 10% to 30%, depending on the characteristics mentioned above.

For **other assets at risk** the potential level of impairment depends on the following factors:

1. Date when the asset was included in the balance sheet of the bank (the older the date the higher the level of impairment);
2. Turnover ratio on assets (the ratio of credit turnover on the accounting entry to

³³ One of the valuation methods (in the assessment of property). Another name of this method – "the sales comparison approach". The sales comparison approach is based primarily on the principle of substitution. This approach assumes a prudent (or rational) individual will pay no more for a property than it would cost to purchase a comparable substitute property.

the average balance on the accounting entry for the period) (the lower turnover ratio the higher the level of impairment);

3. Level of debtor's creditworthiness (the lower the debtor's creditworthiness the higher the level of impairment);

Availability of contracts with potential buyers, property type, and the length of the period the property has been on the balance-sheet is taken into account for non-current inventories.

Assessment of the impairment of the assets transferred to the trust management can include reclassification and redistribution of weights (e.g. reclassification into securities).

5.2.5.5 Quality of issued sureties and guarantees

Purpose of assessment:

The purpose of the assessment is to assess the quality of the guarantees and sureties issued.

Algorithm for assessment:

		-1	1
Indicator	Weight	Higher than	Less than
The theoretical level of default	100%	15%	3%

Adjustments of the score:

The score can be adjusted if the bank has non-conservative provision policy with regard to the issued guarantees/sureties. In this case "1" can be deducted from the automatic score.

5.2.6 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).

Purpose of assessment:

To assess the ability of the bank to generate stable positive financial results, and correspondence of this financial result to the return on equity required by investors in the banking sector.

Sources of information:

1. The bank's financial statements according to local GAAP and to IFRS;

Algorithm for assessment:

The score for the factor "profitability of operations" is determined as the weighted sum of the following indicators:

Indicator	Weight
Profitability according to IFRS (or national GAAP if no IFRS available)	75%
Structural indicators of financial results	25%

5.2.6.1 Profitability according to IFRS (or national GAAP if no IFRS available)

The assessment of this factor depends on the type of bank being rated. For each type of the bank, different benchmarks have been proposed. Between the lower and upper bound, the assessment of each indicator is continuous.

The score for profitability according to IFRS (or national GAAP if no IFRS available) is set automatically on the basis of the following indicators:

Systemically Important Bank		-1	1
Indicator	Weight	Less than	Higher than
Return on average equity excluding volatile components	20%	5%	20%
Return on average equity	80%	4%	16%
Not a Systemically Important Bank		-1	1
Indicator	Weight	Less than	Higher than
Return on average equity excluding volatile components	20%	4%	18%
Return on average equity	80%	3%	15%

Methodological note:

All components of the financial results are divided into 2 categories:

1. Stable (net interest and commission income);
2. Volatile (net non-recurring income, net income from foreign currency transactions and revaluation of it; net income from transactions with securities and revaluation of it);

Adjustments of the score:

Return on equity is adjusted by the amount of funds that are necessary to create loss reserves. This adjustment is used if the Agency expects the impairment of problem assets within a period not exceeding 12 months (losses that took place de-facto were not reflected in the financial statements through the creation of loss reserves).

Preventive calculation of deferred pressure on the financial results due to the impairment of assets is based on the professional judgment of the Agency with respect to the degree of impairment of certain assets and (or) the realization of certain risks, which is formed by objective assumptions obtained in the course of monitoring of the banking sector, the activities of its members and the regulation.

The score for profitability can be adjusted upwards/downwards (by 0,5), if there is an evidence that the benchmark is not adequate for the country and the time period under consideration.

5.2.6.2 Structural indicators of financial results

The assessment of this factor depends on the type of bank being rated. For each type of the bank, different benchmarks have been proposed. Between the lower and upper bound, the assessment of each indicator is continuous.

The score for the structural indicator of the financial results is set automatically on the basis of the following indicators:

Systemically Important Bank		-1	1
Indicator	Weight		
Operating expenses to assets	30%	>6%	<2%

Ratio of net interest and commission income to operating expenses	70%	<75%	>125%
Not a Systemically Important Bank		-1	1
Indicator	Weight		
Operating expenses to assets	30%	>8%	<2%
Ratio of net interest and commission income to operating expenses	70%	<75%	>125%

Adjustments of the score:

The score for “structural indicators of the financial results” can be adjusted upwards, if a significant part of “expenses related to operations of maintenance of credit institutions activity” are investments (IT support, network development, etc.), that can be suspended promptly without deterioration of the bank’s activity.

Methodological note:

Expenses on depreciation of property are not included in calculation of “Operating expenses”, because it is not a stable component (otherwise, expenses related to ensuring the activities would be misstated in the periods of significant write-offs/claims assignment).

5.2.7 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.

Purpose of assessment:

To assess the bank’s exposure to risks related to the dynamic of funds from creditors, risks related to future large payments and availability of sources of additional liquidity.

Sources of information:

1. The bank's financial statements according to local GAAP and to IFRS;

Algorithm for assessment:

The assessment of the factor “Funding base structure” is determined as the weighted sum of the following indicators:

Indicator	Weight
including diversification of the funding base by clients	13,64%
including diversification of the funding base by sources	18,18%
including stability of the funding base	22,73%
including the effect of large payments	18,18%
including availability of sources of additional liquidity	27,27%

5.2.7.1 Diversification of the funding base by clients

The score for the “diversification of the funding base by clients” is determined as the minimum of the two scores set automatically:

		-1	1
Indicator	Weight	Higher than	Less than

Share of the largest depositor in bank's liabilities and equity	Minimum from two scores	12%	3%
Share of the 10 largest depositors in bank's liabilities and equity		45%	18%

Adjustments of the score:

The score for “diversification of the funding base by clients” can be reduced (by not more than 2 levels) taking into account the indicator “share of the related parties in liabilities and equity according to IFRS (except Tier I and Tier II Capital)”, if the activities of the related parties involve additional risks, and the bank is not the key asset for the ultimate beneficiary.

If a high share of liabilities is raised on the interbank market (more than 5% of the liabilities) and (or) there is a high share of issued bills of exchange and (or) bonds in liabilities (more than 5% of the liabilities), it is checked whether the bank has creditors, whose claims to the bank exceed the claims of the ten largest non-banking creditors. If there are such creditors, the score can be adjusted manually. For this purpose, it is necessary to verify the amount of debt owed to the largest creditors and, if necessary, to send an additional request for information on the largest security holders of the bank.

5.2.7.2 Diversification of the funding base by sources

The score for the “diversification of the funding base by sources” is determined as the minimum from two scores set automatically:

		-1	1
Indicator	Weight	Higher than	Less than
Share of the largest funding source in liabilities and equity	Minimum from two scores	75%	35%
Share of the issued securities ³⁴ in liabilities and equity		25%	10%

5.2.7.3 Stability of the funding base

The score for the “stability of the funding base” (ex post analysis, i.e. analysis of the funding base fluctuations which already occurred) are determined as the minimum of two scores set automatically:

- Growth of the raised funds for the past 12 months;
- Scores weighted by the shares of funds from (1) legal entities and (2) individuals (including individual entrepreneurs) in total sum of raised funds:
 - Assessment of the dynamic of funds raised from the legal entities within the past 12 months;
 - Minimum from the assessments of the dynamic of funds raised from individuals (including individual entrepreneurs):
 - Assessment of the dynamic of funds raised from individuals (including

³⁴ including funds reflected as deposits from SPV

individual entrepreneurs) within the past 12 months;

- Assessment of the maximum monthly growth of funds from individuals (including individual entrepreneurs) within the past 12 months.

The algorithm:

					-1	1
Indicator				Weight		
Growth of raised funds in the past 12 months				Minimum from two scores	<-10%	>10%
Dynamic of raised funds from legal entities, over the last 12 months		Minimum from two scores	Weighted average		<-10%	>10%
Dynamic of raised funds from individuals, including individual entrepreneurs, over the last 12 months					<-10%	>10%
The maximum over the last 12 months, quarterly change of funds from individuals, including individual entrepreneurs					<0%	>8%

Adjustments of the score:

The score for the “stability of the funding base” can be reduced by 1-4 levels if:

1. Non-zero balances or turnovers on accounting entries reflecting any overdue payments by the bank on its liabilities are recorded;
2. Liquidity shortage has resulted in unpaid liabilities under agreements for raising of customers funds;
3. There is a reason to consider that the acute fluctuations with the short-term raised interbank loans, payables to employees, funds raised from the central bank have resulted from temporary liquidity shortage.

5.2.7.4 Effect of large payments

The score for the “effect of large payments” (ex-ante analysis, i.e., analysis of the expected fluctuations of the funding base) is determined as follows:

Conditions for assigning score	Score
<ul style="list-style-type: none"> • There are no lump-sum payments (liabilities which are equivalent to 2% of the assets and which are very likely to be redeemed during the next 15 months are considered: repayment of subordinated loan, repayment of bonds, including early repayment on offer, etc.; possible withdrawal of funds from current accounts and on demand accounts are taken into account, such accounts are directly included to the calculation of instant liquidity ratio; payments in the next month are taken into account neither, since they are included to the calculation of the score for current liquidity ratio. 	1
<ul style="list-style-type: none"> • There are lump-sum payments, but there is a source for repayment or liquidity is being accumulated; • The source for repayment is stable; • Liquidity accumulation does not prevent the bank's activities 	0,5

development and does not result in closing of any transactions.	
<ul style="list-style-type: none"> There are lump-sum payments, but there is a source for repayment or liquidity is being accumulated; The source of repayment can be exposed to risks, but the accumulation does not prevent the bank's activities development and does not result in closing of any transactions. 	0
<ul style="list-style-type: none"> There are lump-sum payments, but there is a source for their repayment; The source of repayment can be exposed to significant risks; OR <ul style="list-style-type: none"> There are lump-sum payments, but liquidity is being accumulated; Accumulation prevents the bank's activities development and results in in closing of transactions. 	-0,5
<ul style="list-style-type: none"> There are lump-sum payments, and there is no source for repayment and liquidity is not being accumulated. 	-1

Methodological note:

In this section attention is paid to the schedule of payments on own bills of exchange (if the risk coefficient with regard to own bills of exchange is more than 5%³⁵), raised interbank loans, deposits from legal entities and individuals disclosed in the in the bank's financial statements.

Particular attention is paid to cases if the bank has a significant amount of short-term bills of exchange (including "on demand"), and their circulation is beyond the bank's control (it is not aware of the current bill holder). Risk of a significant amount of short-and medium-term bills of exchange increases the risk of concentration of the bank's liabilities with "unfriendly structures". As opposed to bonds, the bills of exchange circulation is usually carried out at the OTC market, thus their purchase by "unfriendly structures" is more difficult to trace.

Several payments that have to be done within the short period (up to three weeks) are summed up and assessed as one single large payment.

The score for the "effect of large payments" is adjusted if there are "off-balance sheet" liabilities, that can be called to pay with the high probability (according to the court's decision).

5.2.7.5 Availability of sources of additional liquidity

The score for the factor is calculated automatically on the basis of the following indicator:		-1	1
Indicator	Weight	Less than	Higher than
Available amount of additional liquidity to liabilities and equity	100%	1%	8%

³⁵ Indicator of risk of own bills of exchange. Indicator is calculated as ratio of value of issued bank's bills of exchange to bank's capital.

Methodological note:

Available amount of additional liquidity is calculated as a weighted sum of unused limits (maximum amount of funds that can be potentially raised net of funds already raised) on various instruments. Weighing is carried out using the coefficients from the table below (some coefficients can vary, depending on various factors such as provided documents, information on counterparties and others).

Source of additional liquidity	Coefficient (probability of actual increase in the amount of the unused limit)
Unsecured loans from the Central Bank	0,9
Unsecured loans from other banks (excluding loans from banks under common control)	0,3-0,5 depending on the readiness and capacity of the counterparties to provide such loans
Other unsecured loans (excluding loans from related parties)	0-0,3 depending on the readiness and capacity of the counterparties to provide such loans
Loans from the Central Bank secured by "non-market" assets	0,8 , if the bank has experience in raising such loans, 0,5 , if the bank does not have experience in raising such loans
Other loans secured by "non-market" assets, including loans secured by bills of exchange (excluding loans from related parties)	0,2-0,75 depending on the readiness and capacity of the counterparties to provide such loans
Loans collateralized by securities, including bills of exchange, and funds that can be raised via REPO-transactions (excluding loans from related parties)	0,7-0,9 depending on exposure of the securities to stock exchange risks
Other sources (including gratuitous financial aid from the bank's owners and loans from related parties)	0-0,75 depending on the readiness and capacity of the counterparties to provide such loans

The balances on accounting entries describing unused credit lines to obtain loans and "unused limits on obtaining interbank funds in the form of "overdraft" and under "debt limit" are analysed. If limits on the indicator "Unsecured loans from other banks (excluding loans from banks under common control)" stated by the bank are significantly (more than by 1,5 times) less than the balances on accounting entry for unused limits on obtaining interbank funds in the form of "overdraft" and under "debt limit", a detailed breakdown of balances on this accounting entry is requested and then balances on this accounting entry as free unsecured limits on the basis of such breakdown are taken into account.

Balances on accounting entry "unused credit lines to obtain loans" are also used to clarify, if necessary, the figures for additional sources of liquidity as provided by the bank.

Declared support from the owners (liquidity support, including that executed in the form of guarantee letters) is taken into account as "other sources", if it is not taken into account as a support-factor for the owners.

5.2.8 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).

Purpose of assessment:

To determine to what extent the bank is able to maintain the necessary level of liquidity and to plan a liquidity balance efficiently in the mid-term.

Sources of information:

1. The bank's financial statements according to local GAAP and to IFRS;
2. Questionnaire filled in by the bank.

Algorithm for assessment:

The assessment of the factor "Liquidity" is determined as the weighted sum of the following indicators:

Indicator	Weight
The balance of assets and liabilities in the short run	66,6%
The balance of assets and liabilities in the long run	33,4%

5.2.8.1 The balance of assets and liabilities in the short run

The score for the factor is calculated automatically on the basis of the following indicators:

Systemically Important Bank			-1	1
Indicator	Weight			
Balance of assets and liabilities by maturity on the horizon of 1 day				
Instant liquidity ratio	Minimum from two scores	50%	<18%	>54%
Stability of the liquidity to early withdrawal of funds (the share of raised funds with the maturity of more than 1 day, early withdrawal of which in 1 day will lead to violation of the respective normative ratio)			<7%	>20%
Ratio of highly liquid assets to raised funds	-	50%	<6,5%	>12,5%
Balance of assets and liabilities by maturity on the horizon of 30 days				
Current liquidity ratio	Minimum from three scores		<55%	>80%
Stability of the liquidity to early withdrawal of funds (the share of raised funds with the maturity of more than 30 days, early withdrawal of which in 1 day will lead to a violation of the respective normative ratio)			<10%	>25%
Short-term liquidity ratio (LCR)			<71%	>80%

Not a Systemically Important Bank				-1	1
Indicator		Weight			
Balance of assets and liabilities by maturity on the horizon of 1 day					
Instant liquidity ratio		Minimum	50%	<20%	>60%
Stability of the liquidity to early withdrawal of funds				<7%	>20%

(the share of raised funds with the maturity of more than 1 day, early withdrawal of which in 1 day will lead to violation of the respective normative ratio)	from two scores			
Ratio of highly liquid assets to raised funds	-	50%	<7,8%	>13,8%
<i>Balance of assets and liabilities by maturity on the horizon of 30 days</i>				
Current liquidity ratio	Minimum from three scores		<55%	>80%
Stability of the liquidity to early withdrawal of funds (the share of raised funds with the maturity of more than 30 days, early withdrawal of which in 1 day will lead to a violation of the respective normative ratio)			<10%	>25%

Balance of assets and liabilities by maturity on the horizon of 1 day:

The score for the “balance of assets and liabilities by maturity on the horizon of 1 day” is set automatically on the basis of the benchmarks for the instant liquidity ratio, stability of the liquidity to early withdrawal of funds (the share of raised funds with the maturity of more than 1 day, early withdrawal of which in 1 day will lead to violation of the respective normative ratio) and ratio of highly liquid assets to raised funds.

Balance of assets and liabilities by maturity on the horizon of 30 days:

The score for the “balance of assets and liabilities by maturity on the horizon of 30 days” is set automatically on the basis of benchmarks for the current liquidity ratio, the share of raised funds with the maturity of more than 30 days, early withdrawal of which in 1 day will lead to a violation of the respective normative ratio. If the bank is classified as systematically important, benchmarks for the short-term liquidity ratio (LCR) is also taken into account.

Adjustments of the score:

The score can be adjusted (by not more than “1”), on the basis of the following criteria:

1. The ratio of turnovers on the bank’s correspondent account in the Central Bank for a month to the bank's assets (abnormally low ratio - below 50% - indicates low business activities of the bank);
2. The ratio of turnovers to balances on accounts reflecting the lending transactions (abnormally low ratio indicates a low turnover of loans, or, perhaps, their poor quality; high return enables quick accumulation of liquidity having suspended issuance of the loans).

In case of high volume of contingent credit related liabilities (sureties and guarantees) the score can be adjusted for the instant and current liquidity ratio; the adjustment takes into account the quality of contingent liabilities.

The volume of highly liquid and liquid assets can be adjusted based on the economic meaning of the components, forming these assets. If and (or) include assets with the maturity de-facto not complying with the criteria of and (for instance, due to the continuous prolongations), these assets are excluded from the calculation of correspondent liquidity ratios.

5.2.8.2 The balance of assets and liabilities in the long run

The score for the long-term liquidity ratio is calculated automatically on the basis of the following indicator:

		-1	1
Indicator	Weight	Higher than	Less than
Long-term liquidity ratio	100%	110%	70%

Adjustments of the score:

The score for the balance of assets and liabilities in the long run can be adjusted (downward by not more than 0,5) manually, if:

- Long-term deposits reflected in the balance sheet have a high turnover ratio³⁶;
- Active use of prolongation practices when loans payable in less than 1 year are shown in the statements, and the borrower actually uses the loans for more than 1 year.

The score for the balance of assets and liabilities in the long run can be adjusted (upward not more than by 0,5) manually, if:

- Formally long-term deposits have high turnover ratio;
- The principal amount of the loan is being intensively amortised (relatively steady (non-volatile) repayment of the principal amount of the debt during the loan agreement validity), and the share of “balloon loans” (repayment of the principal amount of the debt at the end of the term) is insignificant.

Example: Normal monthly turnover ratio for one-year deposits amounts to 1/12 and for three-year deposits - to 1/36. Turnover ratio is recognised as high in case if the turnover ratio of deposits is significantly above the normal value of the indicator (i.e., more than by 2-3 times).

The score for the balance of assets and liabilities in the long run can be adjusted manually:

1) If both the following conditions are satisfied, then 0,25 can be subtracted from the final score for the factor “The balance of assets and liabilities in the long run”:

- The share of the 30 largest loans in the assets is more than 30%, AND;
- Weighted average (by loan value) maturity of 30 largest loans taking into account changes in maturity (prolongation) is from 3 to 5 years.

2) If both following conditions are satisfied, 0,5 can be subtracted from the final score for the factor “The balance of assets and liabilities in the long run”:

- The share of the 30 largest loans in the assets is more than 30%, AND;
- Weighted average (by loan value) maturity of 30 largest loans taking into account changes in maturity (prolongation) is more than 5 years.

5.2.9 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

³⁶ “Turnover ratio” is the ratio of turnovers on the accounting entry to the average balances on this accounting entry for the same period.

instruments.

Purpose of assessment:

To determine to what extent the bank is sensitive to market risks (stock exchange, interest-rate and currency risks (risk of volatility in exchange rates)).

Sources of information:

1. The bank's financial statements according to local GAAP and to IFRS;
2. Questionnaire filled in by the bank;

Algorithm for assessing:

		-1	1
Indicator	Algorithm		
Currency risks			
Maximum open currency position in one currency, % of capital		>9,5%	<6%
Balancing open currency position in local currency, % of capital		>15%	<5%
Open currency position in all currencies, % of capital	Minimum of scores 5	>19%	<15%
Interest-rate risks			
Difference between the share of assets and liabilities with floating rate		>15%	<5%
Stock exchange risks			
Share of pledged securities and bills of exchange in the gross assets		>17%	<5%

5.2.9.1 Currency risks

The score for this component is determined as the minimum of three scores:

- maximum open currency position in one currency, % of capital;
- balancing open currency position in local currency, % of capital;
- open currency position in all currencies³⁷, % of capital;

Adjustments of the score:

The score which was automatically set according to the benchmarks can be adjusted:

1. *By not more than 0,5 (1 level) downward:* if a significant open position (the score for the maximum open currency position in one currency is less than 0) is formed by illiquid currency (precious metals), e.g. it will be difficult for the bank to reduce the position;
2. *By not more than 0,5 (1 level) downward:* if a significant amount of the loans has been issued in a currency different than the borrower's revenue currency;
3. *By not more than 1 (2 levels) upward:* if a negative score of the indicator "open currency position in all currencies" is combined with a positive score for "balancing open currency position in local currency" (it is due to the fact that the long-term position in one currency covers the short-term position in another currency), and at the same time the bank has followed a similar policy and showed net positive revaluation of currencies and precious metals during the last 6 months;

³⁷ All definitions are provided in the Glossary.

4. *By not more than 1 (2 levels) upward*: if the bank hedges currency risks to a significant extent using derivative instruments (e.g. forwards, options, etc.), and the contracting parties for such transactions are assessed as reliable;
5. The score for the currency risks may be reduced by 0,5 (by one level) in case of high (over 50%) or by 1 (by 2 levels) and in case of very high (over 100%) open currency position calculated according to the bank's financial statements. The numerator of the coefficient is the difference between the assets and liabilities in foreign currency, the denominator is the equity.

Methodological note:

Both long-term and short-term positions in any currency (regardless of the current market trend) can be assessed negatively. In case significant currency risk led to profit, it can be assessed positively in another component of the methodology (assessment of profitability indicators).

Exposure to currency risks can be determined on the basis of comparison of the net currency position according to the balance-sheet and derivative transactions (theoretically, they can offset one another).

5.2.9.2 Interest-rate risk

The score for this component is determined on the basis of the following indicator:

- Difference between the share of assets and liabilities with floating rate.

Methodological note:

The bank's exposure to the interest-rate risk in addition to the indicator assessed in the automatic calculation is evidenced by the difference between the assets and liabilities, for which the bank or its creditors may change the rate unilaterally. This indicator is not taken into account in the calculations based on the expectation that banks are:

1. financially competent entities;
2. entities having strong bargaining power.

In case there is information on significant exposure of the bank to this type of interest-rate risk, the automatic score can be reduced by 2 levels.

Both excess of the liabilities with floating interest rate over the respective assets, and vice versa, are assessed negatively; i.e. the difference between assets and liabilities with floating rate is assessed by module.

The score can be increased manually if:

- 1) The bank operates in business segments providing a high level of interest margin (over 8%), i.e. reduction in interest margins for such bank is not very significant;
- 2) Interest income or expenses are "pegged" to the rate which has not been exposed to significant fluctuations for the last 12 months (more than by 2 percentage points).

The score can be reduced if the assets and liabilities are "pegged" to different rates.

5.2.9.3 Stock exchange risks

The score for this component is determined on the basis of the following indicator:

- Share of pledged securities and bills of exchange in the gross assets.

Methodological note:

The higher the share of pledged securities and bills of exchange in the assets, the more the bank is exposed to stock exchange risk, because in case the value of the pledged asset is impaired drastically, the bank's liabilities will exceed the value of the pledged assets which will reduce the profit margin and the bank's liquidity, as well.

5.3 Corporate governance and risk management

5.3.1. Corporate governance, business processes and information transparency

Organizational 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.

Purpose of assessment:

Indirect assessment of the assets (including intangible), which are not reflected on the balance-sheet, determining competitiveness and investment attractiveness of the bank in the mid-term.

Sources of information:

1. Questionnaire filled in by the bank;
2. Interview with the top managers of the bank;
3. The bank's charter³⁸;
4. Regulation on the board of directors and the management board;
5. Regulation on internal control service and internal control department;
6. Regulation on risk management;
7. Corporate governance code;
8. Regulation on audit committee (internal audit committee);
9. Regulation on dividend policy;
10. The bank's annual reports;
11. The bank's financial statements according to IFRS;
12. The bank's web-site;
13. Quarterly financial statements (for joint stock companies);
14. Web-site of the Central Bank;
15. Other open sources of information.

Algorithm for assessment:

Each of the indicators from the checklist below receive scores "1" – for "yes" and "0" – for "no". Then, the scores are weighted, summed up and converted to a standard scale (from "0" to "1").

Check-list for assessing the quality of corporate governance is as follows:

Activities of the board of directors, the management board and audit (9)	9
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³⁸ Articles of association, Statute.

1	Most members of the board of directors and management board have extensive experience in banking OR good contacts with large customers and government authorities	1
2	The board of directors includes independent directors	1
3	The board of directors meetings are held once every six weeks or more often	2
4	Financial statements according to IFRS are prepared more often than once a year	2
5	Reputation of the auditor for IFRS for the last year is assessed as very high ("The Big Four", Grant Thornton International, Moore Stephens, BDO International)	1
6	The latest annual financial statements according to IFRS are prepared not later than 20 th of April of the next year	2
Arrangement of the internal control system and risk management (8)		8
7	The bank has a separate risk management business unit	1
8	Risk management department is independent from the front-office (sales department)	2
9	The bank has assets and liabilities management committee	2
10	The bank has committees other than a united credit committee and other than asset and liability committee, whose activities are directly related to risk management	2
11	Adequate education (technical or economic education from a good university) and experience of managers of internal control system and risk management department	1
Organizational structure (8)		8
12	There are more than 2 employees in the financial monitoring service	2
13	There is a human resources department	1
14	The number of staff in the risk management department is adequate to the bank's size	3
15	The structure of the risk management department is adequate to the bank's risk profile	2
IT Support (17)		15
16	There is an electronic document management system in the bank	3
17	The bank is neither characterized by acute dependence on any external services (risk of acute overstatement of the cost of maintaining IT systems functioning is minimal), nor on any employees (minimal risks associated with the inability to modernize internal programs, in the case of dismissal of the providers of these programs) in the IT area	4
18	The core banking system is adequate to the current business needs and its shortcomings (e.g., poor performance with branches in different time zones) will not hinder the bank's development in the next 1-2 years	3
19	The bank has its own processing ³⁹ OR has entered into an agreement on the processing service with a company providing services with a high quality	3
20	There is an opportunity to provide online banking service for individuals	2
Information transparency (26)		26
21	The balance sheets and cash flow statements with notes prepared under local GAAP are publicly available (from the bank's, regulator's or another specialised	3

³⁹ Here "processing" means the storage of information on transactions with cards (credit and debit) issued by the bank and transferring of such information to the ABS;

	website) for the past six quarters.	
22	The income statements with notes prepared under local GAAP are publicly available (from the bank's, regulator's or another specialised website) for the past six quarters.	3
23	The beneficial owners of the bank are known from public sources	4
24	Members of the board of directors and the management board are known from public sources	2
25	The bank posts the annual financial statements according to IFRS (with notes) on its web site	3
26	The bank posts the annual financial statements according to IFRS (without notes) on its web site	1
27	The bank posts annual reports according to local GAAP on its web site on a quarterly basis	2
28	The bank posts normative ratios on its web site on a quarterly basis	2
29	The bank posts normative ratios on the Central Bank's web site or on its own web site (on a monthly basis)	3
30	There is an up-to-date list of the bank's related parties in the public sources	1
31	The bank posts the information about ratings assigned by S&P/Fitch/Moody's or other credit rating agencies having a good reputation on its own web site; by default for initial assignment the score 1 is set automatically	2

Adjustments of the score:

The score for the information transparency, quality of business processes and corporate governance can be adjusted by 1-3 levels downward or 1-3 levels upward, taking into account the following:

1. Interview transparency (all the required employees from the bank's side are present and answer the questions directly, they are ready to disclose the necessary information (if they refuse to provide such information, the refusal is reasoned), their answers correspond to the information provided, they do not "flounder" in the responses);
2. Consolidated opinion of the interview participants from the side of the Agency (complexity of the organizational structure, management competence and other slightly formalised factors are taken into account);
3. Terms and completeness of the information provided (including information about the borrowers): information is provided in full and without significant delays (if the bank provides scarce information to the Agency, this may indicate problems in the business processes, and this may indicate that the bank's employees are overloaded with tasks).
4. The bank uses "self-developed"⁴⁰ or rare core banking system (when less than 10 banks have such core banking system, it is referred to as rare one).

Methodological note:

Connection between corporate governance, business processes, information transparency, the bank's strategy from one side and creditworthiness from the other side is based on the

⁴⁰ "Self-developed" means that this system (program) was created by the bank's employees. This is not a usual situation.

following assumptions:

1. Corporate governance, business processes and information transparency are unique assets not reflected on the balance-sheet (at least, according to local GAAP), and are the results of the bank's investments in its own development; these assets determine the bank's ability to generate profit in the midterm;
2. Corporate governance, business processes and information transparency can positively affect the investment attractiveness: in case there is a threat of default, the bank having significant intangible assets is more likely to attract a new investor (so called "white knight") than the one without such assets;

Information transparency forms an intangible asset – reputation. Additional attention on transparency is caused by the fact that it indirectly reduces the probability of having so called "skeletons in the closet", i.e. concealed risk factors.

5.3.2. 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.

Purpose of assessment:

To assess the probability of conflicts among shareholders which may deteriorate the bank's creditworthiness, and reveal indirect signs of the shareholders' interest in supporting the bank.

Sources of information:

1. Questionnaire filled in by the bank;
2. The bank's web-site;
3. Web-site of the Central Bank.

Algorithm for assessment:

The bank is assessed according to each of the following criteria. The minimum of the scores obtained is selected:

No.		-1	-0,5	0	0,5	1
1	The share of the largest ultimate beneficiary (shares owned by the members of one family are summed up)	-	less than 20%	More than 20% but less or equal to 25%	More than 25% but less or equal to 50%	More than 50%
2	Number of "intermediate companies" ⁴¹ up to the	5 and more	4	3	2	1 or 0

⁴¹ Here "intermediate companies" means the companies which are "mother", "grandmother", etc. for the bank. For example, the bank is owned by entity X, entity X is owned by entity Y, entity Y is owned by an individual X,

	controlling ultimate beneficiary (owning a share of over 10%)					
3	Presence of companies registered in “tax havens” and (or) in the countries with the relaxed requirements for the information disclosure in the ownership structure (among “intermediate companies” up to the controlling ultimate beneficiary or ultimate beneficiary, which together account for more than 50% of the equity)			yes		no
4	The Agency has information on the actual largest ultimate beneficiaries	no				yes

Adjustments of the score:

1. The share of the largest ultimate beneficiary is not assessed for banks having dispersed (diluted) ownership structure with a large free-float⁴² and a high score for corporate governance (above 0,7). In this case the score is based on the criteria №2, 3, and 4, which is checked for beneficiaries having a share of more than 5%;
2. The score can be based on the distribution of the voting rights among the shareholders if there are different types of shares or shareholders agreements, that reduce the probability of conflicts;
3. The score can be reduced to “0” if the bank has a legal form as limited liability company AND the bank’s charter includes a paragraph stating that the shareholder of the bank may get out of the bank’s equity, and it results in an obligation for the bank to repurchase the shares of such shareholder;
4. The score can be reduced to “-1” if there are conflicts between owners and these conflicts negatively influences or can influence negatively the bank’s creditworthiness;
5. The score can be reduced to “-1”, if the current owner of the bank (person controlling 10% of equity) was the owner of a bank with a revoked license;
6. The score can be reduced to “-1”, if the current owner of the bank is going through a bankruptcy procedure;
7. The score can be reduced to “-1”, if due to some reasons (for example, temporary administration from the Central Bank, bankruptcy procedure for the shareholder-legal entity or criminal case for the shareholder-individual, death of the shareholder-individual, public information about the non-fulfilment of financial liabilities by the owner-legal entity) there are high probability that the shareholder cannot operate

who is the controlling ultimate beneficiary of the bank (so, the number of “intermediate companies” is 2 in this case).

⁴² *Free float* or *public float* is defined as the proportion of shares held by investors, except for:

- Shares owned by investors holding more than 5% of all shares of the company (they may include the founders, senior management, insiders, strategic shareholders, etc.);
- Shares limited for trading (e.g., issued to employees);
- Owned by insiders (the insiders are expected to hold the assets for a long time);

with the securities of the bank, if this shareholder has more than 25% of the bank's equity.

Methodological note:

If the bank has a shareholder – individual person, the bank can be helped through funds provided from him / her with the purpose of preserving the owner's reputation; in case of a complicated / diluted ownership structure, the bank's failure does not adversely affect the reputation of the beneficiary owner, it means that support is less likely than in case of direct ownership of the shares. In case of a dispersed ownership structure, capital increase is usually delayed, and conflicts among the owners are more likely to arise. The complex ownership structure may also cause attention of the regulator.

5.3.3. Risk management

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).

Purpose of assessment:

To determine to what extent the current risk management infrastructure complies with the risks taken by the bank.

Sources of information:

1. Questionnaire filled in by the bank;
2. The bank's financial statements according to local GAAP and to IFRS;
3. Interview with the top managers of the bank;
4. Documents regulating risk management in the bank.

Algorithm for assessment:

Practice of managing **all types of risks** is assessed according to the following algorithm. Each of the indicators from the checklist below receive scores "1" – for "yes" and "0" – for "no". Then, the scores are weighted, summed up and converted to a standard scale (from "-1" to "1").

Risk type	Parameter	Variation range
Credit risk	Share of the credit risk = 25% + 20%* the share of loans in the sum of loans and securities	from 25% to 45%
credit risk of legal entities and individual entrepreneurs	Share of the credit risk * share of the loans to legal entities and individual entrepreneurs in total loans to legal entities, individual entrepreneurs and individuals	from 25% to 45%
credit risk of individuals	Share of the credit risk * share of the loans to individuals in total loans to legal entities,	from 25% to 45%

	individual entrepreneurs and individuals	
Market risk	Share of the market risk = 10% + 25%* the share of securities in the sum of loans and securities	from 10% to 35%
stock exchange risk	Share of the market risk * linear function (score for the exposure to financial instruments' risks)	Depending on the score for "exposure to financial instruments' risks"
currency risk	Share of the market risk * linear function (the score for currency risk)	Depending on the score for "currency risks"
interest-rate risk	Residual share of market risk (after deduction of shares mentioned above)	Residual share of market risk
Liquidity risk	Linear function (average score for instant and current liquidity ratios)	from 5% to 10% depending on the average score for current and instant liquidity
Operating and reputation risk	Residual share (after deduction of shares mentioned above)	from 30% to 35% depending on the weight of liquidity risks
Operating risk related to cash-turnover	Minimum from two scores	
Operating and reputational risks		

5.3.3.1 Credit risk management

Check-list for assessing the quality of **credit risk management** consists of two sections:

1. Risk management for risks on loans to legal entities and individual entrepreneurs;
2. Risk management for risks on loans to individuals.

No	Credit risks: legal entities and individual entrepreneurs	Weight
1	The bank has a methodology for credit risk management for loans to legal entities (separate document)	2
2	The credit committee of the bank includes representatives of the legal department	1
3	The credit committee of the bank includes representatives of the risk management department	1
4	The credit committee of the bank includes representatives of the security department	1
5	More than 70% of insurance policies for collateral on loans to legal entities are from insurance companies rated BBB- or higher according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation	2
6	More than 50% of collateral (on loans to legal entities) is insured	2
7	The bank intensively uses the owners' sureties as ADDITIONAL collateral (other than collateral formed by property)	2

8	Fixing covenants in loan agreements is a common practice for the bank (loans with covenants account for more than 30% of loans to legal entities and individual entrepreneurs)	2
9	The bank established a specialized service having more than 1 employee to ensure charging order (including interaction with the Federal Bailiffs' Service or its analogue)	1
10	The share of the overdue loans to legal entities and individual entrepreneurs does not exceed 3,5% (as of the quarterly dates during the year)	1
11	The share of the loans with a bad quality (according to national classification or loans with overdue more than 90 days) in total sum of loans to legal entities does not exceed 5% (as of the quarterly dates during the year)	1
Credit risks: Individuals		Weight
1	The bank has a methodology for credit risk management for loans to individuals (separate document)	1
2	Credit risks of individuals are assessed on the basis of scoring models based on the statistical data for at least 3 years	1
3	Representatives of security department are involved in making a decision on issuing loans to individuals	1
4	The bank checks a borrower in the credit bureaus, and the bank gets the information from more than one credit bureau	3
5	More than 70% of insurance policies for collateral on loans to individuals are from insurance companies rated BBB- or higher according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation	2
6	More than 50% of collateral (on loans to individuals) is insured	2
7	The bank insures the life of borrowers of mortgage loans OR such loans account for less than 2% of the total loans to individuals as of the last reporting date	1
8	The bank established a specialized service having more than 1 employee to ensure charging order (including interaction with the Federal Bailiffs' Service)	2
9	Share of debt of "payroll customers" ⁴³ in the portfolio of loans to individuals is more than 1/3 as of the last quarterly date	1
10	Share of the overdue loans to individuals does not exceed 6% (as of the quarterly dates during the year)	1
11	Share of the homogeneous loans to individuals which are not overdue exceeds 80% (as of the quarterly dates during the last year)	1

The scores for each section are summed up separately, then weighted by shares in the loan portfolio of each type of loans.

5.3.3.2 Market risk management

Check-list for assessing the quality of **market risk management** consists of three sections:

⁴³ "Payroll customers" here refers to borrowers of the bank having at the same time a "salary" account in the bank (current account for receiving salary). If the borrower of the bank receives his/her salary on an account in the same bank, the bank can control the creditworthiness of the borrower very easy.

1. Interest-rate risk management;
2. Currency risk management;
3. Stock exchange risk management.

Nº	Interest-rate risks	Weight
1	The bank has a methodology for interest-rate risk management	1
2	Stress testing on the bank's exposure to interest-rate risks is carried out	3
3	Gap-analysis is applied	2
4	There are accurate regulations for work with instruments bearing interest-rate risk	2
5	Gap between assets and liabilities with floating rate is less than 2 percentage points	3
	Stock exchange risks	Weight
1	The bank has the methodology for stock exchange risk management	1
2	Stress testing on the bank's exposure to stock exchange risks is carried out	3
3	Duration analysis is applied	2
4	VAR methodology is applied	2
5	Losses on stock exchange risks do not exceed 10% of the equity	2
	Currency risks	Weight
1	The bank has the methodology for currency risk management	1
2	Stress testing on the bank's exposure to currency risks is carried out	3
3	Duration analysis or gap-analysis is applied	2
4	VAR methodology is applied	2
5	Losses on currency risk do not exceed 10% of the equity	2

The scores for each section are summed up separately, then allocated and weighted by shares of the corresponding risk types in the total amount of the market risk.

5.3.3.3 Liquidity risk management

Check-list for assessing the quality of **liquidity risk** management consists of one section:

Nº	Liquidity risks	Weight
1	The bank has a methodology for liquidity risk management (separate document)	1
2	Stress testing of the bank's exposure to liquidity risks is carried out	3
3	Instant liquidity ratio is at least 20% as of all monthly dates for the last 12 months.	2
4	Current liquidity ratio is at least 55% as of all monthly dates for the last 12 months.	1
5	Long-term liquidity ratio is not more than 110% as of all monthly dates for the last 12 months.	1
6	No violations of the liquidity ratios for the last 12 months are detected.	3

3.3.4 Operational risk management

The score for "Operational risk management" is determined as the minimum score from the two following parameters:

- In accordance with the check-list for quality of operational and reputational risk management;

- Operational risk management related to cash-turnover (refers only to “physical cash”).

Operational and reputational risk management

Check-list for assessing the quality of ***operational and reputational risk management***:

№	Operational and reputational risk	Weight
1	The bank has the separate document regulating operational risk management	1
2	There is a database of operational losses	2
3	Responsibility for maintaining the database is shared among departments (it is not concentrated in the business unit generating risks)	2
4	Database of operational risks has been maintained for more than 3 years	2
5	In order to restrict an access to computers physical media storages (USB-tokens, etc.) are used	1
6	During the year-ending period there have been no principal changes of management in the bank OR the management has been changed as planned with minimal risk of violating the law and interrupting operational activities	3
7	The employee turnover rate does not exceed 25% during the year OR the employee turnover rate is between 25% and 50%, but it is typical for the bank's business model, and risk of large-scale violations of the labour laws is minimal	3
8	The bank inspects the actual location of the companies having significant turnovers on accounts at least once a year	1
9	The bank applies premium rates for operating current accounts in case there are any suspicions of “transit” transactions	1
10	The bank applies other methods of fighting money laundering (discontinuing online banking, etc.)	2
11	The bank's head office is owned by the bank or leased from “friendly” entities (e.g., owners)	3
	Measures aimed at minimising the damage or loss of property, plant and equipment and other tangible assets	
12	An acceptable level of protection against theft, flooding, fires (security, video surveillance) is ensured in the bank's head office OR the bank is located in the office of at least class C1 according to the international classification (C1, B, A1, A2, A3)	3
13	At least 50% of the bank's property is insured against theft, floods, fire with insurance companies having high credit rating (BBB- or higher according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation)	2
14	The bank has a BBB policy issued by an insurance company having high credit rating (BBB- or higher according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation)	7
	Measures aimed at minimising breakdowns and failures of the equipment and systems	
15	The key bank's servers were updated at least 4 years ago	4
16	Data backup at least once a day is ensured	2
17	The bank has backup servers	1

18	The bank has backup communication channels	1
19	The bank's head office has backup power supply	3
	Measures aimed at minimising losses from improper arrangement of the activities	
20	The bank received (confirmed) a quality management certificate (ISO) not later than 12 months before the assessment, and the company issuing the certificate has a good reputation (auditor's reputation according to ISO is considered as high if it is accredited at least by one of the following accreditation bodies: UKAS (United Kingdom), DAR (Germany), SAS (Switzerland), COFRAC (France), ANAB (USA), JAB (Japan))	2
	Management results	
21	For the previous 12 months there have been no delays in performance of the bank's liabilities related to the realization of operational risks	6
22	The Agency has found no significant errors in the information provided (questionnaire and financial statements)	6
23	The Agency has no information on cases of realization of operational risks related to illegal actions of third parties and employees of the bank	3

Operational risk related to cash-turnover

At the beginning of the assessment all banks have a score of "1" for "Operational risk management related to cash-turnover". Then the following values are deducted:

1st criterion

- ✓ If the share of physical cash in assets was more than 7% but not more than 15% as of the last reporting date OR as an average value for the past 6 months => the deduction = "0,5";
- ✓ If the share of cash in assets was more than 15% as of the last reported date OR as an average value for the past 6 months => the deduction = "1";
- AND
- ✓ If the cash turnover ratio is less than 5 times (500%) for the last quarter OR as average for the past 6 months => additional deduction = "0,5";

2nd criterion

- ✓ If less than 60% of physical cash is insured as of the last reported date OR physical cash is insured by an insurance company with a rating lower than B according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation => the deduction = "0,5";

3rd criterion

- ✓ If debit turnovers with physical cash are from 70% to 100% of average assets from the beginning to the end of the analyzed period (as of the last reported date or as average for past 6 months) => the deduction = "0,5";
- ✓ If debit turnovers with physical cash is higher than 100% of average assets from the beginning to the end of the analyzed period (as of the last reported date or as average for past 6 months) => the deduction = "1";

Adjustments of the score:

The score⁴⁴ can be downgraded if the bank does not provide the requested information on time regarding the following sections:

⁴⁴ The score may be decreased by 0,5 or 0,25 points up to the Agency's discretion.

- operating risk management;
- IT support (if calculation of the indicators/forms requested is impossible because of poor IT-systems);
- information transparency (in case when the bank refused to provide the requested information).

The score for operational risk management can be decreased by one level, for the bank involved in financial recovery procedure of a troubled bank as an investor-bank. Operational risks in this case include the diversion of resources (first of all, labor resources) to manage troubled bank.

5.3.4. Strategy of development

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.

Purpose of assessment:

To determine whether the bank's activities have been strategically planned, i.e. whether they are subject to strategic targets (medium-and long-term), and how the targets determination process is organised in the bank.

Sources of information:

1. Questionnaire filled in by the bank;
2. Interview with the top managers of the bank;
3. The bank's annual reports for the last 3 years;
4. The bank's financial statements according to IFRS;
5. Strategic documents of the bank;
6. Other open sources of information.

Algorithm for assessing:

Conditions for assigning score	Score
<ul style="list-style-type: none"> • The bank has all necessary strategic documents* (strategy for 1 year, for 3-5 years); • The bank's targets are clearly defined in the strategic documents (SMART methodology⁴⁵); • The strategy contains a list of key segments, analysis of competitive environment, indication of the bank's strengths and weaknesses as compared with competitors; • The strategy takes into account the current macroeconomic parameters (as one of the scenarios); • Moving towards the defined targets enhances creditworthiness of the bank and strengthens the competitive position. 	1

⁴⁵ SMART is an acronym that includes 5 main features of effective target. The target shall be **specific**, measurable by any indicators (**Measurable**), **attainable**, **result-oriented**, and **time-bounded**.

<ul style="list-style-type: none"> One of the above mentioned conditions is not fulfilled (but not the second one and not the last one). 	0,5
<ul style="list-style-type: none"> Two of the above mentioned conditions are not fulfilled OR the second condition is not fulfilled OR the last condition is not fulfilled 	0
<ul style="list-style-type: none"> Three of the above mentioned conditions are not fulfilled. 	-0,5
<ul style="list-style-type: none"> Four of the above mentioned conditions are not fulfilled. 	-1

*The full set of strategic documents:

- 1 year - a financial plan (it can be included in the longer-term business plan);
- 3 years - business plan (it can be included in the strategy);
- 5 years or more - the strategy.

A Power Point presentation CAN be considered as the strategy. The strategy shall determine targets (specific target, parameters of achievement, timing and responsible persons/ units). The financial plan shall include indicators (financial results), business plan shall include financial results + strategic priorities.

Adjustments of the score:

The score can be adjusted (by not more than "1" level up/down) based on the results of the interview, if the top managers have shown good/poor understanding of the bank's development prospects.

5.4. Internal support factors and internal stress factors

If a **moderate** internal stress (support) factor is detected, **0,1** is deducted (added) from (to) the rating score. If a **strong** internal stress (support) factor is detected, **0,2** is deducted (added) from (to) the rating score. If **very strong** stress (support) factor is detected, **0,3** is deducted (added) from (to) the rating score. If **maximum** stress (support) factor is detected, **0,4** is deducted (added) from (to) the rating score. If several internal stress-factors (support-factors) are detected, “penalties” and “bonuses” are be added together. The rating score for stand alone creditworthiness is determined using the following formula:

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

If there is a reason to assume that the conditions for stress or support-factor will not be fulfilled for the next reporting date, the stress-factor can be omitted (not assigned). All stress and support-factors are assigned only if the condition for these factors are satisfied for the last reporting date, unless otherwise stated.

5.4.1 Internal stress factors

Internal stress-factors' assessment criteria:

Nº	Stress-factor	Moderate stress factor (deducting 0,10)	Severe stress factor (deducting 0,20)
1	Specialization and captivity	High level of assets attributed to related parties (see Section 5.4.1.1)	High level of assets attributed to related parties (see Section 5.4.1.1)
2	Geographic reach	Concentration of business (more than 50% of assets as of the last reported date) in the region having high risks: Presence of major crisis and/or war or social instability in the country of core bank's operations.	NA
3	Regulation and supervision risks ⁴⁶	The bank violated the liquidity normative (prudential) ratios applicable for the this bank for 2-5 days within any 30 consecutive working days (the period under consideration amounts to 2 months preceding the last reporting date) The bank violated the normative (prudential) ratios describing the related party risks applicable for the this bank 6 times or more during the 30 consecutive working days (the period under consideration is 2 months prior to the last reporting date)	The bank violated the liquidity normative (prudential) ratios applicable for the this bank 6 and more times within 30 consecutive working days (the period under consideration amounts to 2 months preceding the last reporting date)

⁴⁶ This stress-factor is not applicable for banks that are going through the procedure of financial recovery.

		An existence of a large-scale deliberate violation of the local anti-money laundering regulation (applicable to the rated bank) is suspected (see Section 5.4.1.2)	An existence of a large-scale deliberate violation of the local anti-money laundering regulation (applicable to the rated bank) is suspected (see Section 5.4.1.2)
4	Stress factor of assets operations	Extremely low level of loans collateralisation (see Section 5.4.1.3)	-
5	Stress factors of funding base	High probability of customer's funds outflow, which can lead to violation of liquidity normative ratios (due to large payments or due to "bank panic" in the region). Moreover, both the bank's balance sheet liabilities and contingent liabilities (guarantees, payments according to the court's decision, etc.) are taken into account.	High probability of funds outflow in the upcoming months, which can lead to non-fulfilment of bank's liabilities in case of lack of sources of additional liquidity (the score for "additional liquidity sources" is negative). Moreover, both the bank's balance sheet liabilities and contingent liabilities (guarantees, payments according to the court's decision, etc.) are taken into account.
		Vulnerability of the liquidity due to funds outflow - any of the conditions (see Section 5.4.1.4)	Vulnerability of the liquidity due to the funds outflow - any of the conditions (see Section 5.4.1.4)
6	Stress factors of assets-liabilities operations	Expected loss resulting in Capital adequacy ratio below 10,5% OR Expected loss resulting in Common equity tier 1 (CET 1) ratio below 5,5% OR Expected loss resulting in Tier 1 capital ratio below 6,5%	Expected loss which may result in non-compliance with Capital adequacy ratio, Common equity tier 1 (CET 1) ratio, Tier 1 capital ratio
		Stress-factor for suspicious allocation of funds, threatening the implementation of capital adequacy standards (see Section 5.4.1.5.1)	Stress-factor for suspicious allocation of funds, threatening the implementation of capital adequacy standards (the factor can also be very strong and maximum) (see Section 5.4.1.5.1)
		The vulnerability of capital due to the impairment of assets (see Section 5.4.1.5.2)	The vulnerability of capital due to the impairment of assets (see Section 5.4.1.5.2)
		Any of the regulatory capital ratios below the regulatory minimum +0,5 p.p. ⁴⁷ (see Section 5.4.1.5.3)	Violation of any of regulatory capital ratios as of the last reported date

⁴⁷ In this case any "capital buffers" are not added to the minimum required levels of capital adequacy ratios,

		The amount of equity is close to the local regulatory minimum for banks (see Section 5.4.1.5.4)	The amount of equity is extremely close to the local regulatory minimum for banks (see Section 5.4.1.5.4)
		Extremely high growth of the loan portfolio and portfolio of guarantees (see Section 5.4.1.5.5)	-
7	Other stress factor	Moderate influence for risks that are not assessed or insufficiently assessed in the rating model because of specific characteristics of the rated bank or temporary influence ⁴⁸ of such risks	Strong influence for risks that are not assessed or insufficiently assessed in the rating model because of specific characteristics of the rated bank or temporary influence of such risks

5.4.1.1 Stress-factor of specialization and captivity

5.4.1.1.1 High level of assets attributed to related parties

The stress-factor is assigned on the basis of the following indicator:

$$\text{Level of lending to RP} = \frac{[(\text{Assets falling on RP} - \text{reserves}) - (\text{Funds raised from RP})] * \text{Coefficient}}{\text{Capital}}$$

The value of loans to RP (net of reserves) and the amount of contingent liabilities (credit exposure) can be reduced by the amount of loans and other assets, nominal rating class of which is not lower than BBB- according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation, or which are collateralized by assets with such nominal rating class. The same way the value of loans to RP (net of reserves) and the amount of contingent liabilities (credit exposure) can be increased by the amount of loans and other assets for which the value of reserves was reduced by the value of collateral and the agency considers this collateral's nominal rating class is lower than the one above.

"Coefficient" is the coefficient of stability of the funds raised from related parties. The coefficient can range from 0 to 0,7. The maximum coefficient value is set for the funds raised from related parties without right to preschedule withdrawal and partial withdrawal.

Moderate stress-factor is assigned if the indicator (calculated in accordance with the formula specified above) is in the range from 50% to 100%, and strong stress-factor – if the indicator is above 100%.

5.4.1.2 Stress-factor of regulation and supervision risks

5.4.1.2.1 Stress-factor for existence of large-scale deliberate violation of anti-money laundering regulation

The stress-factor for existence of large-scale deliberate violation of anti-money laundering regulation is assigned on the basis of the following check-list:

because they just help the bank to redistribute profit, but they are not object of regulation.

⁴⁸ Temporary influence of the factor means that the rating score for the bank increased temporary in accordance to opinion of the member of the rating committee, and significant decline 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.

№	Criteria	Sub criteria	Score
1	There are people that worked in the management of a bank which license was revoked (or who owned such bank in the period during the year before license withdrawal) in the list of top managers of the rated bank (Management Board, shareholders, Board of Directors, Board of advisors).	-	1
2	The supervision body made very often (more than 1 time per 1,5 year) inspections for compliance with an anti-money-laundering regulation.	-	0,5
3	None of the owners owns a share of over 10% OR more than 70% of ultimate owners are not represented in the Board of Directors or the Management Board.	-	0,5
4	Chairman of the Board of the bank was not approved by the supervision body for a long period (more than a year).	-	0,5
5	Frequent change of the bank's management, not associated with the change of the key owners of the bank (more than 50% of Board of Directors and (or) the Management Board was changed during 12 months).	-	0,5
6	High ratio of debit turnovers on current accounts of commercial organizations to assets, which are characterized as risky according to the following criteria: <i>1. There is discrepancy between turnovers on company's accounts and the company business scale (assets and equity);</i> <i>2. frequent change of the 10 largest companies in terms of turnovers;</i> <i>3. equity of companies that show the large turnovers is close to the minimum required shareholders' equity;</i> <i>4. the absence of the official company's website;</i> <i>5. the company showing large turnovers was created less than 2 years ago.</i>	<i>From 150 to 300%</i>	0,5
		<i>More than 300%</i>	1
7	High debit turnovers in local and foreign currency on correspondent accounts in foreign banks relative to the rated bank's assets; these transactions are related to transfer of customer's funds.	<i>More than 50%, but less than 100%</i>	0,5
		<i>More than 100%</i>	1

8	High ratios of debit turnovers on physical cash accounts (the largest within past six months) to bank's assets AND the structure of turnovers are not "normal" for this bank. This point refers to operations with physical cash.	More than 90%, but less than 200%	0,5
		More than 200%	1
9	The bank was frequently brought to justice for violation of anti-money-laundering regulation.	More than 1 case per 1 branch for the last 24 months	0,5
		More than 2 cases per 1 branch for the last 24 months	1
10	Bank's office is located on the periphery of a large city.	-	0,5
11	Due to the specific of the bank's business model, the bank is exposed to the specific regulation and supervision risks that are not included to the criteria listed above. Depending on the probability of the regulation and supervision risks materialization, the rating committee assigns 0,5-1 score in the check-list.	-	

The amount of points scored according to the table above	The score for the stress-factor violation of anti-money laundering regulation
[1;2)	0,5 (moderate)
[2;3)	1 (strong)
[3;4)	1,5 (very strong)
[4;∞)	2 (super strong / maximum)

5.4.1.3 Stress-factors of assets operations

5.4.1.3.1 Extremely low level of loans collateralization

Stress-factor for "extremely low level of loans collateralization" is assigned, if the collateral excluding pledge of securities, sureties and guarantees is less than 30% of the loan portfolio (excluding issued interbank loans, bills of exchange of credit institutions, legal entities, government authorities and loans to the governments, and the loans to the companies rated BBB- or higher according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation).

5.4.1.4 Stress-factors of funding base

5.4.1.4.1 Stress-factor for the pressure on liquidity due to funds outflow

The "stress-factor for the pressure on liquidity due to funds outflow" is assigned based on the following criteria:

	Moderate	Strong
Pressure on liquidity from the outflow of	1. Outflow of funds from the largest creditor, excluding the Central Bank and bank's affiliated parties at the moment or for the month will lead to	1. Outflow of funds from the second largest creditor, excluding the Central Bank and bank's affiliated parties will lead to violation of he

funds (stress factor of funding base) - any of the conditions	<p>violation of the instant liquidity normative ratio or current liquidity normative ratio (see methodological note at the end of this table – (1)).</p> <p>2. The net outflow of 7% of funds that are not considered in the instant liquidity normative ratio and 10% of funds not considered in the current liquidity normative ratio at the moment or during the month will lead to violation of the instant liquidity normative ratio or current normative ratio.</p> <p>3. Ratio of sum of funds raised from the Central Bank by REPO operations⁴⁹ and funds raised with the pledge of non-marketable assets⁵⁰ for up to 30 days to LAM (highly liquid assets)⁵¹ is not less than 5 (see methodological note at the end of this table – (2)).</p> <p>4. Ratio funds raised from the Central Bank through REPO and through the pledge of non-marketable assets for up to 30 days to LAT (liquid assets)⁵² is not less than 1,6 (see methodological note at the end of this table – (2)).</p> <p>5. The ratio of loans and deposits raised from other banks for up to 30 days and balances on correspondent accounts, to LAM (highly liquid assets) is not less than 1,5 (see methodological note at the end of this table – (3)).</p> <p>6. The ratio loans and deposits raised from other banks for up to 30 days and balances on correspondent accounts, to LAT is not less than 0,75</p>	<p>instant liquidity normative ratio or current liquidity normative ratio (see methodological note at the end of this table – (1)).</p> <p>2. The net outflow of 5% of funds not considered in the instant liquidity normative ratio or in the current liquidity normative ratio at the moment or during the month will lead to violation of the instant liquidity normative ratio or current normative ratio.</p> <p>3. Ratio of sum of funds raised from the Central Bank by REPO operations and funds with the pledge of non-marketable assets for up to 30 days to LAM (highly liquid assets) is not less than 10 (see methodological note at the end of this table – (2)).</p> <p>4. Ratio of sum of funds raised by the Central Bank from the Central Bank by REPO operations and funds raised with the pledge of non-marketable assets for up to 30 days and LAT (liquid assets) is not less than 2,5 (see methodological note at the end of this table – (2)).</p> <p>5. The ratio loans and deposits raised from other banks for up to 30 days and balances on correspondent accounts, to LAM is not less than 5 (see methodological note at the end of this table – (3)).</p> <p>6. The ratio of loans and deposits raised from other banks for up to 30</p>
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⁴⁹ This criterion refers to risks related to “REPO-pyramid”.

⁵⁰ Non-marketable assets here are the loans from the highest quality category. The bank can obtain loans from the Central Bank secured by this type of assets.

⁵¹ Liquid assets with terms up to 1 operating day.

⁵² Liquid assets with terms up to 30 days.

	<p>(see methodological note at the end of this table – (3)).</p> <p>7. If fulfillment of liabilities on the largest issued guarantee (except for the principals rated BBB- or higher according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation), will lead to the violation of the current liquidity ratio or calculated analogue, the moderate stress-factor is assigned. (see methodological note at the end of this table – (4)).</p>	<p>days and balances on correspondent accounts, to LAT is not less than 1,25 (see methodological note at the end of this table – (3)).</p>
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Methodological note:

(1) The assessment of vulnerability of liquidity to outflow of funds from the largest creditors can be adjusted if the first or second largest creditor is affiliated with the bank and there are reasonable grounds to believe that the owners are willing to support the bank's liquidity and the funds on their accounts are relatively stable during the period available for analysis (based on the information obtained from interview, media and bank's financial statements). In this case, the potential outflow of funds from the largest non-affiliated entity is analysed.

The amount of the bank's liabilities to the largest creditors (subject of stress testing) can be reduced, by the amount of conditional deposits raised from these creditors, having no opportunity of full or partial early withdrawal and having no covenants on the early payment and the maturity of which is more than one quarter left. The mentioned part of liabilities can be considered as very stable. So, this part can be excluded from the stress-testing.

(2) The assessment of the bank's exposure to risks of refinancing of funds raised from the Central Bank by REPO operations, can be adjusted in case of transactions for a period longer than 30 days or if the rated bank acts as a "transaction agent" (no default risk, i.e. the bank transferred funds received via REPO automatically to other banks). Example: annual FX-REPO agreements with the Central Bank. In addition, when assessing the risks of refinancing of funds raised from the Central Bank, the funding is considered as risk-free in terms of liquidity, if it is implemented as a direct REPO involving securities that are not owned by the bank, but received as a collateral under a reverse REPO agreements with third counterparties with the condition that there is no large gap between the date of execution of obligations due to both transactions and there is no doubt about the liquidity of these securities for the period of the transaction.

(3) Criteria for refinancing risks for funds raised from the Central Bank, are milder than criteria for risks for funds raised from commercial banks, on the basis of test results, and because of the greater stability of funding from the Central Bank. In practice, the Central Bank usually closes the credit limit on securities immediately before the revocation of the license. The limits of funding in the interbank credit market are not regulated by any documented agreements and operatively change / close by one counterparty based on its own assessment of the reliability of other counterparty.

(4) When testing liquidity for payment on the largest guarantee⁵³ if the amount of payment is critical (critical amount of payment in guarantee means that it satisfies the moderate stress-factor of funding base), the bank is being asked about the payment schedule (in the case of risk realization) for this guarantee which is defined in the agreement. Guarantees having conditions of non-lump sums payments, but having long-term schedule for payments (more than one quarter) is excluded from the stress-testing of liquidity.

(5) When conducting the stress-tests for instant liquidity in order to determine the stress-factor of the funding base, the sources of accumulation of the instant liquidity mentioned below are added to the amount of highly liquid assets⁵⁴.

Sources of accumulation of the instant liquidity:

- 1)** Bonds included in the Lombard list of the Central Bank (or its analogue) having minimum discounts (haircuts) which have high credit ratings and are not included in the list of high liquid assets (LAM) and without encumbrance (not pledged) at the moment of evaluation.
- 2)** 30% of interbank deposits and loans placed for more than 1 day, but for not more than 30 days, (including those into the Central Bank), the probability of default of which is estimated as a minimum in accordance with the assigned credit ratings (BBB- or higher according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation), or in accordance with other factors (loans to Central banks, banks of development).
- 3)** Part of securities received on transactions made on a return basis (securities received as a pledge on reverse REPO agreements).
- 4)** Other sources of accumulation of instant liquidity approved by rating committee (liquid assets that are not considered for the calculation of LAM), which include (1) balances on accounts of payments to the stock-exchanges, on conversion transactions and forward transactions in the part of "short" instruments confirmed by the extracts from stock-exchanges transactions, (2) liquid securities that are not included in the Lombard list of the Central Bank (or its analogue), with a steady demand for them (for example, government bonds of countries with a low level of country risk).

The volume of highly liquid assets increased by the described above adjustments is used for assessment of the vulnerability of the liquidity to the outflow of funds from the largest creditors (excluding funds from the Central Bank and sustainable funding from the affiliated companies) and used for assessment of the vulnerability of the liquidity to the early outflow of funds on the horizon of one business day.

Also, the amount of liquid assets is increased by the amount of potentially raised funds under the pledge of the securities listed in the third paragraph of the sources of liquidity accumulation (securities of customers as a pledge of reverse REPO agreements with described in the methodological explanation discounts), in order to assess the vulnerability of liquidity to the described above potential outflow of funds on the horizon of one month.

Adjusted amount of liquid assets to be used for the assessment of the vulnerability of

⁵³ Information about the largest guarantee is requested from the bank.

⁵⁴ In this case amount of highly liquid assets refers to criterion of the stress factor of the funding base - resistance to outflow of raised funds on the horizon of one business day.

liquidity to an outflow of funds of the largest creditors (excluding funds from the Central Bank and sustainable funding from the affiliated companies) to early outflow of funds on the horizon of one month, and to payments of the biggest guarantee.

5.4.1.5 Stress-factors of assets-liabilities operations

5.4.1.5.1 Stress-factor for suspicious allocation of funds, threatening the implementation of capital adequacy standards

The following ways of fund withdrawal from the bank are checked:

1. Allocation of funds in illiquid securities (mostly, in illiquid equity securities);
2. Allocation of funds in liquid securities on accounts in “scheming” / unknown depositories (custodian banks) without reliability rating combined with the lack of precedents of pledging of these securities by market counterparties;
3. Combination of high share of physical cash in assets with low turnover of “physical cash accounts” (potentially it indicates that cash could not be in the bank);
4. Raising of “expensive” funds from individuals and placement of these funds to correspondent accounts without any income. OR Raising of “expensive” FX-funds and placement of these funds to letters of credit (for foreign transactions) having lower margin;
5. Allocation of funds in loans having little or no economic sense:
 - substantial part of the loan portfolio was classified as loans to borrowers with no signs of real activity (*) (more than 50%);
 - low turnover ratio of the loan portfolio (less than 10% per month) OR a combination of significant turnover with “rolling over” of the same or affiliated borrowers;
 - absence of liquid property as collateral for the loan portfolio;
 - active allocation of loans to borrowers that according to the agency’s information, defaulted on other liabilities or have signs of a “shell company”.

(*)The minimum list of conditions indicating a potential absence of borrower’s real activity:

1. The book value of loan is more than 10 times higher than borrower’s revenues for the last 12 months;
2. The borrower has no fixed assets that it owns or does not have leased property or equipment necessary for the activity;
3. The large share of receivables/ issued loans/ securities/ other financial investments in the assets (over 70%);
4. The borrower did not provide the bank statements from accounts opened in other credit institutions;
5. The borrower makes suspicious transactions through the bank (transactions without clear economic meaning);
6. Changes of the sole executive body of the borrower, more than two times during the last calendar year;
7. The borrower is not located in the legal address (mentioned in the Statute) or in the address mentioned as an actual address in official documents;
8. The borrower lost main documents, agreements many times over the last three years;
9. The borrower is registered in a “mass” address (hundreds of other companies are registered for the same address);
10. The borrower’s tax address was changed more than two times during the last

calendar year;

11. The general director of the borrower is the same general director in many other companies;
12. The absence of chief accountant / accounting department in borrower's list of employees / organization structure;
13. The borrower does not have other employees apart from general director and chief accountant;
14. The borrower has not been paying wages to it's employees for more than 3 months / The borrower pays wages lower than the minimum required level.

Above mentioned conditions are not applicable for medium and small enterprises (official MSE).

The "stress-factor for suspicious allocation of funds, threatening the implementation of capital adequacy standards" can have the following levels: moderate, strong, very strong and maximum. The amount of withdrawn funds is estimated. These estimations are approved by the rating committee. Then the adjusted capital adequacy ratios are calculated taking into account assumption of full immurement of withdrawn funds (assets).

The stress-factor has the following algorithm based on the corrected CARs* of the bank (4 levels):

	Adjusted CAR, %	Adjusted Tier 1 ratio, %	Adjusted CET 1 ratio, %
Moderate (0,5)	[8,5-8)	[6,5-6)	[5-4,5)
Strong (1)	[8-5)	[6-4)	[4,5-3,25)
Very strong (1,5)	[5-2)	[4-2)	[3,25-2)
Maximum (2)	2<=	2<=	2<=

*Adjusted CARs – capital adequacy ratios recalculated with excluding of the assets that considered withdrawn from the bank.

5.4.1.5.2 Stress-factor for vulnerability of capital due to the impairment of assets

The "stress-factor for vulnerability of capital due to the impairment of assets" is assigned based on the following criteria (if any of the following conditions are satisfied):

	Moderate	Strong
The vulnerability of capital due to the impairment of assets (stress factor of assets-liabilities operations) - any of the mentioned conditions	<ol style="list-style-type: none"> 1. Full impairment of 1,5% of the total loan portfolio will lead to a decrease of the capital value below the regulatory minimum, or violation of any of the capital adequacy ratios. 2. Materialization of credit risk (full impairment) on any of its 15 major credit objects (borrowers), excluding credit institutions (other than investments in assets rated BBB- or higher according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation) will lead 	<ol style="list-style-type: none"> 1. Full impairment of 1% of the total loan portfolio will lead to a decrease in capital value below the regulatory minimum, or violation of any of the capital adequacy ratios. 2. Materialization of credit risk (full impairment) on any of its 25 credit major objects, excluding credit institutions (other than investments in assets rated BBB- or higher according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation) will lead

	<p>to a decrease of the capital below the regulatory minimum or violation of any of the capital adequacy ratios see methodological note below this table – (1)).</p> <p>3. Full impairment of funds on correspondent accounts opened in any of the two largest banks-counterparties, or interbank loans issued to any one of the two largest banks-counterparties (other than counterparties rated BBB- or higher according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation), will lead to capital decrease below the regulatory minimum or violation of any of the capital adequacy ratios see methodological note below this table – (2)).</p>	<p>to a decrease of the capital below the regulatory minimum or violation of any of the capital adequacy ratios see methodological note below this table – (1)).</p> <p>3. Full impairment of funds on correspondent accounts opened in any of the three largest banks-counterparties or interbank loans to any one of the three largest banks-counterparties (other than counterparties rated BBB- or higher according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation), will lead to decrease of the capital below the regulatory minimum or violation of any of the capital adequacy ratios see methodological note below this table – (2)).</p> <p>4. Full impairment of funds on correspondent accounts opened in any bank-counterparty with a credit rating B or lower according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation), or interbank loans issued to any of these counterparties will lead to a decrease in capital below the regulatory minimum or violation of any of the capital adequacy ratios see methodological note below this table – (3)).</p>
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Methodological note:

(1) Assessed pressure on the capital and financial result may be partially or fully neutralized taking into account the high quality collateral for loans that is used as the subject of stress-testing.

For this, the collateral is classified as very liquid. If it is assumed that the Central Bank can recognize this collateral as inappropriate, usage of such collateral for adjustment is avoided. These scenarios include overstatement of the estimated value of collateral, or the

impossibility of its withdrawal without the risk of critical deterioration of financial situation of the pledger.

Reliable collateral (allowing with a high probability to neutralize the pressure on the capital) includes guarantee deposits, own bills of credit organization, securities included in the Lombard list of the Central Bank (or its analogue) with credit ratings not lower than BBB- according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation, and guarantees from legal entities having a credit ratings not lower than BBB- according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation.

To sum up, this adjustment gives the opportunity to “soften” the results of stress-testing if the largest issued loans (the object of stress-testing) have very liquid collateral that can partially or fully neutralize the negative effects from the default of the borrower.

(2) Criteria for a negative assessment of the potential default of the counterparties on the interbank market are tougher than criteria for credit risk on borrowers (who are not credit institutions), because usually default of claims to credit institutions occurs within one day (license is revoked => according to the requirements it is necessary to form 100% of reserves during one business day). While impairment of loans to corporate borrowers is easily stretched in time due to the restructuring of loans and gradual revaluation of the financial condition and quality of debt service. It allows the bank to increase reserves gradually up to 100% for several months or even years, when changing the maturity of the loan and the payment schedule.

The stress-factor of assets-liabilities operations is adjusted from strong to moderate and from moderate to “zero” if this stress-factor is based only on the parameter “stability of capital to default of counterparties in the interbank market”, and vulnerability of the capital to default of counterparties on the interbank market (violation of the regulatory requirements for capital adequacy or the value of capital in case of default of counterparties) is based only on the claims (assets) to credit institutions being members of the same banking group with the rated bank. If the bank exposure to interbank risks (is related only to bank from the same banking group, the rated bank does de-facto not have these kind of risks.

(3) The assessment of vulnerability of the amount of the capital and capital adequacy to default of the interbank counterparty, accounting for the balance on NOSTRO-accounts or issued interbank loan, and having credit ratings B or below according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation, includes the assessment of the reliability of counterparties, that do not have credit ratings, if there are any reasons to do it (first of all, foreign contractors and subsidiaries of credit institutions are checked).

5.4.1.5.3 Stress-factor for extremely low level of Capital adequacy ratio, Common equity tier 1 (CET 1) ratio and Tier 1 capital ratio (any of the regulatory capital ratios below the regulatory minimum +0,5 p.p.).

Moderate stress-factor is assigned if any of the regulatory capital ratios below the regulatory minimum +0,5 p.p.

Moderate stress-factor can be eliminated if one of the following conditions is satisfied:

1. There is a decision made to increase the bank’s capital, while the probability of implementation of this decision within the next quarter is assessed as high, and planned increase of the capital is enough to increase the levels of capital adequacy

ratios above minimum required level +0,5 p.p. (without taking into account capital buffers);

2. The ratio for capital adequacy is manageable by the decisions of the bank's top-management (for instance, by selling liquid securities); However, if during the year the bank had been showing low level of capital adequacy, the mentioned condition is assessed as not satisfied (the management of the bank didn't confirm that it has control under capital adequacy).

5.4.1.5.4 Stress-factor for extremely low level of equity

Moderate stress-factor is assigned if the amount of bank's equity is close to local regulatory minimum for banks; strong stress-factor is assigned if the amount of bank's equity is extremely close to local regulatory minimum for banks.

Moderate stress-factor can be eliminated if both of the following conditions is satisfied:

1. There is a decision made to increase the bank's capital, the probability of implementation of this decision within the next quarter is assessed as high, and planned increase of the capital is enough to increase the levels of capital above the critical levels;
2. The amount of capital is manageable by the bank through decrease (increase) of loss reserves.

5.4.1.5.5 Stress-factor for extremely high growth of the loan portfolio and portfolio of guarantees

The stress-factor for extremely high growth of the loan portfolio and portfolio of guarantees is assigned if the bank is not ready (cannot satisfied with minimal requirements for capital level and capital adequacy) for materialization of credit risks at the level equal to average market analogue of the portfolio (of loans/ guarantees) for any of the capital adequacy ratios or minimum level of the capital.

5.4.2 Internal support factors

5.4.2.1 Other internal support-factor

Other 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.

5.5 External support-factors and external stress-factors

On the basis of the rating score for **stand-alone creditworthiness** obtained after adjusting bank's **financial stability** by internal support- and stress-factors the **preliminary credit rating** is determined using the following formula:

***Preliminary credit rating score** = 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.*

If there is a reason to assume that the conditions for stress or support-factor will not be fulfilled for the next reporting date, the stress-factor can be missed (not assigned). All stress and support-factors are assigned only if the condition for these factors are satisfied for the last reporting date, unless otherwise stated.

5.5.1 External support factors

5.5.1.1 Support from the owners

Purpose of assessment:

1. If the bank requires additional capitalisation: how likely it is, that the bank will receive additional capitalisation within the next 9 months;
2. If the bank does not require additional capital (the score for the capital adequacy is 0,5 or higher), but may require additional liquidity: how likely it is, that the bank will receive support from the owner in case of short-term financial difficulties.

When assessing the support factor for the support from the owners, the following is taken into account:

1. "Nominal" rating class of the entity, related to the rated bank, if this entity can support the bank. Support-factor can be assigned, only if the "nominal" rating class of this entity is higher, than the stand-alone rating of the bank. If owners of the bank are individuals, documented volume of assets outside the bank, is taken into account;
2. Importance of the bank as an asset for the entity/ individual person that can provide a support for the bank. To assess this importance, the credit rating agency takes into account the share of the bank's equity, owned by this entity/ individual person; presence of the comfort letters from the entity/ individual person; presence of the sureties on the bank's liabilities; interrelationships of the businesses and other factors;
3. Potential needs of the additional funding for the rated bank and the presence of such funds in the supporting entity/ individual person. The credit rating agency distinguished two following situations:
 - At the moment the bank needs an additional financial support. In this case, the following condition shall be satisfied in order to assign the support-factor: supporting entity/ individual person has enough liquid assets, that can be immediately transferred to the balance sheet of the bank to cover its needs, and if supporting entity/ individual can provide such support in the future;
 - At the moment the bank doesn't need an additional financial support. The agency assesses the probability of such support provision in the future, if the negative scenario for the bank materialises. In this case, the current presence of the assets of the supporting entity/ individual person is assessed, as well as the ability to generate such assets.

The strong-support factor can be assigned if the rated entity is critically important for the supporting counterparty and if this counterparty has a credit rating not lower than BBB-

according to the international scale of S&P/Fitch or comparable rating from the agency having a good reputation.

When assigning the support-factor, the following is taken into account: the credit rating of the rated entity cannot be higher than the credit rating / “nominal” rating class of the supporting entity.

Methodological note:

Negative influence from the owners (problems in the “mother” holding) is included in the list of stress-factors.

5.1.1.2 Support from the government authorities

Purpose of assessment:

To determine the probability of the bank getting support from federal, regional and local (municipal) authorities.

Algorithm for assessment:

	Moderate support factor (bonus 0,10)	Strong support factor (bonus 0,20)
Support from the government authorities	<p>The bank has good relationship with the government authorities/regulatory authorities which have a moderate positive effect on the bank's activities and development prospects.</p> <p>OR</p> <p>The bank may rely on administrative support from federal/regional authorities.</p> <p>The moderate support-factor for the government is applicable for banks having a systematic importance for the banking system of the country and these importance is confirmed by special government regulations / orders. E.g. the bank has a status “too big to fail”, according to the professional judgment of the Agency.</p>	<p>The bank has good relationship with the government authorities/regulatory authorities which have a strong positive effect on the bank's activities and development prospects.</p> <p>OR</p> <p>The bank may rely on administrative and financial support from federal/regional authorities.</p> <p>The strong support-factor for the government is applicable for banks having a systematic importance for the banking system of the country and these importance is confirmed by special government regulations / orders AND if such banks at the same time are involved in the financing of key government functions (such as, military transactions, etc.).</p>

For the purpose of assessment the following factors are taken into account:

1. Precedents of support by the federal/regional authorities (transfer of transactions of state-owned companies to the bank, issuance of a subordinated loan, assistance in search for an investor, etc.);
2. Strategic status of the bank (i.e., strong position in the segment of retail deposits);

3. There are members of parliament at the federal or regional level who have a close relationship with the bank;
4. Government institutions and institutions close to such bodies with access to political leverage have shares in the bank's equity.

Methodological note:

Negative influence from the government (large outstanding claims, adverse changes in the laws) is included in the list of stress-factors.

5.1.1.3 Other external support-factor

Other external 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.

5.5.2 External stress factors

The purpose of detecting external stress-factors is to take into account the external factors, effect of which in the current external conditions is so destructive (it may result in closing up the business, default or licence revocation), that even the maximum penalty ("-1") by the relevant component is insufficient (according to the opinion of the Agency).

Factor	Moderate stress factor (deducting 0,10)	Strong stress factor (deducting 0,20)
Negative influence from the owners	High probability of funds withdrawal from the bank (financial difficulties in the "mother" holding / bad reputation of the management and (or) ultimate owners.	Very high probability of funds withdrawal from the bank (serious financial difficulties in the "mother" holding / bad reputation of the management and (or) ultimate owners.
Regulation and supervision risks	Planned changes in bank regulation (prescriptions, instructions by supervisory body, etc.) will significantly deteriorate the financial position of the bank and the stability of its business model.	Planned changes in the bank regulation (prescriptions, instructions by supervisory body, etc.) will break the business model (the bank won't be able to operate the same way after implementation of these regulations).
The stress-factor for banks involved in the "official procedure of "financial recovery" as an investor	The penalty for this stress-factor is in the range between "0" and "1" (see methodological notes below this table)	
Other stress factors	Moderate influence for risks that are not assessed or	Strong influence for risks that are not assessed or insufficiently

	insufficiently assessed in the rating model because of specific characteristics of the rated bank or temporary influence ⁵⁵ of such risks	assessed in the rating model because of specific characteristics of the rated bank or temporary influence of such risks
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Methodological notes (the stress-factor for banks involved in the “official procedure of financial recovery” as an investor):

This stress-factor is applicable for banks-investors having operational, regulatory and reputational risks due to involvement in the procedure financial recovery of a “troubled” bank. The assessment of these risks is based on the aggregated capital adequacy ratio of the bank-investor and troubled bank.

The aggregated capital adequacy ratio is closely monitored during the recovery process, because loan loss reserves for bad assets of the troubled bank are created not on a one-time basis, but gradually.

Thus, the strong-stress factor is assigned to the bank-investors that has a negative value of aggregated capital (taking into account the capital of the troubled bank).

Continuous linear assessment:

Stress-factor for recovery risks (deduction from the rating score)	0,2	0
Aggregated capital adequacy of the bank-investor and troubled bank	Not more	Not less
	-4%	4%

De-facto this stress-factor is applicable only if the capital adequacy ratio calculated on the basis of consolidated FS is below 4%.

⁵⁵ Temporary influence of the factor means that the rating score for the bank increased temporary in accordance to opinion of the member of the rating committee, and significant decline 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.

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

The **preliminary credit rating** is adjusted by the **BSR** score in order to arrive at the **final credit rating in international scale** (see Section 4. Rating assignment process).

6.1 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 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 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 Institutional Framework

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

6.5 Economic Factors

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

6.6 Stress and 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.

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	
Stress and adjustment factors	6%*
FINAL BSR SCORE	

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

7. The rules for the determination of the outlook on the credit rating of bank

According to this methodology, credit rating agency determines the outlook on the credit rating, which means the opinion of the credit rating 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 (the high probability of the credit rating upgrade within the following 12 months);
2. Negative outlook (the high probability of the credit rating downgrade within the following 12 months);
3. Stable (the high probability of the credit rating maintenance within the following 12 months);
4. Developing outlook (the probability of the following rating actions is equal for the 3 months horizon: upgrade, downgrade and credit rating maintenance).

The outlook on the credit rating of the bank is based on the rating 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 credit rating (not for the stand alone credit rating).

When assigning the outlook, the rating agency takes into account the historical data of the rated entity, data from the bank's strategy, rating 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).